

# Shell-Based Finite Element Analysis of Reinforced Concrete Slabs Subjected to Non-uniform Stress Distribution at Column Connection Regions

by

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A thesis

presented to the University of Waterloo

in fulfillment of the

thesis requirement for the degree of

Master of Applied Science

in

Civil Engineering

Waterloo, Ontario, Canada, 2022

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### **Author's Declaration**

This thesis consists of material all of which I authored or co-authored: see Statement of Contributions included in the thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

## **Statement of Contributions**

The contents of section 2.2 of Chapter 2, as well as portions of Chapter 3, and Chapter 4, are presented in the following publications:

1. Abolhelm, R., and Hrynyk, T. D. (2023). “Study of non-uniform stresses at slab-column connections of RC plates,” ACI SP [Accepted]
2. Abolhelm, R., and Hrynyk, T. D. (2023). “Shell-Based Finite Element Modelling of RC Flat Plates Subjected to Non-uniform Connection Region Stresses,” Proceedings of the Canadian Society of Civil Engineering Annual Conference 2021, Lecture Notes in Civil Engineering, Vol 241. Springer, Singapore.

## Abstract

RC flat plates design provisions and mechanical models have been developed in a highly-idealized manner and, as a result, loosely represent the performance of real-world RC flat plates. Part of this inadequacy is due to the insufficient amount of reliable data for typical RC flat plate constructions scenarios in comparison with the abundantly studied idealized test specimens, which generally consist of symmetric specimen geometries, uniform/regular loading conditions and reinforcement arrangements. In this regard, there is a need for reliable and cost-effective analysis procedures that may be used to estimate the performance and facilitate the design of atypical real-world RC flat plates.

This thesis presents the application of a low-cost thick-shell nonlinear finite element analysis (NLFEA) procedure to estimate the punching shear resisting performance of RC slab-column connections under variable connection shear stress conditions. Variation of connection stress conditions stems from columns with different cross-section aspect ratios, different distributions of gravity loading conditions, slabs constructed with significantly different planar reinforcement conditions in the orthogonal directions, as well as a combination of gravity loading and unbalanced bending moments. In this regard, forty-eight isolated slab-column connection specimens that are presented in the literature and were constructed without out-of-plane shear reinforcement presented were modelled and analyzed using the shell-based finite element-based analysis procedure VecTor4. The results from these analyses were used to assess NLFEA model performance. All results were developed using a predefined set of material models and analysis parameters, defined on the basis of prior and unrelated validation studies, and were shown to provide good agreement with experimental findings without the need for extensive calibration studies or the adoption of case-specific failure criteria.

From the findings obtained, it was determined that the thick-shell NLFEA employed is suitable for estimating the punching shear response for slabs subjected to varied and highly non-uniform shear stresses within the connection regions and provided similar levels of precisions as that previously obtained for isolated slab-column connections constructed with idealized geometries and reinforcing conditions, and subject to idealized loading conditions. For the forty-eight slabs considered, the mean computed-to-reported punching capacity ratio was 0.97, with a coefficient of variation (CoV) of 12%.

## Acknowledgements

I would like to thank my parents, Shokouh Khorsandi and Mohammad Javad Abolhelm, for supporting me financially and emotionally throughout the years. I am so grateful for their unconditional love and infinite kindness and for being my best friends. I am forever thankful for all of their efforts and sacrifices, for always backing me up and being there for me, showing me the way when I needed guidance, and for raising me, knowing I would not be here if it were not for them.

Secondly, I want to thank my wonderful supervisor, Professor Trevor D. Hrynyk, who was not only my supervisor, professor, and mentor but also my good friend who treated me like family and helped me to grow in more than one way as a person and a researcher. I am grateful for his constant academic and emotional support during the pandemic. It was indeed an honour to get the chance to know him and work with him.

I want to extend my gratitude to my committee members, Professor Maria Anna Polak, Professor Adil Al-Mayah, and Professor Trevor Hrynyk, who honoured me by reading my thesis and providing me with constructive and invaluable feedback. Appreciations to Professor Daniel Lacroix, Professor Lei Xu, Professor Robert Gracie, Professor David Brush, Victoria Tolton, and Richard Morrison, who helped me during my studies at the University of Waterloo. I would also like to thank Professor John Quilty, Professor Dipanjan Basu, Anne M. Allen, Doctor Rania Al-Hammoud, and Professor Trevor Hrynyk, with whom I had the blessing to work as a Teaching Assistant. I want to further thank my professors at Sharif University of Technology, Tehran, Iran, Professor Alireza Khaloo, Professor Vahid Khonsari, and Professor Mohammad Taghi Kazemi, for their support and recommendation.

Many thanks to my amazing friends and colleagues, Amir Mohammad Emami, Amir Hossein Ansari, Mohammad Safaie, Amirali Badiie Bahnamiri, Mi Zhou, Miguel Gonzalez Goetz, Mohammad Reza Neshatian, Ali Ghaedi, Mohsen Khalili, Shu-Feng Tsao, Hatef Abdoos, and Hadi Hashemi for helping me in this journey and making it possible.

Lastly, a special thank you to my dear cousin, Amir Aboulhelm, and his lovely family for their abundant kindness and support.

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# Chapter 1

## Introduction

### 1.1 Overview and Research Significance

Reinforced concrete (RC) flat plate construction is typical in modern building applications worldwide. While RC flat plates are generally characterized by efficient load-carrying capabilities and cost-effective construction, the presence of highly concentrated and complex three-dimensional loading conditions at the slab-column connection regions of these systems can lead to brittle punching-governed failures that can propagate structural collapse (Mitchell and Cook 1984). Consequently, flat plate punching has received significant attention within the research community over the past several decades. Many recent studies focused on the topic have raised questions regarding the suitability of existing code provisions in the context of typical real-world design scenarios involving flat plate construction (Einpaul et al. 2016; Kueres et al. 2017; Drakatos et al. 2016; and Milligan et al. 2020). Specifically, it has been shown that while existing provisions and analysis procedures generally perform well for cases involving highly-idealized slab-column connections (e.g., the intersecting column is of a square or circular cross-section, the adjoining slab is constructed with uniform planar reinforcement in orthogonal directions, and the slab is subjected to uniformly distributed gravity loading surrounding the perimeter of the column without

unbalanced moment), the performance of many of the existing design and analysis procedures tends to deteriorate when they are applied to common scenarios involving slab-column connections that deviate from the idealized conditions noted above. More specifically, it has been shown that existing punching shear design provisions do not provide the same level of conservatism for slab-column connections subject to construction details and/or loading conditions that accentuate localization of the through-thickness slab shear stresses along the column perimeter (Milligan et al. 2021; Drakatos 2016).

In recent investigations, it has also been established that nonlinear finite element analysis (NLFEA) modelling techniques may be used to accurately simulate the structural response of idealized RC slab-column connections employing square column cross sections and symmetric in-plane reinforcement and loading conditions. However, findings also suggest that these same modelling procedures have had only limited successes in capturing the performance of slab-column connections involving alternative construction and loading conditions that lead to increased localization of out-of-plane shear stresses. Generally, to overcome this issue, case-specific modelling calibrations and/or supplemental failure criteria have been proposed (Setiawan et al. 2020).

## 1.2 Objectives

Existing codes and provisions pertaining to RC slab design (e.g., ACI 318:19, Eurocode 2, and fib MC2010) are empirical and have largely been developed on the basis of experimental data; however, the use of test data that actually represent real-world slab design scenarios has been rare, as the execution of such testing programs is costly and challenging. Nonlinear finite element analysis (NFEA) is a feasible alternative to investigating the behaviour of structures.

To date, two main approaches exist for NLFEA modelling of flat plates: 1) finite element modelling employing continuum 3D solid elements and 2) finite element modelling employing shell/plate elements. Recent studies using 3D continuum elements to analyze the shear resisting performance of RC flat plates showed that these models are capable of providing good response estimates; however, the implementation of these elements, even for a single isolated slab-column connection, is computationally expensive and in most cases has been used in conjunction with a series of modelling calibration exercises to get meaningful results. In contrast, shell-based modelling approaches are much more cost-effective due to the reduced number of degrees of freedom employed in the modelling. However, shell elements struggle to effectively model the response of flat plate slabs in disturbed regions due to the primary assumptions involved with their formulations, which is the reason why these elements are not commonly used to model the shear behaviour of slab-column connections.

Goh and Hrynyk (2020) presented modelling approach employing a modified layered thick shell elements in which the shear response modelling within disturbed regions was modified by exerting a form of local out-of-plane shear strain suppression. Of specific interest in the context of RC flat plate modelling procedures, the results obtained demonstrated the capability of the modelling technique in providing reliable and precise strength and deformation estimates for idealized slab-column connections without the need for case-specific model calibration.

The primary objectives involve the following:

1. Investigate the adequacy and relative performance of the thick-shell modelling procedure presented by Goh and Hrynyk (2020), herein referred to as the software program VecTor4, to estimate the structural response of RC slab-column connections that develop highly-localized stress conditions surrounding the perimeters of the intersecting columns. In this regard, the modelling approach, behavioural models, and analysis parameters considered in all analyses were predefined and matched those used in prior VecTor4 applications.
2. Develop a practical shell element meshing procedure for RC flat plates using the commercial software program GiD (Coll et al. 2016).
3. Identify deficiencies associated with the application of the thick-shell modelling procedure for RC flat plates experiencing irregular out-of-plane shear stress distributions surrounding the columns.

### 1.3 Organization of the Thesis

In total, this thesis is comprised of six chapters. The following provides an outline of the upcoming chapters of this thesis.

Chapter 2 begins with a brief introduction to finite element modelling with emphasis on shell elements and presents a short overview of recent FEA modelling methods using 3D continuum solid elements and shell elements. Detailed information on the key factors of the modelling approach employed in this study, including the cracked RC constitutive modelling and the treatment of disturbed regions, is also presented in this chapter.

Chapter 3 is focused on the modelling procedure employed in the software program GiD and the meshing technique used for this study. Further, the default material models used in the analyses are presented in this chapter.

Chapter 4 presents and discusses the numerical results obtained for several series of isolated slab-column connections that were tested under gravity loading conditions, and are currently available in the literature. The test series considered in this chapter were focused on experimentally examining the influence of non-uniform shear stress distributions within slab-column connection regions as a result of the asymmetrical slab and column geometries (i.e., support rectangularity) as well as different reinforcement ratios in the planar orthogonal slab directions.

Chapter 5 presents and discusses numerical results obtained for slabs subjected to combined gravity and lateral loading conditions. Influences associated with load protocol (e.g., monotonic or cyclic) and existing damage were examined in related testing programs available in the literature and, as such, were considered in the numerical modelling comprising this chapter.

Chapter 6 summarizes the concluding remarks of the thesis and provides some suggestions for future studies.

# Chapter 2

## Background

This chapter presents a brief overview on various finite element modelling techniques used to study the punching shear resisting performance of RC flat plates using 3D continuum elements and shell elements, including the ones used in this thesis. Following the studies of Goh and Hrynyk (2018; 2020), the performance of layered thick shell element modelling was investigated to assess its suitability for estimating the punching shear behaviour of isolated slab-column connections with highly non-uniform stress distributions surrounding the critical punching/support perimeters. Cracked RC constitutive modelling of the slabs was done using the formulations of the Disturbed Stress Field Model (DSFM) (Vecchio, 2000). The finite element modelling method employed in this thesis was previously validated by Goh and Hrynyk (2018 and 2020) to estimate the shear performance of idealized slab-column connection specimens in which the stress distribution at connection regions was more uniform throughout the connection regions. The results presented by Goh and Hrynyk (2020) showed that the finite element modelling procedure used was cost-effective and highly accurate at estimating the punching shear performance of slab-column connections without the need for implementing any additional failure criteria or case-specific calibrations.

## 2.1 Finite Element Modelling

### 2.1.1 Shell Elements

Shell elements can be used to analyze the behaviour of flat and curved shell structures under a combination of bending, shear, and in-plane forces (membrane action). These elements are arguably a more practical option for studying the behaviour of large structural systems, such as slabs, in comparison to commonly used 3D continuum elements; however, due to the underlying assumptions involved with the formulation of these elements (i.e., plane sections remain plane but not necessarily normal to the element's in-plane midsurface and out-of-plane transverse normal stresses being negligible (Reissner 1945; Mindlin 1951), conventional shell finite elements struggle with estimating the shear performance of disturbed regions. Three variations of shell elements include flat elements, curved elements, and degenerate isotropic elements. Flat shell elements would be suitable for planar structures like slabs; however, they are generally not practical for analyses of curvilinear structures as implementing such elements in curved shell structures would require extremely fine meshes, which in most cases mitigate the primary benefit of employing the shell element. Further, curved shell elements often are computationally expensive as they demand many degrees of freedom and high displacement derivatives to fulfil the convergence criteria (Polak and Vecchio 1993). Degenerated shell elements, such as Serendipity, Lagrangian, and Heterosis elements, are three-dimensional elasticity-based elements that can be used to analyze both thick- and thin-shell structures under a variety of in-plane and out-of-plane loading conditions.

#### 2.1.1.1 Plate Elements

Plate elements are effectively a subset of shell elements; however, they deviate from shells in that they do not consider membrane actions. Thin shells/plates are often analyzed using plate elements developed based on the Kirchhoff plate bending theory, where it is assumed that normals to the midsurface of the element remain straight and normal throughout the element's bending deformation, allowing the out-of-plane shear deformation to be insignificant and disregarded (Love 1888). Thick plate elements have been established according to the Mindlin theory (Mindlin 1951). This theory neglects the normal to midsurface stresses and accounts for the shear deformation of the plate elements; hence, while the normals to the midsurface of elements are still assumed to be straight, they are no longer necessarily normal to the midsurface of the deformed elements. Thick plates typically decouple the in-plane and out-of-plane response contributions. Since these elements ignore the interaction of bending and shear forces on the behaviour of shell structures, the behavioural estimation of these elements is not approvingly accurate.



### 2.1.1.2 Shell Element Formulations

The first degenerated shell elements introduced in 1970 involved quadratic 8-noded Serendipity elements with five degrees of freedom per node, comprised of three translational and two rotational degrees of freedom (Ahmad 1970). The overall performance of these elements is not satisfactory, especially in thin shell structures, due to having a low constraint index which leads to shear locking effects and convergence issues (Hughes and Cohen 1978). Lagrangian shell elements are quadratic degenerated shell elements with 9 nodes and 5 degrees of freedom at each node. Contrary to Serendipity elements, Lagrangian elements are very capable of modelling both thick and thin shell structures; however, the numerous spurious zero-energy modes that can arise in these elements often make them computationally inefficient, specifically in cases with reduced or selective integration. The Heterosis elements evolved from the combination of Serendipity and Lagrangian shell finite elements. This quadratic 9-noded hybrid element takes advantage of superior characteristics of Serendipity and Lagrangian elements by adopting the translational shape functions of the Serendipity elements and rotational shape functions of Lagrangian elements. While the eight side nodes of this element have five degrees of freedom (3 translational and 2 rotational), the center node only has two rotational degrees of freedom, enabling the element to avoid additional zero-energy modes in cases with reduced integration. Consequently, this hybrid element performs well in the modelling of thick and thin shells. Figure 2.1 summarizes and compares the three shell element formulations described above.

	SERENDIPITY	HETEROSIS	LAGRANGE
$u, v, w$ shape functions	Serendipity	Serendipity	Lagrange
$\theta_1, \theta_2$ shape functions	Serendipity	Lagrange	Lagrange
integration scheme	bending: 2 x 2 – Gauss shear: 2 x 2 – Gauss	bending: 3 x 3 – Gauss shear: 2 x 2 – Gauss	bending: 3 x 3 – Gauss shear: 2 x 2 – Gauss
number of spurious zero-energy modes	bending: 1* membrane: 1*	bending: 0 membrane: 1*	bending: 1 membrane: 2+1*
constraint index	1	3	4

<sup>1</sup> from Figueiras and Owen (1984)

\* not communicable in a mesh of two or more elements

● -  $u, v, w, \theta_1, \theta_2$  degrees of freedom considered

○ -  $\theta_1, \theta_2$  degrees of freedom considered

**Figure 2.1** — Comparison between the Lagrange, Serendipity, and Heterosis elements.  
(adapted from Hrynyk 2013)

## 2.1.2 Approaches for RC Flat Plates

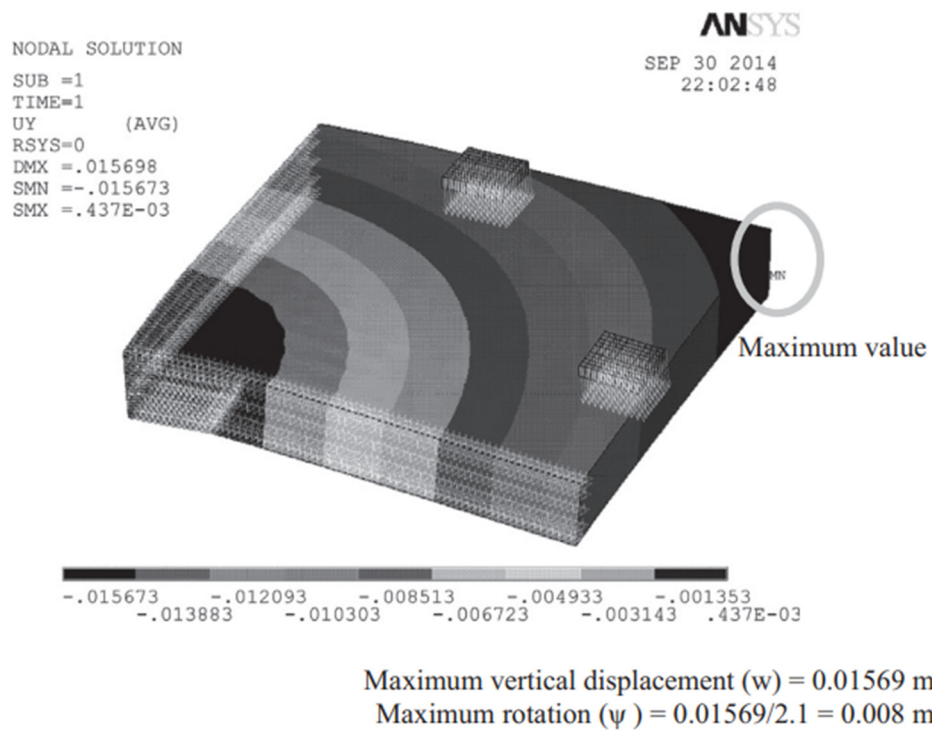
This section reviews recent modelling methods employing continuum 3D solid elements and shell elements to study the punching shear response of RC flat plates.

### 2.1.2.1 Modelling Employing Continuum 3D Solid Elements

Mahmoud (2015)

16 flat plates of Ruiz et al. (2012) were modelled by Mahmoud (2015), employing 3D solid elements using the commercial software program ANSYS to analyze the shear resisting performance of RC flat plates constructed with out-of-plane shear reinforcements. Due to symmetrical geometry and loading conditions present in the testing program, one-quarter slab models were considered. The testing program was focused on investigating the impacts of varying the column size, the thickness of the slab, and the shear reinforcement ratio on the punching shear performance of the flat plates with and without openings. The slabs were reinforced in shear with

either shear studs or continuous stirrup cages. In the finite element modelling, the concrete and steel plates were modelled using 8-noded Solid65 and Solid45 elements, respectively, both of which had plastic deformation capabilities. Element Solid65 also enabled the concrete to develop cracks in three dimensions and experience crushing. 2-noded 3D truss elements (the Link8 element) with 3 degrees of freedom were selected to model the in-plane reinforcement and continuous stirrups as this element was capable of modelling plastic deformation. In this program, shear studs were modelled using Beam188 elements. The elasticity and isotropic hardening plasticity models of these elements, along with their other characteristics, enabled them to perform well at analyzing cases under flexure, drift, and torsion. The analytical results presented by Mahmoud (2015) showed an acceptable agreement with the results reported by Ruiz et al. (2012). The mean numerical-to-experimental ratio was 1.14 with a coefficient of variation (CoV) of 7 % for the shear capacity, and 1.40 with a CoV of 11 % for the rotation capacity of the slabs. The model used to analyze slab PL3 is shown in Figure 2.2.



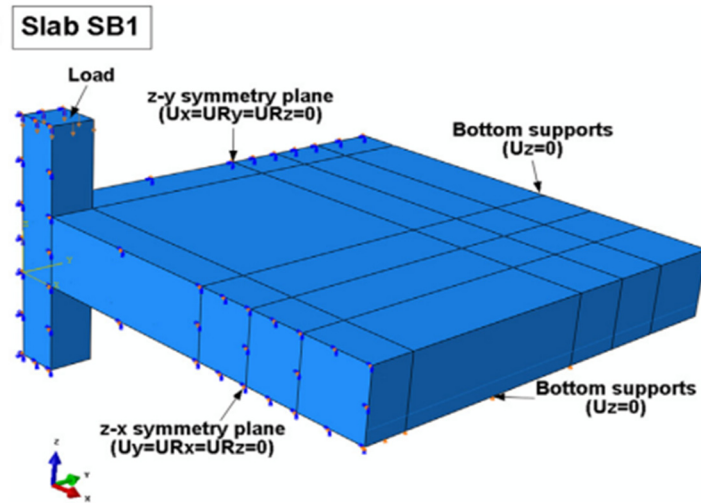
**Figure 2.2** — Proposed vertical displacement value of model PL3.  
(adapted from Mahmoud 2015)

#### Wosatko et al. (2015)

The ability of the gradient-enhanced damage-plasticity model and the rate-dependent damaged plasticity model in modelling and predicting the punching shear performance of isolated slab-column connections without shear reinforcement was investigated by Wosatko et al. (2015), employing 3D solid elements in FEAP and ABAQUS software programs, respectively. Steel reinforcement-concrete bond interaction was assumed to be perfect. The gradient-enhanced damage-plasticity model was initially formulated to model regularized material damage; however, the model itself tended to exaggerate the elastic stiffness degradation; therefore, the plastic counterpart was added to improve the model performance. The damaged plasticity model for concrete and other quasi-brittle materials in ABAQUS is essentially a plasticity-focused model with a damage modelling extension to advance the program's performance under the cyclic loading. The models were found to be highly sensitive to assumptions made regarding the behaviour of concrete in tension and displayed localized deformation that required the researchers to use case-specific calibrations and mesh regularizations to get meaningful results.

#### Genikomsou and Polak (2015)

Similarly, Genikomsou and Polak (2015) investigated the punching shear performance of interior and edge slab-column connections without shear reinforcement under various static and dynamic loading combinations using 8-noded 3D solid elements and the concrete damaged plasticity model (CDP) in ABAQUS. In-plane reinforcements were modelled using 2-noded truss bar finite elements. Similar to the previous work presented by Wostako et al. (2015), a perfect bond between the reinforcements and concrete was assumed in the modelling of flat plates. The main objectives of the numerical program were to study the influence of different modelling parameters and to develop guidance regarding model calibration for RC flat plates under punching. According to the results presented, the dilation angle and damage parameters were found to play major roles in the concrete material modelling. Moreover, considering the mesh size dependency of the model, mesh sensitivity analyses were found to be necessary. In this regard, a proper approach to mesh size selection was proposed. The summary of this study concluded that the new calibrated model could be used to predict the shear performance of RC flat plates with a good degree of precision. The calibrated model was further leveraged to investigate the performance of RC flat plates with shear bolts and openings. (Genikomsou and Polak 2016, Genikomsou and Polak 2017). FE model of a quarter of slab SB1 is presented in Figure 2.3.



**Figure 2.3** — Geometry and boundary conditions of slab SB1.  
(adapted from Genikomsou and Polak 2015)

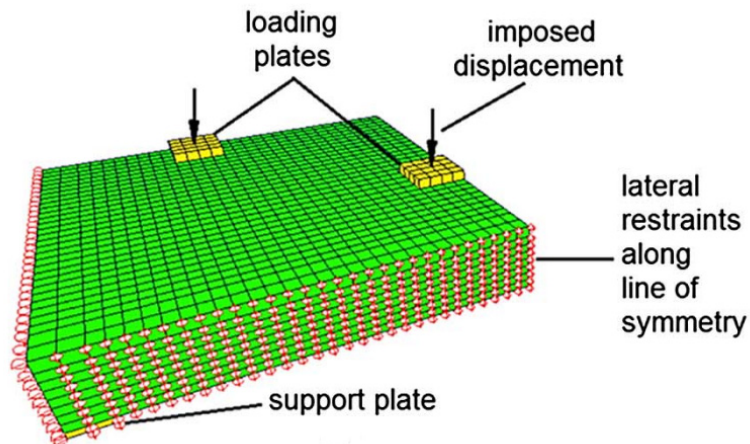
Shu et al. (2016)

Shu et al. (2016) studied the shear performance of slab-column connections by comparing the load capacity, load-deflection, and crack patterns of eleven isolated slab-column connections tested and reported by Guandalini and Muttoni (2009) to the results obtained from 3D solid nonlinear finite element analyses conducted using the software program DIANA. This study also investigated the effects of different element types, element sizes, and element order, as well as different concrete material models to analyze slabs subjected to punching shear failures. The results presented by Shu et al. proved that the use of first-order 3D tetrahedral elements, assumptions regarding the crack band, and material models available within the program could estimate the performance of RC flat plates under bending with good levels of accuracy. It was noted that a minimum of seven layers of elements through the slab thickness was required to prevent the development of shear locking effects. Adopting first-order brick elements led to similar results, while second-order brick elements underestimated the shear capacity and initial stiffnesses of the connections.

Goh and Hrynyk (2018)

21 isolated slab-column connections without shear reinforcements were analyzed by Goh and Hrynyk (2018) using 3D solid elements to investigate the shear performance of flat plate systems employing the formulations of the Disturbed Stress Field Model (DSFM), using software programs VecTor4. 8-noded, first-order, 3D continuum elements with three transitional degrees of freedom

at each node were used to model the specimens. Fully bonded in-plane reinforcements were modelled using 2-noded truss bar finite elements. Eight elements were provided through the thickness of the slab, and a common/typical meshing strategy was used for the slabs. The mean of the analytical to experimental shear capacities of the slabs analyzed in this program was reported to be 1.0 with a coefficient of variation of 10 %. The load-rotation responses presented by Goh and Hrynyk (2018) demonstrated the competency of the DSFM model in evaluating the performance of flat plates under shear with high precision. The finite element analyses program was also found to be successful at capturing the increase in punching shear capacity in multi-bay flat plates. However, it was noted that depending on the scale and the condition of the slab system under consideration, the solid modelling method used may be computationally prohibitive (Goh and Hrynyk, 2020). Figure 2.4 demonstrates the model used for analyzing slab PG1.



**Figure 2.4** — One-quarter slab finite-element mesh for Slab PG1.  
(adapted from Goh and Hrynyk 2018)

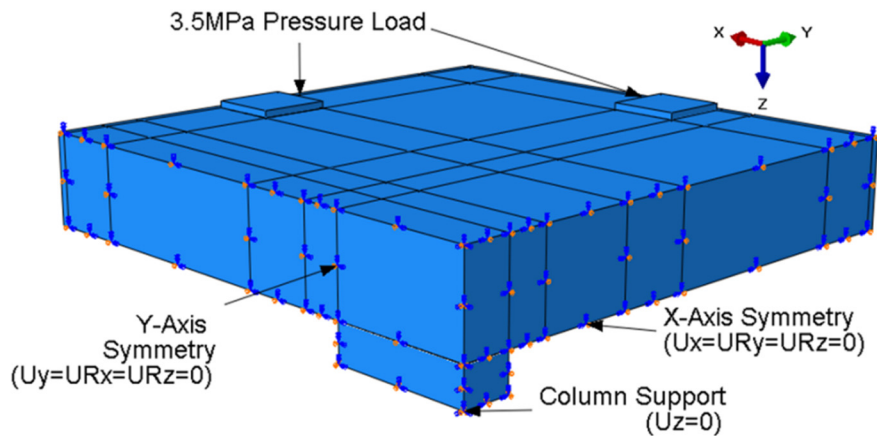
Setiawan et al. (2020)

Setiawan et al. (2020) presented the finite element modelling of five isolated slab-column connections without shear reinforcements and column aspect ratios varying from 3.0 to 8.8, to investigate the effects of support rectangularity on the shear performance of RC flat plates. The results obtained from the analyses were used to enhance a previously introduced nonlinear joint-shell punching modelling (JSPM) procedure introduced elsewhere (Setiawan et al. 2019). All slabs were modelled using 8-noded brick finite elements in the program ATENA. The CC3DNonLinCementitious2 model was used for concrete material modelling, which considers both tensile and compressive aspects of the response, and the Menetrey-William failure surface was used to incorporate the triaxial compressive behaviour of concrete. A rotating-crack model was also adopted to model cracked concrete for more accurate load-rotation responses and to avoid

the arbitrary, somewhat arbitrarily specified shear retention required by the fixed crack model in ATENA. Post-crack concrete modelling followed a similar approach to the MCFT model by Vecchio and Collins (1986) in reducing the concrete compressive capacity. First-order tetrahedral elements were used to model loading and supporting elastic steel plates, and master-slave constraints were employed to properly connect loading plates to the slabs. The in-plane reinforcements were modelled as embedded bars with perfect bonds, using 2-noded truss bar elements. In all cases, the program overestimated the punching shear capacities of the slabs; therefore, the models were subsequently recalibrated using a strain-based failure criterion. The calibrated results showed that the nonlinear finite element analysis method described, using 3D solid elements, could be employed to estimate the shear resisting performance of RC flat plates supported on rectangular columns. The numerical results demonstrated cracking patterns and stress distributions reflecting damage reported experimentally, while the degree of shear redistribution to the longer sides of the control perimeter was overestimated.

#### Milligan et al. (2020)

Milligan et al. (2020) performed numerical modelling to investigate the effects of column rectangularity on the punching shear performance of isolated slab-column connections constructed without out-of-plane reinforcement and loaded under concentric gravity loading, using the finite element modelling procedure proposed by Genikomsou and Polak (2015). Seven interior slab-column connections originally tested and reported by Sagaseta et al. (2011, 2014) were modelled using the software program ABAQUS/Explicit. The specimens considered permitted the investigation of support rectangularity, non-uniform loading patterns, and asymmetric in-plane reinforcement arrangements on the shear performance of RC flat plates. The experimental considered were also used to recalibrate the ABAQUS-based modelling procedure and analysis parameters. Taking advantage of symmetric loading conditions and slab geometry, one-quarter of slab finite element models were created. Concrete was modelled using 3D eight-node continuum elements (C3D8R), while in-plane reinforcing bars were modelled using 3D two-node truss bar finite elements (T3D2). A perfect bond between the concrete and steel reinforcement was assumed in all cases. Loading and support steel plates were connected to the slabs using cohesive and hard contact surfaces, respectively. CDP-based tensile and compressive modelling was used to model the behaviour of the concrete, while the steel reinforcing bars were modelled with a linear elastic-perfectly plastic stress-strain response. The calibrated ABAQUS-based RC slab modelling procedure presented in this study demonstrated that the 3D nonlinear finite element analysis employing CDP concrete modelling could indeed be used to estimate the shear performance of slab-column connections with non-uniform stress distribution at the connection regions. In all, the mean computed-to-reported punching capacity ratio was 0.91, with a coefficient of variation (CoV) of 7.7 % for the slabs analyzed in this study. Mesh configuration and boundary conditions of a typical quarter slab model are shown in Figure 2.5.



**Figure 2.5** — Summary of boundary conditions in calibrated FEM.  
(adapted from Milligan et al. 2020)

### 2.1.2.2 Modelling Employing Shell Elements

#### Polak (1998)

Polak (1998) employed 9-noded 3D layered thick shell elements to model several slabs subjected to high concentrated shear, investigating the capability of degenerated shell elements at capturing the shear performance of flat plates. In-plane reinforcements were added to the model as separate layers through the thickness of the elements assuming to have linear elastic-perfectly plastic responses. Out-of-plane reinforcement, where present, was treated in a smeared sense, also with linear elastic-perfectly plastic bilinear responses. Cracked concrete nonlinear material modelling was based on the MCFT (Vecchio and Collins, 1986). As such, cracks were modelled in a smeared sense and assumed to rotate in response to changing loads and materials stiffness/damage. The results of this study indicated the ability of layer thick shell elements to capture the shear and flexural behaviour of flat plates with and without shear reinforcements under large concentrated loads with reasonable levels of accuracy. However, while the correct governing mode of failure was predicted for all specimens, the program tended to significantly underestimate the shear capacity of slabs.

#### Guan and Polak (2007)

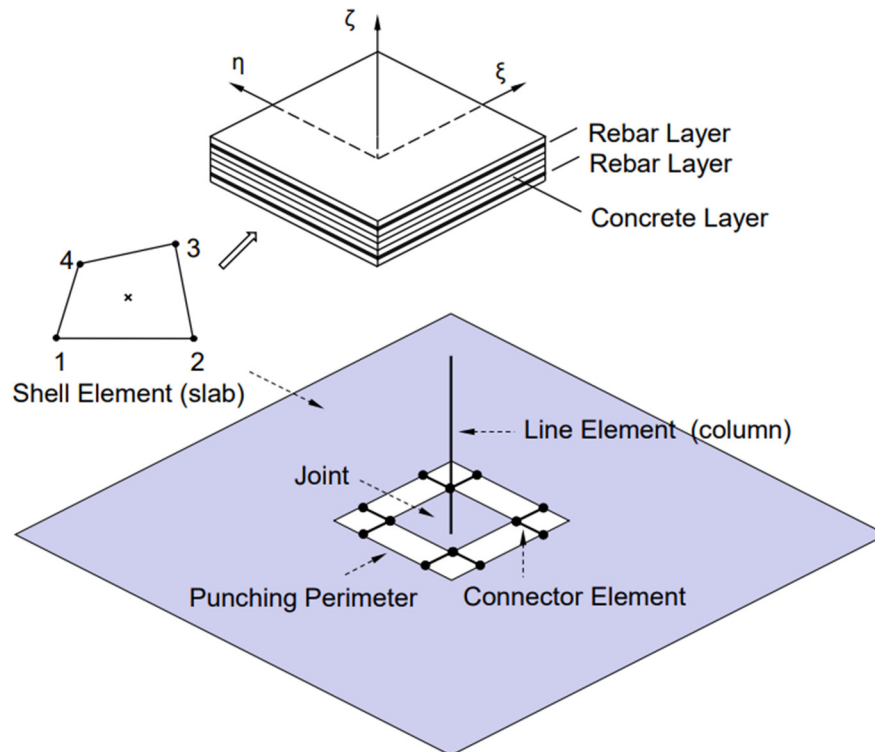
Guan and Polak (2007) studied the performance of 8-noded layered degenerated shell elements in analyzing slab-edge column connections with openings and shear studs, employing the nonlinear elastic-plastic-fracturing tangential method introduced by Guan and Loo (1997). Each element was divided into eight sub-layers with varying thicknesses, based on prior studies by Guan and Loo



(2003). Flexural reinforcement was treated as separate smeared reinforcement layers provided within the elements' thickness. The comparison of analytical to the experimental results of ten slab-edge column connections confirmed the ability of nonlinear layered finite element modelling using 3D layered finite shell elements to estimate the slab deflections, punching shear capacities, and progressive crack development up to the failure, with a good level of precision. The analytical results were consistent with the reported data and supported the experimental findings. Moreover, it was concluded that layered finite element analysis were a viable option for RC flat plate design applications.

#### Liu et al. (2015)

24 internal slab-column connections were modelled using a finite element modelling technique proposed by Liu et al. (2015) in the program ABAQUS to investigate the performance of the model in predicting the behaviour of flat plates under various loading conditions (e.g., concentric gravity loading, torsion, and unbalanced gravity loading). Although shell elements were found to demonstrate very good results capturing the load-deflection of isolated connections subjected to symmetrical loading patterns, they tend to overestimate the performance of connections subjected to torsion or non-uniform loading distribution around the column, which may be due to a constant shear stiffness used for concrete by the shell finite elements employed in ABAQUS. Therefore, a combined element approach was used: 4-noded thin-shell elements were used to model slabs regions outside of the punching perimeter defined according to the provisions of ACI 318-11 (i.e., a distance of one-half of the effective depth of the slabs away from the face of the column) to simulate the flexural response of the flat plates, rigid shell elements were used to model the support area, and eight 3D beam-shape Cartesian-Cardan connector elements with 6 degrees of freedom at each node were used to model the slab-column connection regions. The concrete modelling was based on the DCP, using a dilation angle of 30 degrees and the Hognestad stress-strain curve to represent the compressive behaviour of concrete. The connector beams were assumed to detach from the slab upon the punching failure to stop load transition between the slab and column. The calibrated results of this study showed that the proposed modelling technique employing Muttoni's Critical Shear Crack Theory (CSCT) punching failure criterion (2008) was satisfactory at capturing the punching behaviour of flat plates; however, the adequacy of the model needed to be further investigated in more complex cases. Figure 2.6 shows the details of the proposed macro model used in this study.



**Figure 2.6** — Schematic of proposed macro model for flat plate. (adapted from Liu et al. 2015)

Soares and Vollum (2015)

The rotation restraint conditions developed by way of surrounding slab bays on the shear performance of multibay slab-column connections were investigated by Soares and Volume in 2015. Several slabs with various boundary conditions were modelled using 4-noded quadratic curved shell elements and embedded reinforcements in the program DIANA. The "total strain fixed crack model" option was selected for concrete material modelling, and the tension-softening stress-strain response of concrete was assumed to be linear. The compression behaviour of concrete was modelled using the Thorenfeldt model (Thorenfeldt et al., 1987), while MCFT (Vecchio and Collins, 1986) was adopted to model the performance of concrete after cracking. Comparing the strengths predicted by BS 8110, EC2, and MC2010 code provisions to the results obtained from the analyses, it was shown that the MC2010 code provisions were most effective in estimating the shear capacities of RC flat plates. Further, the numerical obtained showed that the rotational restraint due to slab continuity of surrounding bays increases the shear capacity of the slab-column connections.

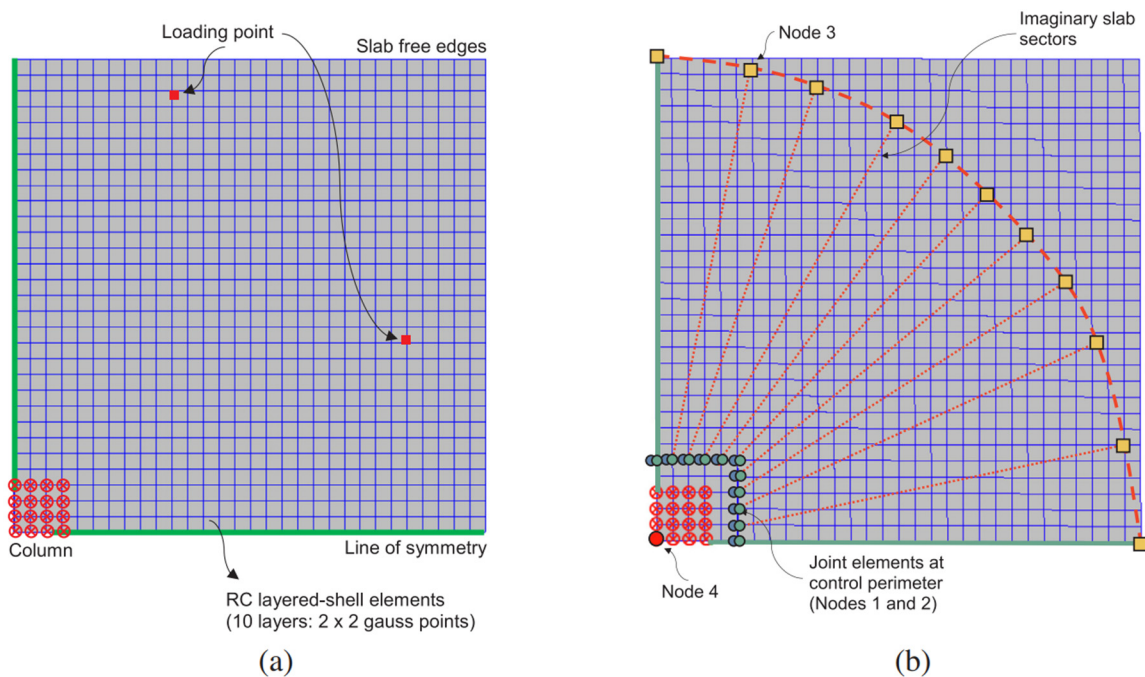
#### Plos et al. (2017)

Plos et al. (2017) proposed a multi-level assessment strategy to efficiently evaluate the current state of RC bridge deck slabs using various techniques from observation and hand calculations, to linear and nonlinear finite element analyses employing shell and other continuum elements. The proposed assessment system included five levels: 1) Simplified analysis methods (2D linear analysis and strip methods), 2) 3D linear FE analysis (Redistribution), 3) 3D nonlinear shell FE analysis, 4) 3D nonlinear FE analysis with continuum elements, 5) 3D nonlinear FE analysis with concrete continuum elements and reinforcement bar slip. The higher levels were shown to offer more accurate results and various data regarding the structure's condition; however, they were more costly. The shell-based finite element analysis (levels 2 and 3) were assumed to be able to capture the bending and flexural failure; however, they were noted to be not suitable for punching shear failure. Therefore, the shear capacity of the structures would be estimated using local resistance models. Low-cost 3D linear shell finite element analysis can be adapted to analyze different load cases. In contrast, 3D nonlinear shell finite element analyses were used to study the most critical load case. Two cases of studies were investigated to validate the proposed strategy. The software program DIANA 9.4.4 was used to model and analyze slabs using levels 3 to 5. In the nonlinear shell finite element analyses, a fracture energy-based total strain rotating crack model was used to model the concrete. In-plane reinforcement was assumed to be embedded in the shell elements, fully bonded and modelled by the von Mises plasticity model. Eight-noded shell elements with 9 out-of-plane integration points were used to model the specimens in levels 2 and 3. The results of this study concluded that the proposed strategy would give conservative results in terms of the shear capacity; however, the errors would decrease at higher levels employing the non-linear finite element analyses.

#### Setiawan et al. (2019)

Setiawan et al. (2019) developed a new numerical procedure to study the shear performance of flat plates, employing layered shell elements in conjunction with joint elements in the program ADAPTIC, which was validated by analyzing 47 slabs that were constructed without out-of-plane reinforcement. The study attempted to capture the slabs' behaviour under shear loading conditions and maintain the structure's load redistribution and post-punching response. Similar to that proposed by Liu et al. (2015), 2-noded 3D joint elements with 6 degrees of freedom were provided at the punching shear perimeter around the slab-column connections at a distance  $d/2$  ( $d$  is the effective depth of the slabs) from the face of the columns to compute the punching shear capacity using CSCT failure criteria (Muttoni 2008). Once a joint element fails in shear, the shear forces of that element will be redistributed amongst the surrounding un-failed elements. The ultimate failure of the structure was assumed to occur once all zero-length joint elements experienced a 1-mm relative out-of-plane deformation. The model developed by Fernandes Ruiz et al. (2013) was used

to determine the post-peak strength of the slabs. The shell elements were subdivided into 10 concrete layers through the thickness with separate fully bonded in-plane reinforcement layers. Concrete tensile cracking, concrete compression response, and cracked concrete softening effects were considered. RC cracked concrete was modelled using a fixed crack modelling approach with a shear retention factor to decrease the stiffness of cracked concrete. The results of this study showed that this type of simplified method could be used as an alternative to computationally costly 3D continuum solid elements to predict the shear behaviour of flat plates with a comparable level of precision. The modelling approach to simulate a quarter of slabs is shown in Figure 2.7.

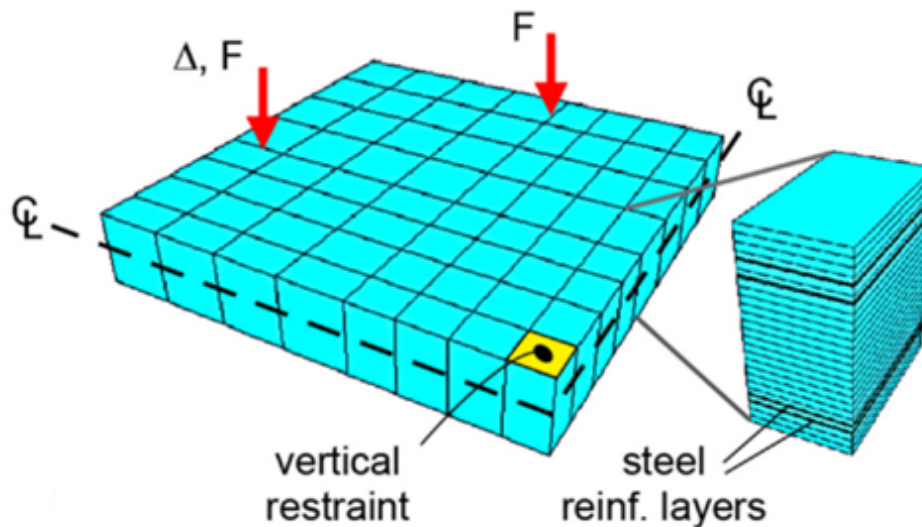


**Figure 2.7** — Plan view of mesh discretisation and boundary conditions for typical quarter slab modelled in ADAPTIC: (a) pure shell element model; (b) proposed model combining shell and joint elements. (adapted from Setiawan et al. 2019)

### Goh and Hrynyk (2020)

Goh and Hrynyk (2020) investigated the performance of a disturbed region enhanced layered thick-shell finite element modelling procedure to estimate the shear performance of RC flat plates, using the program VecTor4 (Hrynyk and Vecchio 2019a). In this study, 21 RC flat plates constructed without out-of-plane shear reinforcement were analyzed using 9-noded layered thick-shell finite elements with 42 degrees of freedom and 20 layers through the thickness. In-plane reinforcement was treated as planar-oriented reinforcement layers placed through the thickness of

the elements. The results were compared to those obtained from nonlinear finite element analysis adopting conventional thick shell elements and 3D continuum solid elements (Goh and Hrynyk 2018). The Disturbed Stress Field Model (Vecchio 2000) was used for modelling cracked RC material response in all cases. For comparison purposes, a common finite element mesh was used to model all 21 slabs. The results obtained were compared with more conventional thick-shell finite element modelling (i.e., without consideration of disturbed region effects) and showed that when appropriate disturbed region modelling was not done, the thick-shell elements performed poorly, significantly underestimating the capacity of the shear governed plates. Alternatively, the use of modified layered thick-shell elements, which enhance the shear strength of the disturbed regions by using an out-of-plane shear strain suppression (OSS) technique, successfully captured the correct failure modes in all cases with accurate stiffness and shear capacity computation. Using the proposed thick-shell modelling approach, the mean numerical-to-experimental shear capacity ratio for the 21 slabs was 1.01, with a coefficient of variation of 9 %. This study concluded that modified thick-shell finite element modelling in conjunction with DSFM-based cracked RC material modelling could capture the shear response of flat plates with the same level of accuracy as solid continuum elements in a more efficient manner without the need for case-specific calibrations and failure criteria. The typical mesh used for modelling a quarter of a slab is presented in Figure 2.8.



**Figure 2.8** — Typical one-quarter slab mesh employed ( $8 \times 8$  grid of shell elements).  
(adapted from Goh and Hrynyk et al. 2020)

### 2.1.3 Summary

Several shell and solid finite element-based numerical studies investigating the punching shear behaviour of flat plates were reviewed in this chapter to provide a background on the recent finite element modelling procedures used to analyze the shear performance of RC flat plates. Considering the variety of modelling techniques and material models used in these programs, there appears to be a lack of cost-efficient methods to analyze isolated slab-column connections accurately without implementing a series of case-specific calibrations.

The majority of finite element modelling methods presented employing 3D continuum elements demonstrated a good performance capturing the shear capacity, slab deformations, and cracking patterns; however, they are computationally expensive, making them impractical for large-scale (i.e., real-world) analyses. Moreover, using these elements often requires detailed model calibrations and supplemental failure criteria to provide good results.

Conventional degenerated layered shell element modelling is highly cost-effective and performs well in analyzing shells. However, compared to commonly used 3D solid elements, shell elements have been shown to struggle to capture the shear resisting behaviour of RC flat plates with the same level of precision, especially in disturbed regions. This inaccuracy is mostly due to the fact that the assumptions behind the formulation of these elements do not represent the true behaviour of RC slab elements within disturbed regions. Consequently, in these regions, the 3D shell elements usually would be replaced by alternative finite elements such as 2-noded connector elements to better model the shear behaviour of flat plates. Yet, employing joint elements along with shell elements would add to the complication of the modelling and execution, and in most cases, additional failure criteria are still required to determine the punching shear failure.

The Critical Shear Crack Theory (CSCT) (Muttoni and Ruiz, 2008) showed good results modelling the reinforced concrete; however, it does not apply to all cases (i.e. flat plates with opening). The MCFT-based models, such as Disturbed Stress Field Model, also showed a great performance modelling the cracked reinforced concrete in diverse scenarios.

Recent studies by Goh and Hrynyk (2018 and 2020) using enhanced layered thick shell elements and DSFM-based cracked RC constitutive modelling demonstrated great performance in analyzing the shear behaviour of RC flat plates. However, further investigation is needed to validate these elements' capability to capture the shear behaviour of shells in more complex cases.

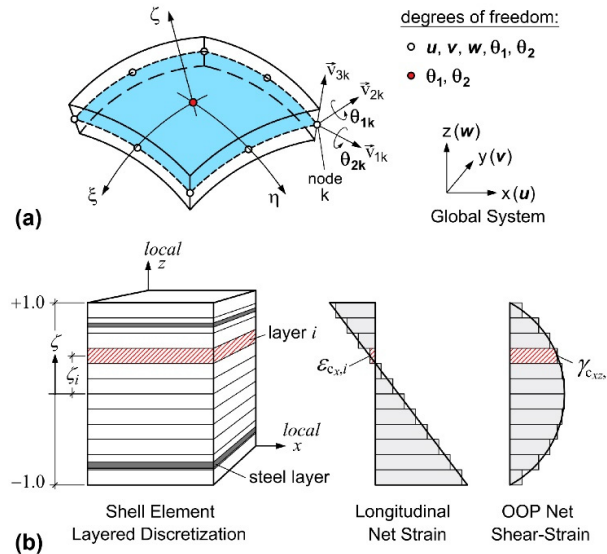
## 2.2 Layered Thick-Shell Modelling Approach

### 2.2.1 Procedure Background

VecTor4 is a NLFEA program dedicated to the analysis of three-dimensional RC planar structures. Typical program applications include the analysis of RC shells, slabs, and walls subjected to different forms of static, quasi-static, and/or dynamic loading conditions. The analysis framework of VecTor4 was built upon a shell finite element analysis program developed by Figueiras and Owen in the 1980s (Figueiras and Owen 1984) for applications involving conventional RC shells and slab structures; however, over the past several decades, the program has been progressively refined and improved to expand its structural performance estimation capabilities, and to broaden its range of application such that it can be used to tackle different RC infrastructure problems (e.g., Polak and Vecchio 1993, Hrynyk and Vecchio 2015, and Hrynyk and Vecchio 2016).

The program employs high-order (9-node, 42-degree of freedom) layered thick-shell finite elements (refer to Figure 2.9). The use of layered thick-shell elements allows for stiffness variations through the thickness of the element arising from changes in material composition or material nonlinearity to be represented discretely and permits analyses involving combined in-plane and out-of-plane loading conditions, including cases of combined in-plane and out-of-plane shear. Material stresses are assumed to be constant through the thickness of each layer and are integrated using volume integration sampling points located at the layer mid-heights. In-plane reinforcement may be defined in any planar orientation and is incorporated at discrete depth locations within the thickness of the element (i.e., in-plane reinforcement is not smeared or distributed throughout the concrete layers). While often not relevant to the case of RC flat plates constructed without through-thickness shear reinforcement, when present, transverse reinforcement oriented in the out-of-plane direction is treated in a smeared sense, and is considered in the material modelling of the core concrete layers. A perfect bond between concrete and reinforcements is assumed. The through-thickness response of the layered thick-shell element is based on the assumptions that i) plane sections remain plane, but not necessarily normal to the element mid-surface, ii) out-of-plane normal stresses are negligible, and iii) according to the through-thickness formulation presented in Hrynyk and Vecchio (2015), the ‘effective’ out-of-plane shear strain distribution used to calculate cracked RC material response can be approximated as being parabolic through the thickness of the layered shell element. Note that assumptions i and ii are consistent with traditional Mindlin (1951) shell formulations, and assumption iii was developed to modify the through-thickness shear strain variation of the shell elements in a manner that has been shown to better capture shear-governed brittle concrete response for RC elements subject to out-of-plane shear forces (Hrynyk and Vecchio 2015). With the application of these simplifying assumptions, the layered thick-shell analysis approach negates the need for structure through-thickness finite element discretization and, as a result, significantly reduces the number of degrees of freedom associated with a given finite element model. The through-thickness

sectional response conditions, which illustrate the strain conditions pertaining to assumptions i and iii noted above, are presented in Figure 2.9b.



**Figure 2.9** — Thick-Shell Finite Element; a) 9-node heterosis shell element; b) through-thickness discretization and assumed strain conditions. (adapted from Goh and Hrynyk 2020)

## 2.2.2 Cracked RC Constitutive Modelling

Cracked concrete behavioural modelling is done on the basis of the formulations of the Disturbed Stress Field Model (DSFM) (Vecchio 2000), a smeared crack continuum analysis procedure developed as an extension of the Modified Compression Field Theory (MCFT) (Vecchio and Collins 1986) and utilized in various software applications (Sadeghian 2018).

### 2.2.2.1 Modified Compression Field Theory (MCFT)

Compression Field Theory (CFT), originally developed by Mitchell and Collins (1974), was formulated to model the behaviour of RC beam-type elements under applied torsion. As originally formulated, CFT is effectively a fully rotating smeared crack continuum model employing the assumption that the post-cracking tensile strength of RC is negligible. Experimental results provided by Vecchio and Collins in the early 1980s (Vecchio and Collins 1982) from studying the behaviour of 30 planar RC panel elements under various biaxial loading patterns, definitively showed that cracked RC elements exhibited significant tension stiffening effects stemming from the interaction between cracked concrete and bonded steel reinforcing bars, as well as a pronounced compression softening effect that effectively causes cracked concrete to crushing



under compressive stresses that are significantly lower than that of uncracked concrete. The MCFT, formally established in 1986 by Vecchio and Collins, reflects the findings obtained from the RC panel testing programs by modifying the cracked concrete material models previously employed in the CFT. In summary, the MCFT relates average strains to average material stresses using RC element equilibrium, compatibility, and constitutive relations. Cracks are modelled to exhibit fully-rotating behaviour through the loading process as the result of rotating average principal strains and stresses and it is assumed that concrete principal strains and stresses remain aligned at all stages. Another key feature that was introduced with the formulation of the MCFT was the examination of the local concrete and steel stresses on the crack surface, which permitted aggregate interlock-related failures to be considered.

The MCFT has been shown to perform well at estimating the behaviour of numerous RC structures under various loading conditions; however, in cases involving RC elements with very high or very low reinforcement ratios, the shear capacity and material stiffness have been shown to be respectively under and overestimated. This matter was largely addressed by incorporating shear slip deformations along the crack surface of the RC element in the compatibility relations in an extension to the MCFT referred to as the Disturbed Stress Field Model (DSFM) (Vecchio 2000). A summary of the equations comprising the MCFT is provided in Figure 2.10.

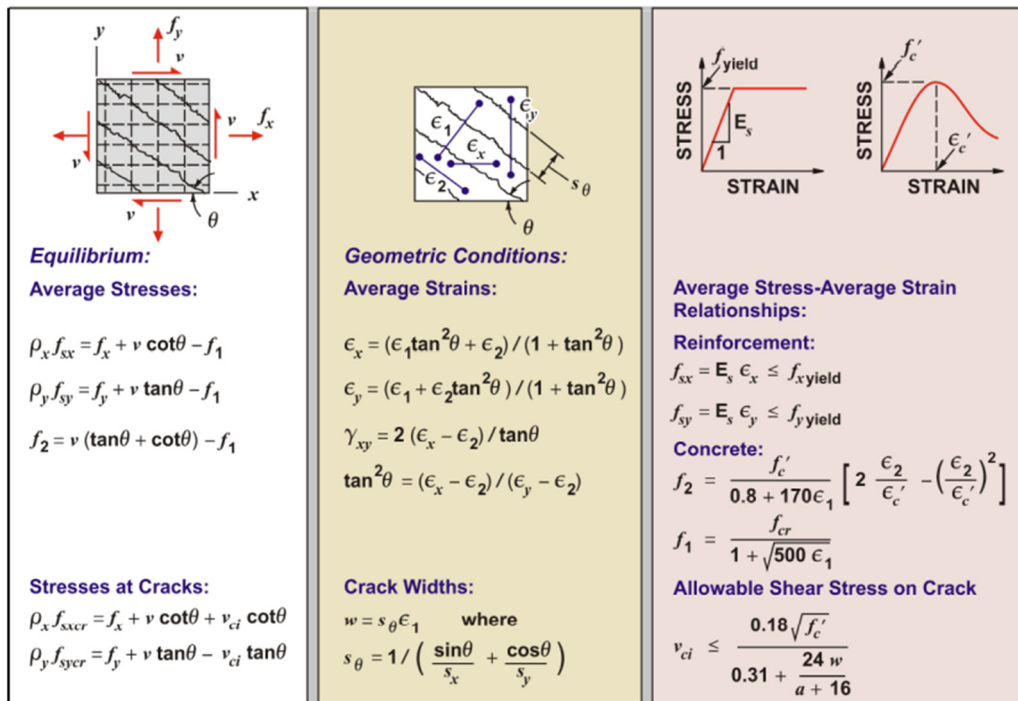


Figure 2.10 — Equations of the MCFT. (adapted from Bentz et al., 2000)

### 2.2.2.2 Disturbed Stress Field Model (DSFM)

The hybrid rotating-/fixed-crack analysis procedure employed by the DSFM inherently considers the redistribution of internal forces that can occur due to local changes in stiffness arising from cracking or crushing of concrete, yielding of steel reinforcement, concrete compression softening of cracked concrete that is attributed to the presence of coexisting lateral tension, the presence of post-cracking tensile stresses between developed cracks, and influences associated with variable and changing crack widths including the development of local shear stresses and shear slip deformations along crack surfaces. This model was essentially developed to address noted deficiencies associated with MCFT pertaining to RC elements constructed with extremely high or low reinforcement ratios, elements subjected to high biaxial compression and shear loading, and elements with limited crack rotation. The original panel tests performed by Vecchio and Collins (1986) showed that the alignment of the average principal stresses and average principal strains of cracked concrete elements tended to deviate from one another over the course of loading to failure. This inclination divergence would become more significant in higher load levels, which was not in agreement with the coincidentally rotating principal stress and strain axes assumption employed in the MCFT. This phenomenon was found addressed by incorporating crack slip deformations within the element's compatibility relations, as demonstrated in Figure 2.11. This modification also eliminated the need for many of the crack slip check requirements applied in the MCFT. Moreover, the DSFM model, as compared with the original MCFT model, supports more in-plane reinforcement arrangement scenarios in any planar direction.

A summary of several of the key RC material modelling attributes, as well as the average and local element stress conditions associated with the application of the DSFM for three-dimensional continuum analyses that are performed in VecTor4, are presented in Figure 3.4. From the figure, it can be seen that the local stress conditions developed on and across crack surfaces is only affected by the average stress perpendicular to the crack surface ( $f_{c1}$ ). In cases with reinforcement components that are not normal to the crack surface, the development of the local shear stresses on the crack surface ( $v_{ci}$ ) are assumed to arise, and necessary to equilibrate the reinforcement stresses across the crack ( $f_{si-cr}$ ).

Compared to the original MCFT model, the formulation of the post-cracking tension resistance of the RC 3D elements along 1-direction, the stress perpendicular to the crack surface ( $f_{c1}$ ), was enhanced in the DSFM model to provide more accurate tension-stiffening estimations that consider the changes in the orientation of the crack surface relative to that of the reinforcement, and to better account for details relating to member size, reinforcing bar size, ratio, and spacing. Equations 2.1 through 2.3 are used to compute the post-tensioning resistance of RC elements based on the direct tensile strength of concrete ( $f'_t$ ), a tension stiffening bond parameter ( $m$ ), the reinforcement ratio and the bar diameter of  $i^{\text{th}}$  reinforcement component ( $\rho_i$  and  $d_{bi}$ , respectively), the yield stress ( $f_{yi}$ ) and the average stress ( $f_{si}$ ) of the  $i^{\text{th}}$  reinforcement component, and the angle of between reinforcement component  $i$  and the normal of the crack surface ( $\theta_{1i}$ ), which was calculated using

the direction cosines of the unit vectors ( $l$ ,  $m$ , and  $n$ ) along the reinforcement and the 1-direction. Note that the limiting term shown in the right side of Equation 2.1 is used to ensure that average post-cracking tensile stresses arising from tension-stiffening are achievable across the crack by way of local stress increases in the reinforcement.

$$f_{c1} = \frac{f'_t}{1 + \sqrt{2.16 \times m \times \varepsilon_{c1}}} \leq \sum \rho_i (f_{yi} - f_{si}) \times \cos^2 \theta_{1i} \quad (2.1)$$

$$\frac{1}{m} = \sum \frac{4\rho_i}{d_{bi}} \times |\cos \theta_{1i}| \quad (2.2)$$

$$\cos \theta_{1i} = l_1 l_i + m_1 m_i + n_1 n_i \quad (2.3)$$

Due to the inclination of the crack surface, the increase in local reinforcement stresses induces shear stresses ( $v_{ci}$ ) on the crack surface. Vector summation is used to combine the shear stresses on the crack surface along 2- and 3-direction ( $v_{ci,12}$ ,  $v_{ci,13}$ ), computing the magnitude of the resultant shear stress on the crack surface ( $v_{ci,1}$ ) calculated according using Equations 2.4 through 2.6.

$$v_{ci,12} = \sum \rho_i (f_{si-cr} - f_{si})(l_i l_1 l_2 + m_i m_1 m_2 + n_i n_1 n_2) \quad (2.4)$$

$$v_{ci,13} = \sum \rho_i (f_{si-cr} - f_{si})(l_i l_1 l_3 + m_i m_1 m_3 + n_i n_1 n_3) \quad (2.5)$$

$$v_{ci,1} = \sqrt{v_{ci,12}^2 + v_{ci,13}^2} \quad (2.6)$$

The effects of lateral cracking and lateral tensile straining is applied for all compressive stress directions, using the compression softening relations of Equations 2.7 and 2.8. For example, in a case where the third principal stress direction is compressive, the following may be used to estimate the compressive stress resistance of the cracked RC element in the 3-direction:

$$f_{c3} = -\beta_d f'_c \left[ 2 \left( \frac{\varepsilon_{c3}}{\beta_d \times \varepsilon'_c} \right) - \left( \frac{\varepsilon_{c3}}{\beta_d \times \varepsilon'_c} \right)^2 \right] \quad (2.7)$$

$$\beta_d = \frac{1}{1 + C_s \times C_d} \leq 1.0 \quad (2.8)$$

In the equations above,  $\beta_d$  represents the extent of compression softening caused by coexisting lateral stresses,  $f'_c$  is the concrete's cylindrical compressive strength,  $\varepsilon'_c$  is the compressive strain in the concrete coinciding with the cylindrical compressive strength, the crack slip softening

coefficient,  $C_s$ , is taken as 0.55 to accommodate crack slip deformations in the analysis, and  $C_d$  is a strain softening coefficient. Using Equations 2.9 and 2.10, the strain softening coefficient associated with 3-direction compression is computed to take into account three-dimensional stress conditions.

$$\text{For } \varepsilon_{c2} > 0: C_d = 0.35 \left( -\frac{\sqrt{\varepsilon_{c1}^2 + \varepsilon_{c2}^2}}{\varepsilon_{c3}} - 0.28 \right)^{0.80} \quad (2.9)$$

$$\text{For } \varepsilon_{c2} \leq 0: C_d = 0.35 \left( -\frac{\varepsilon_{c1}}{\varepsilon_{c3}} - 0.28 \right)^{0.80} \quad (2.10)$$

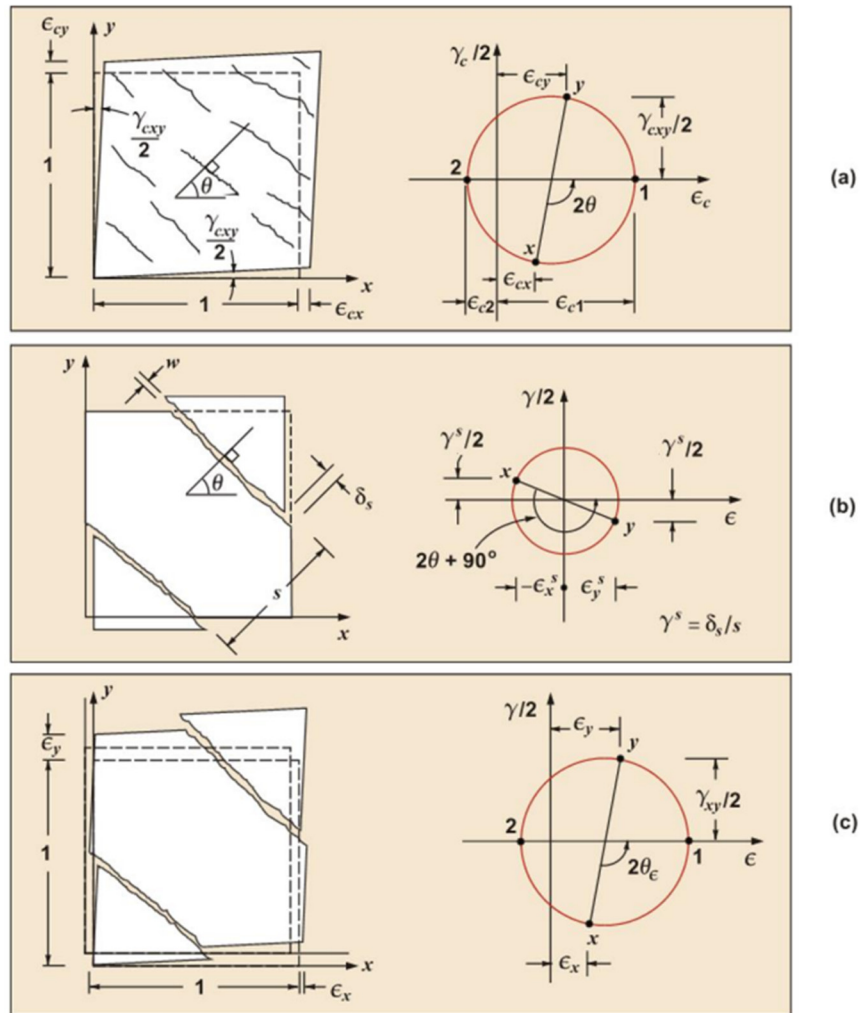
Note that the 3-direction softening calculation ignores the effects of the intermediate tensile strain if it is compressive or zero. To calculate  $C_d$ , the vector sum of  $\varepsilon_{c1}$  and  $\varepsilon_{c2}$  is calculated as an effective tensile strain, when both  $\varepsilon_{c1}$  and  $\varepsilon_{c2}$  are in tension.

Based on Walraven and Reinhardt's model (1981), the crack shear-slip response is calculated, which is heavily impacted by concrete crack width. Equations 2.11 and 2.12 are employed to compute the crack slip displacement,  $\delta_{s,1}$ , in which,  $w$  is the average crack width,  $f_{cc}$  is defined as concrete cube strength (taken as  $1.2f'_c$ ), and  $v_{co}$  is used to implement an initial offset in the crack shear-slip relation.

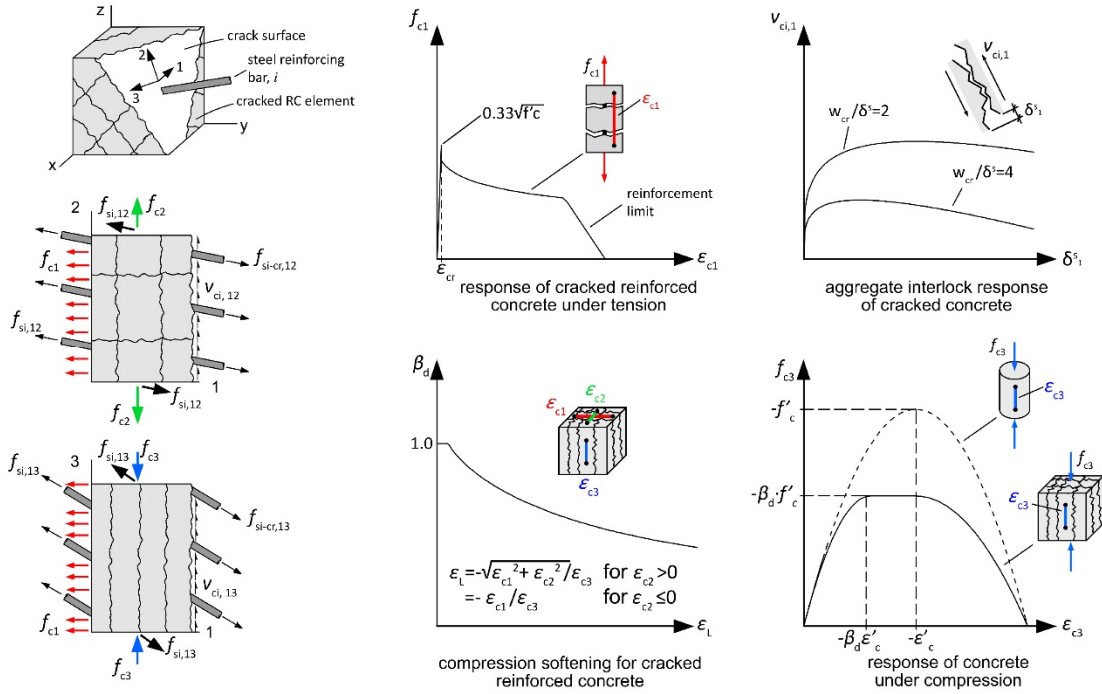
$$\delta_{s,1} = \frac{v_{ci,1} + v_{co}}{1.8w^{-0.8} + (0.234w^{-0.707} - 0.20) \times f_{cc}} \quad (2.11)$$

$$v_{co} = f_{cc} / 30 \quad (2.12)$$

Details regarding other material models used in this thesis, in support of the DSFM material modelling (e.g., to consider material hysteresis, concrete confinement and dilation, etc.), are also briefly summarized in Chapter 3.



**Figure 2.11** — Compatibility conditions: (a) deformation due to average (smeared) constitutive response; (b) deformations due to local rigid body slip along crack; (c) combined deformations. (adapted from Vecchio 2000)



**Figure 2.12** — 3D Cracked RC material modeling in accordance with DSFM.  
(adapted from Goh and Hrynyk 2020)

### 2.2.3 Treatment of Disturbed Regions

The equilibrium and compatibility conditions governing the formulation of the thick-shell modelling procedure employed in VecTor4 require that plane sections remain plane (assumption i noted above) and that out-of-plane normal stresses sum to zero (assumption ii). Thus, the application of such thick-shell modelling approaches presents significant challenges for applications involving disturbed regions such as slab-column connections comprising RC flat plates where transverse confinement and direct strut action are known to play key roles in the transfer of load from the slab to the supporting columns. To account for these beneficial out-of-plane shearing effects in a simple and approximate manner, VecTor4 employs a form of local out-of-plane shear strain suppression (OSS) within the disturbed regions of slabs, which are assumed to occur within a distance of the total slab thickness ( $h$ ) away from the face of the supporting columns and loading points. The OSS reduction factor is used to linearly decrease the shear strain of concrete within the disturbed regions, enhancing the shear resistance and stiffness of the material. VecTor4 automatically recognizes all shell element integration points falling within these regions by computing their respective distances ( $r$ ) to the nearest out-of-plane restraint or out-of-plane concentrated load, and uses these  $r$ -values to compute OSS reduction factors according to Equation 2.13.

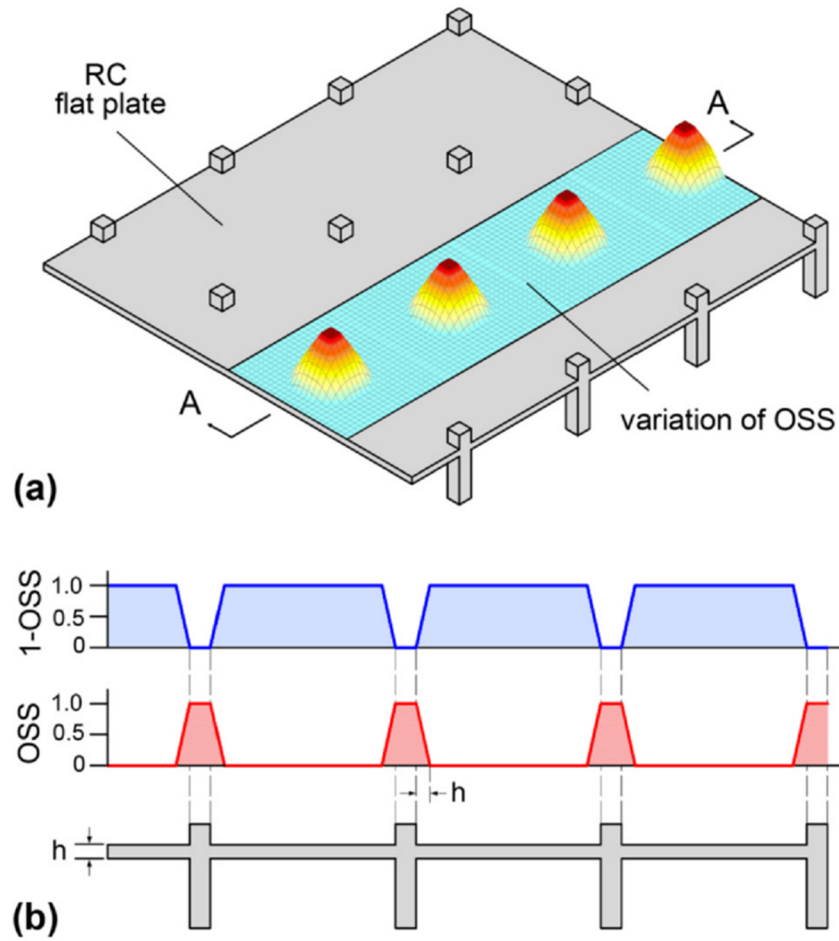
$$OSS = 1 - r/h \geq 0 \quad (2.13)$$

The OSS factor would then be utilized to develop the modified total strain vector  $\{\varepsilon_m\}$ , as shown in Equation 2.14.

$$\{\varepsilon_m\} = \begin{bmatrix} \varepsilon_x \\ \varepsilon_y \\ \gamma_{xy} \\ \gamma_{xz} \times (1 - OSS) \\ \gamma_{yz} \times (1 - OSS) \end{bmatrix} \quad (2.14)$$

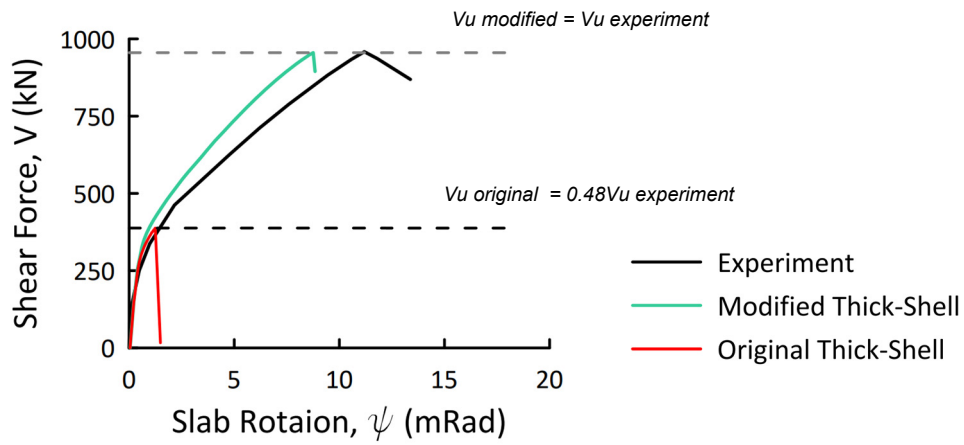
In the context of RC flat plates, the slab area being subjected to out-of-plane shear strain modification is limited to the disturbances at slab-column connections and, as such, is small relative to the total slab area. To illustrate the affected slab regions, Figure 2.13 shows a typical flat plate with regions undergoing OSS modification.

The application of the local out-of-plane shear strain suppression on modelling reinforced concrete flat plates was investigated by analyzing one of the isolated slab-column connections of Sagaseta et al. (2011), known as (PT21), with and without the OSS modification. The obtained results are demonstrated alongside the experimental data in Figures 2.14 and 2.15. Specimen PT21 measured  $3,000 \times 3,000 \times 250$  mm [ $118 \times 118 \times 9.8$  in.] supporting on  $260 \times 260$  mm [ $10.2 \times 10.2$  in] column, and loaded uniformly along all four slab edges. This slab was constructed with no shear reinforcements and studied the influence of asymmetrical in-plane reinforcement arrangements in planar directions on the shear performance of flat plates. The details regarding the test specimen are provided in Chapter 4. The results showed that this simple and costly modification significantly improved the failure pattern of the model by affecting the shear failure location of the slab so that the failure would happen at a section away from the support instead of immediate failure at an area adjacent to the column, which is in agreement with the actual behaviour of flat plates. Moreover, although the application of OSS had only a marginal effect on the stiffness of concrete, the estimated punching shear capacity of the specimen greatly improved due to the local out-of-plane shear strain suppression in the slab-column PT21. Similar simplified disturbed region modelling approaches have been applied in 2D sectional modelling procedures (e.g., Bentz 2000, Guner 2008) and are also in line with many modern sectional shear design provisions that permit RC beam and slab regions located adjacent to supporting elements to be designed using reduced shear force/stress demands (e.g., ACI 318-19; CSA A23.3; AASHTO LRFD 2019). The methodology and performance of the simplified disturbed region modelling approach employed in VecTor4 are presented in detail elsewhere (Goh and Hrynyk 2020). Finally, it should also be noted that the treatment of connection disturbed regions is a critical facet of shell-based modelling of RC slabs that are punching sensitive. As such, this approach is fully-automated within the material modelling and requires no additional costs from a user modelling perspective or run-time.

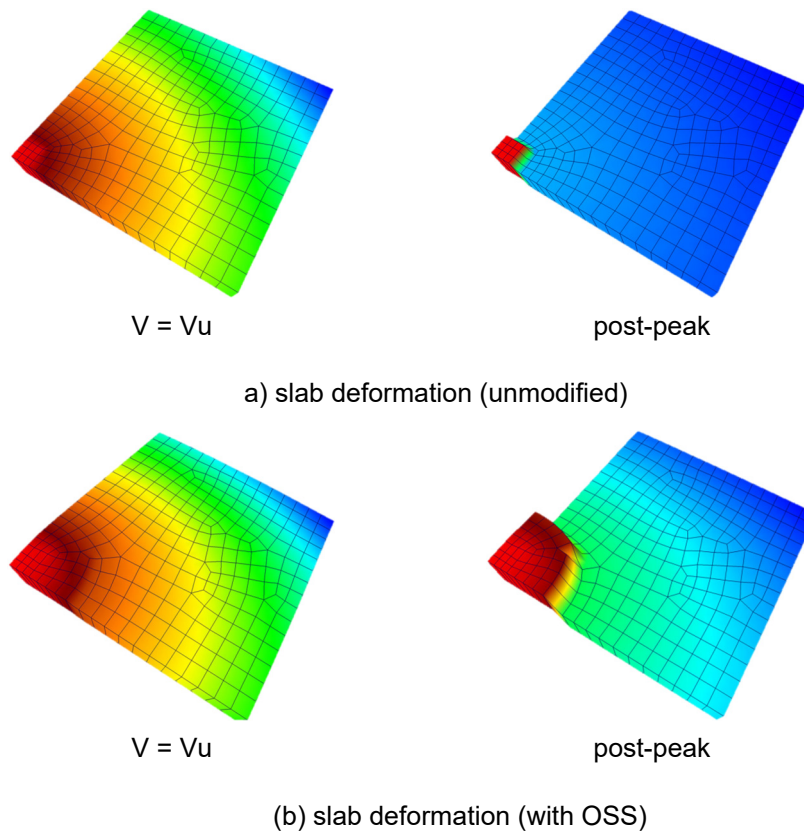


**Figure 2.13** — Proposed out-of-plane shear strain suppression (OSS) procedure: (a) impacted regions for a typical RC flat plate; (b) flat plate cross section and OSS variation along column line A-A. (adapted from Goh and Hrynyk 2020)





**Figure 2.14** — Shear force-slab rotation response of slab PT21 with and without OSS.



**Figure 2.15** — Computed failure sections with and without OSS for one quarter of slab PT21.

# Chapter 3

## General Modelling Approach

### 3.1 GiD Preprocessing

Software program GiD 14.0.4 was used to generate the thick-shell element meshes for all finite element models developed in this thesis. The following presents the general modelling approach employed.

The first step toward modelling the specimens was to define the geometry of the slabs. Since all the isolated slab-column connections studied had either single- or double-axis symmetric geometries and loading conditions, one-half or one-quarter finite element models were created. To define the geometry of the specimens, nodes representing the boundaries of the planar specimens were specified, such as the corners of the slabs, support regions, and known locations of loading points and vertical/horizontal restraints. In cases where the in-plane reinforcement arrangement or the material properties were not uniform throughout the slab, the model was subdivided into regions permitting the assignment of corresponding material properties. Once all nodes were specified, the boundary of the geometry and material sections were created using the line tool. Boundary lines were selected to create a surface representing each slab area. After creating the surfaces, element thickness, nodal restraints, material types, and loads conditions were added to

the model. Lateral translations and edge rotations of the nodes comprising the axes of symmetry were restrained to account for slab continuity. Out-of-plane translations were typically restrained along the perimeters of supports representing intersecting, non-rotating columns. In all cases, each layered thick-shell finite element was subdivided into 20 equal-thickness concrete layers, and additional steel layers were provided within the element thickness to represent in-plane steel reinforcement. Material properties were specified to match those reported in the literature or, when necessary, were reasonably assumed when related information wasn't provided (e.g., the concrete density of 2,400 kg/m<sup>3</sup> [150 lb/ft<sup>3</sup>] to account for self-weight).

GiD offers various options and techniques for generating finite element meshes. The models presented in this thesis were developed using an *unstructured meshing* approach using element *size to point* specifications. This meshing approach provided a cost-effective method for increasing the finite element mesh density within the critical slab regions surrounding the intersecting columns while allowing fewer elements to be used in less critical regions located toward the perimeters of the specimens. This meshing technique also arranges the elements in a circular pattern around the supports, which is more compatible with the stress distribution pattern in these regions. Quadratic9 shell element meshing in agreement with the 9-noded high-order heterosis shell element employed in VecTor4 was used in all cases. Once the element types were assigned to the various model regions, prescribed/predefined node locations were established prior to mesh generation. In this study, prescribed/predefined nodal locations were added at locations of concentrated loading points, restraints, and measurement locations displacement/rotation measurement points considered in the experimental program using the *Force Point to Surface Mesh* option. The *Unstructured-Assign Sizes to the point* option was selected for mesh generation. By selecting this method, the density of the mesh could be easily modified by assigning the size of the mesh surrounding a specific point. Typically, a size of 25 % of the effective depth of the slab was assigned to elements close to the corners of support regions to increase the mesh density of the critical slab regions surrounding the column. A size of approximately 50 % of the effective slab depth was assigned for points at the free corners of the specimens, which decreased the density of the mesh at the slabs' edges. The mesh generator requires the element size to be specified prior to generating the mesh; therefore, the maximum size assigned to the points has been used as the element size to be generated, which is equal to the 50 % of the effective depth of the slabs. Using the maximum element size generally provided a good distribution of element sizes throughout the slabs.

## 3.2 Mesh Selection and Sensitivity

A mesh sensitivity investigation was performed to establish an appropriate meshing procedure that was to be used in all cases. One of the isolated slab-column connection tests presented by Sagaseta et al. (2011), referred to as (PT31), was considered in the meshing investigation. Slab PT was 3,000-mm [118-in.] square, 250-mm [9.8-in.] thick, with 260-mm [10.2-in.] square column,

constructed with symmetrical reinforcements in orthogonal directions and no out-of-plane shear reinforcement to study the shear behaviour of flat plates with various in-plane reinforcement ratios in planar directions. The details of the test program can be found in Chapter 4. The results obtained from analyzing specimen PT31 with seven different finite element meshes are summarized in Figure 3.1 and Figure 3.2. From the figure, it can be seen that a planar shell element sizing on the order of about 25 % of the average flexural depth of the slab ( $d_{eff}$ ) within the connection region and roughly about 50 % of  $d_{eff}$  toward the free edges of the connection specimen resulted in punching shear capacity estimates that were in-line with those computed using increased mesh densities, while still minimizing computational costs required. Further, on the basis of these results, these slab depth normalized shell element sizes were applied used for all slab finite element meshes generated within this study. It must also be noted that the resulting shell element sizing that was used aligns with the connection region meshing recommendations provided by Goh and Hrynyk (2020) for prior punching-focused VecTor4 analyses.

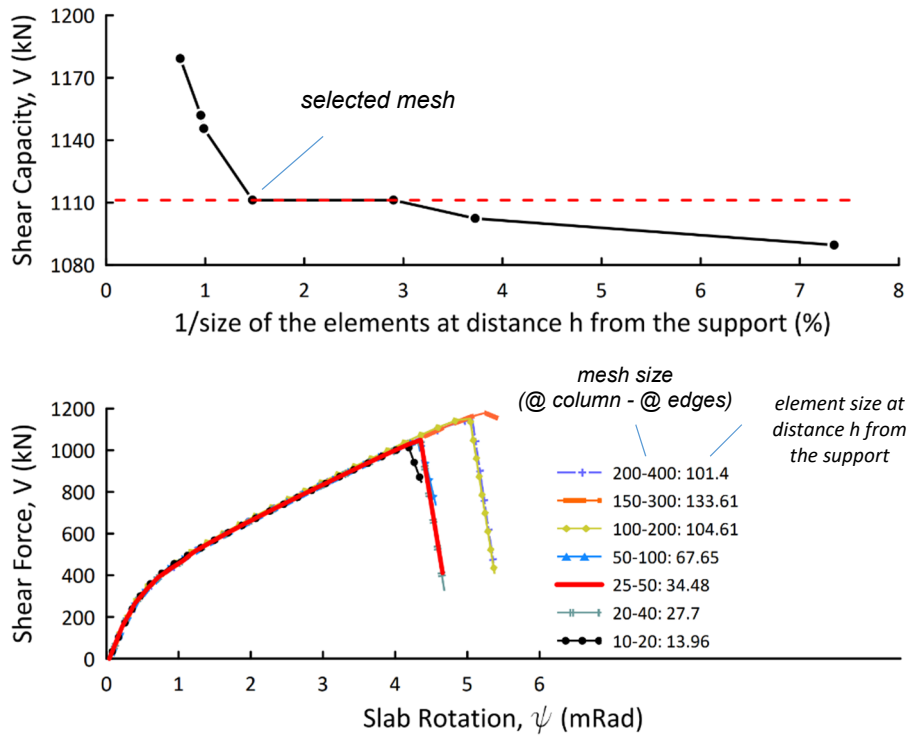


Figure 3.1 — Results from mesh sensitivity study of PT31.

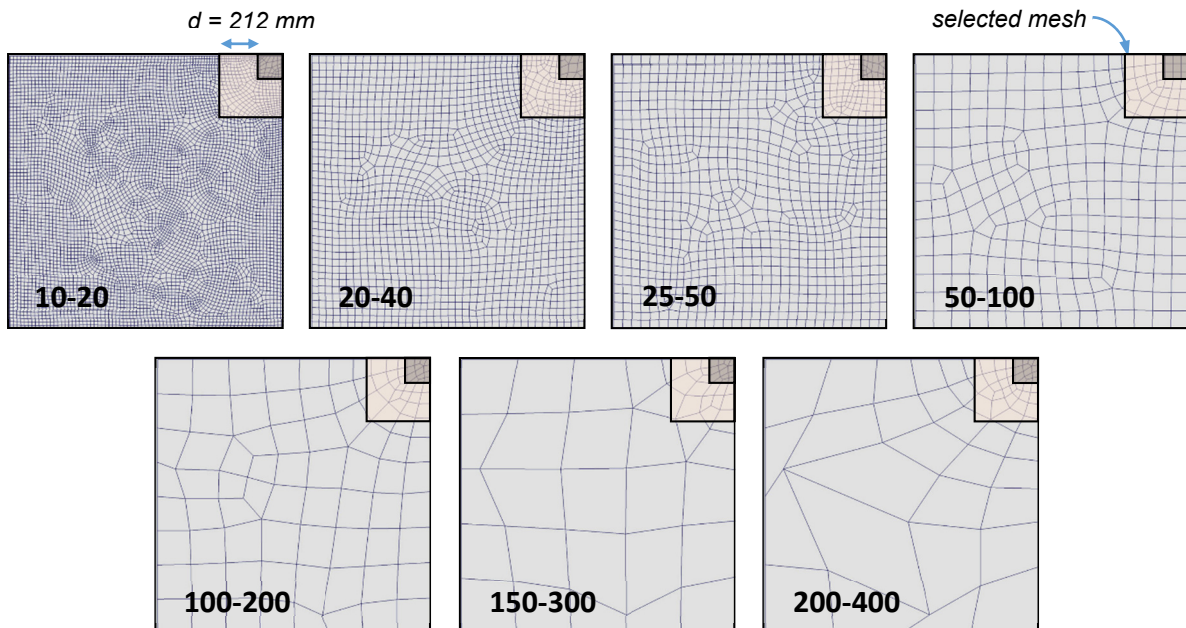


Figure 3.2 — Typical meshes used for mesh sensitivity study of one quarter of slab PT31.

### 3.3 Default Material Models and Analysis Parameters

In addition to the material modelling of the DSFM, a number of supplemental material models are also used within VecTor4 to incorporate response mechanisms that fall outside of those originally considered in the formulation of the DSFM. Specifically, dilatation and confining effects, concrete and steel hystereses, plain concrete tension softening, and several others are employed to capture secondary response mechanisms that often bear heavily on the response of cracked RC in certain situations. For example, in the case of RC flat plates subjected to punching shear loading conditions, influences associated with biaxial confinement and dilatation, as well as post-cracking tension softening of unreinforced concrete regions, are particularly important. A summary of the supplemental material models considered for all of the analyses presented in this paper is shown in Table 3.1. Note that these models are the same as those considered in very different analysis applications that did not involve punching shear, such as Hrynyk and Vecchio (2015, 2019) and, with only one exception, represent the ‘default’ material models that have typically been employed in VecTor4 validation studies. The concrete compression base curve is often selected on the basis of concrete compression strength. In this paper, Hognestad’s parabola (1951) was used to model the compression base curve response for all specimens considered, regardless of concrete compressive strength. The default material models used in this study are briefly summarized in the following section. The details of all material models used in the VecTor software are provided elsewhere (Wong et al. 2013).

**Table 3.1** — Key Supplemental Material Models used in VecTor4

Material	Model	Description
Concrete	Compression Base Curve	Hognestad (Parabola)
	Compression Post Peak	Modified Park-Kent
	Compression Softening	Vecchio 1992-A
	Tension Stiffening	Modified Bentz 2003
	Tension Softening	Linear
	Confinement Strength	Kupfer / Richart
	Concrete Dilatation	Variable - Orthotropic
	Cracking Criterion	Mohr-Coulomb (Stress)
	Crack Slip Calculation	Basic (DSFM/MCFT)
	Crack Width Check	Crack Limit (Agg/2.5)
	Hysteretic Response	Nonlinear w/ Offsets
Steel	Hysteretic Response	Seckin (w/ Bauschinger)

Note: details pertaining to model formulations and implementation are available elsewhere (Wong et al. 2013)

### 3.3.1 Default Concrete Material Models

#### Compression Based Curve - Hognestad (Parabola):

The Hognestad curve is a parabolic strain-stress response which works well for estimating the compression response of normal concrete with a compressive strength of less than 40 MPa. This parabolic curve is formulated to be symmetrical about  $\varepsilon_{peak}$ , at which concrete experiences its highest stress,  $f_{peak}$ , while the stress at a strain of  $2\varepsilon_{peak}$  is taken as zero.

#### Compression Post Peak: Modified Park-Kent:

The Kent-Park stress-strain curved model was enhanced by Park, Priestley and Gill (1982) to reflect the improvement in post-peak strength and ductility of concrete as the result of confinement. The post-peak bilinear response of confined reinforced concrete is modelled using formulas presented elsewhere in Wong et al. (2013).

#### Compression Softening: Vecchio 1992-A:

Vecchio 1992-A compression softening model considers a reduction in both the uniaxial compressive strength and well as its related strain in cracked concrete. This model is developed based on the results of over a hundred biaxially-loaded RC panel tests done at the University of Toronto. The softening effects are applied using the softening parameter,  $\beta_p$ , the value of which may vary between zero and one. By restricting the ratio of principal tensile strain over principal compression strain to 400, this model evades overestimating the softening effects in cases with a high value of principal tensile strain. Moreover, this model may be applied in conjunction with other material models to incorporate effects due to the shear slip deformations that also contribute to the softening behaviour of cracked RC.

#### Tension Stiffening: Modified Bentz 2003:

VecTor4 considers tension stiffening within cracked RC regions located within 7.5 times the bar diameter of all reinforcement layers provided through the thickness of the element. The model employed considers both the percentage of reinforcement and the bond characteristics in the formulation of tension stiffening Bentz (2003).

#### Tension Softening: Linear:

Plain concrete is a quasi-brittle material and exhibits some degrees of post-cracking tensile stress-strain response. The tension softening response of plain concrete is often considered to be negligible; however, considering the post-cracking stress-strain response of RC elements with low reinforcement ratios can impact estimated stress redistributions and localized damage development. The tension softening response of the concrete was assumed to be linear and

gradually decreases from the cracking stress and strain to zero stress at a strain level defined by the element fracture energy and crack spacing.

#### Confinement Strength: Kupfer / Richart:

Confined concrete demonstrates an increase in compressive strength and ductility. VecTor4 uses a strength enhancement factor,  $\beta_l$ , to account for confinement effects on the stress-strain response of concrete under biaxial or triaxial compression. The Kupfer/Richart model used in this program estimates the strength enhancement factor  $\beta_l$  by combining the concrete's biaxial compression strength formula by Kupfer et al. (1969) with the Richart et al. (1928) stress enhancement term for columns with spiral reinforcements.

#### Concrete Dilatation: Variable – Orthotropic (Variable Poisson's Ratio-Kupfer):

An increase in concrete compressive stress triggers internal microcracking that, in turn, can lead to concrete lateral expansion. In RC, the interaction of concrete and reinforcements in crack planes can remarkably improve the compressive strength and ductility of the member. Under tensile loading conditions, the initial Poisson's ratio,  $\nu_o$ , which was taken as 0.15 for concrete, is assumed to linearly decrease to zero between tensile strain levels of  $\epsilon_{crack}$  and  $2\epsilon_{crack}$ . Under compressive loading, a variable Poisson's ratio is used to reflect the lateral expansion in concrete. This model is formulated according to the strain data provided by Kupfer et al. (1969). The Poisson's ratio is assumed to nonlinearly increase from its initial value (commencing at a compressive strain level of  $0.5\epsilon_{peak}$ ) to a maximum value of 0.50.

#### Cracking Criterion: Mohr – Coulomb (Stress):

The cracking strength of concrete is determined using the Mohr – Coulomb (stress) model. The cracking strength is a stress state-dependent factor in concrete which mostly is in reverse relation to through-thickness compressive stresses. This model uses a series of shear and normal stresses to develop Mohr-Coulomb circles, determining the shear stress failure and failure plane of concrete. The shear strength can be determined using the concrete's internal friction angle,  $\phi$ , and a cohesion parameter,  $c$ . Formulas regarding the calculation of the cohesion and the shear strength of concrete are presented in Wong et al. (2013).

#### Crack Width Check: Crack Limit (Agg/2.5):

A crack width check, based on the maximum nominal coarse aggregate size, is used to limit the compressive resistance of severely damaged (i.e., highly cracked) RC elements. This limit is particularly relevant in lightly reinforced RC elements, where crack widths are large and have the tendency to undergo large rotations.

#### Hysteretic Response: Nonlinear w/ Offsets:



This model considers strain offsets in unloading and reloading stages of cyclic and reverse cyclic loading in tension and compression domains, employing a nonlinear Ramsberg-Osgood formula. By default, plastic damage accumulation is considered for concrete in compression but neglected for cracked RC in tension.

### 3.3.2 Default Steel Material Models

#### Hysteretic Response: Seckin Model w/ Bauschinger Effect:

The hysteretic response of steel reinforcing bars was modelled using a derivative of the Seckin model (1981). A key feature of this model is the automatic consideration of the Bauschinger effect.

# Chapter 4

## Slabs under Gravity Loading

Studies in the past few decades focused on investigating slab-column connections have generally shown that although code provisions are highly effective and accurate in estimating the shear capacity of idealized slab-column connections with square columns, symmetric in-plane reinforcement detailing, and uniform/regular loading patterns, their accuracies deteriorate for more complex and realistic cases in which the connection regions are subjected to non-uniform, or irregular, stress distributions (Milligan et al. 2021). Previous applications utilizing the software program VecTor4 have shown that the thick-shell modelling approach employed, coupled with DSFM material modelling and simple modifications to account for local out-of-plane disturbances, can successfully estimate the shear performance of idealized slab-column connections with high levels of accuracy, without the need for case-specific calibration (Goh and Hrynyk 2020).

This chapter investigates the performance of the thick-shell NLFEA procedure for alternative flat plate connections that develop highly non-uniform distributions of out-of-plane shear stresses in the connection regions, and are more representative of flat plate construction scenarios that are encountered in real-world construction. In this regard, test data comprising four experimental programs involving isolated RC slab-column connections that are tested in a manner producing highly non-uniform out-of-plane shear stress distributions within the connection regions were modelled using the same thick-shell NLFEA modelling procedure: i) a series of nine specimens

tested by Hawkins et al. (1971) that examined the influence of column rectangularity (and loading pattern), ii) fifteen specimens tested by Oliveira et al. (2004) that also focused on rectangularity with column aspect ratios that were varied from 1.0 to 5.0, iii) seven slabs tested by Sagaseta et al. (2011) which focused on studying the stress non-uniformity caused by differing in-plane reinforcement ratios as well as different loadings cases, and iv) four square slabs tested by Sagaseta et al. (2014) to investigate the influence of column rectangularity in conjunction with predominantly one-way and two-way loading patterns.

All isolated slab-column connections were supported by a single intersecting column located at the centre points of the test specimens, were constructed without any form of through-thickness shear reinforcement, and were subject to loading patterns producing conditions of concentric punching shear forces without unbalanced moments. As a result of the doubly-symmetric specimen geometries and loading conditions considered in all cases, one-quarter slab finite element models were created and used to simulate the structural responses of test specimens.

## 4.1 Hawkins et al. (1971) Slabs

In 1971, Hawkins et al. reported experimental findings demonstrating the influence of column aspect ratio on punching shear strength. The testing program consisted of nine square RC flat plate test specimens that were centrally supported on rectangular columns with column aspect ratios ranging from 1 to 4.3. The slabs were constructed with different in-plane reinforcement ratios, ranging from 0.77 % to 1.12 %, and were subjected to different configurations of gravity loading. All slabs were 2,130-mm [84-in.] square, 152-mm [6-in.] thick, and were constructed with only a top mat of flexural reinforcement (i.e., tension reinforcement provided in planar orthogonal directions).

The Hawkins et al. (H-series) test specimens were loaded along opposite slab edges, two-edge loading; however, slabs H7, H8, and H9 were non-uniformly loaded along the full perimeter of the slab, using four-edge loading. While the column aspect ratio was varied amongst the test specimens, slabs H1 to H8 were designed to have a column perimeter length of 1,220-mm [48-in.]. With the exception of slab H5, which was constructed with additional reinforcing bars along the column line in the top layer, all of the slabs were constructed with equal orthogonal reinforcement ratios in the planar directions of the slab, which was proportioned according to the 1963 ACI code and designed for the live load of 4.39 kPa [100 psf]. The concrete compressive strength varied from 24.7 to 29.9 MPa [3,580 to 4,340 psi], and mild reinforcement with a nominal strength of 412 MPa [59.7 ksi] was used for all flexural reinforcement. Displacement transducers were used to measure slab displacement over the course of testing. However, load-displacement response data were only reported for slabs H1, H3, and H7.

All slabs ultimately failed due to punching; however, initial flexural reinforcement yielding was reported to occur in slabs H1 and H6. The ultimate shear capacity, inclusive of the self-weight and weight associated with loading equipment, was reported for all specimens. The results of this study concluded that the increase in column aspect ratio decreased the shear capacity of the slabs. Further, the results obtained from H7 to H9 indicated a marginal decrease in load capacity due to a four-edge loading pattern. Specimen H6 was loaded at two sides of the slabs parallel to the long side of the column, which presented results similar to the unity aspect ratio column, ignoring the rectangularity effects of the column. While additional reinforcements in H5 increased the stiffness of the specimen up to 35 %, it had little effect on the shear strength of the slab. A summary of the specimen details and test results obtained for the Hawkins et al. slabs is reported in Table 4.1.

#### 4.1.1 Nonlinear Finite Element Modelling

The total number of shell elements comprising the models was on the order of 425, depending on the specimen, which required approximately 7,650 total degrees of freedom. The test specimen geometry and the locations of concentrated loads are shown in Figure 4.1a. Typical shell element meshing employed for the Hawkins et al. slabs is also depicted in Figures 4.1b and 4.1c for modelled quarter-slabs H3 and H7, subjected to two-edge and four-edge loading patterns, respectively. Typical shell element meshing of the rest of the slabs were presented in Figure 4.1d.

In addition to the self-weight, the one-quarter slab models of H1 through H6 were loaded equally at two points using a master-slave displacement-controlled loading method where one concentrated loading point is defined by prescribed nodal displacements (i.e., the master node) and the second concentrated load (the slave node) mirrors the force required to impose the displacement at the master node. Load-controlled analyses were used for the analyses of slabs H7-9, in which the loading along the edges was not symmetrical.

Nominal shear force versus out-of-plane displacement response diagrams for experimental and analytical data of displacement gauges D4 and D8 are presented in Figure 4.2. Note that D4 and D8 pertain to slab displacements at the free edges along the corner of the slab in the y- and the x-directions. Based on the results of the analyses, it can be seen that the numerical results reasonably estimate the shear capacity of the majority of slabs; however, they underestimate the strength of H1 and generally overestimate the stiffness of slabs H1, H3, and H7. In all cases, VecTor4 estimated the correct mode of failure; however, for slab H1, where extensive flexural steel yielding was reported to occur prior to slab failure, the simulation underestimated the degree of yielding. From the strength results obtained from the analysis of all nine of the Hawkins et al. slabs, VecTor4 showed the tendency to underestimate the shear capacity of slab-column connections. The mean computed-to-experimentally reported strength ratio obtained for the Hawkins et al. slabs was 0.88 with a coefficient of variation (CoV) of 10.2 %. A summary of the results obtained for all of the Hawkins et al. slabs is reported in Table 4.2.

**Table 4.1** — Summary of test specimen characteristics and capacity results of Hawkins et al. (1971)

Specimen	Load*	$d$ (mm)	$\rho_x$ (%)	$\rho_y$ (%)	$f'_c$ (MPa)	$f_y$ (MPa)	Column: (mm) $C_{max} \times C_{min}$	$V_{test}$ (kN)	$V_{VT4}$ (kN)	$V_{VT4}/V_{Test}$
H1	TE	117	1.12	1.12	29.6	412	305 × 305	384	303	0.79
H2	TE	117	1.12	1.12	28.1	412	406 × 203	351	298	0.85
H3	TE	117	1.12	1.12	29.9	412	457 × 152	333	329	0.99
H4	TE	117	1.12	1.12	29.3	412	495 × 114	331	346	1.05
H5	TE	117	1.12/2.61 <sup>+</sup>	1.12	27.4	412	457 × 152	355	287	0.81
H6	TE	117	1.12	1.12	24.8	412	457 × 152	336	272	0.81
H7	FE	117	0.87	0.87	26.1	412	457 × 152	320	250	0.78
H8	FE	121	0.81	0.81	24.7	414	495 × 114	314	282	0.90
H9	FE	121	0.77	0.77	27.1	414	305 × 152	315	291	0.92
Mean =									0.88	
CoV* (%) =									10.2	

\* TE = two-edge loading; FE = four-edge loading; CoV = coefficient of variation

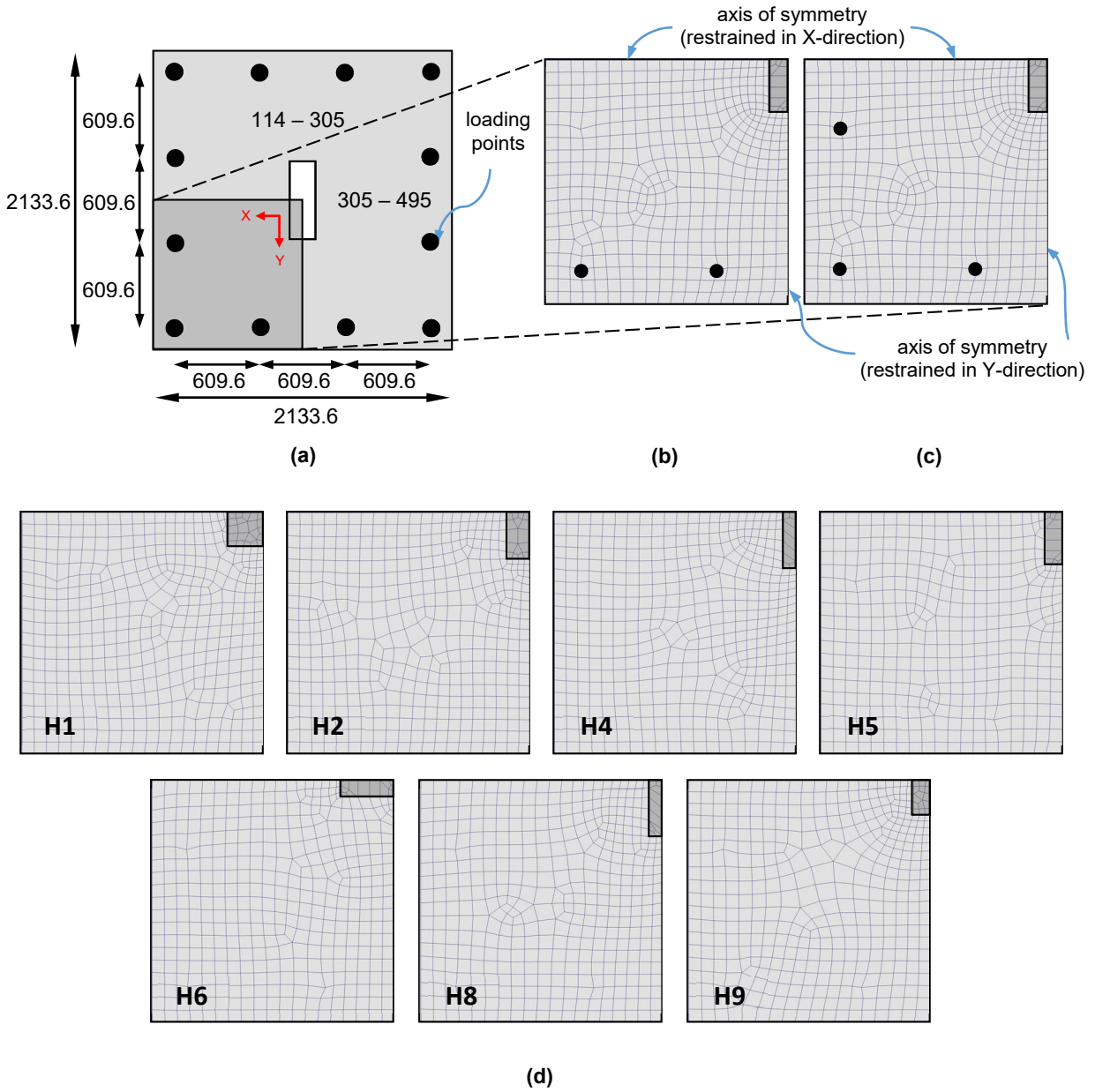
+  $\rho_x$  of 2.61% used within central 457 mm [18 in.] of the slab representing column strip

Additional notes:

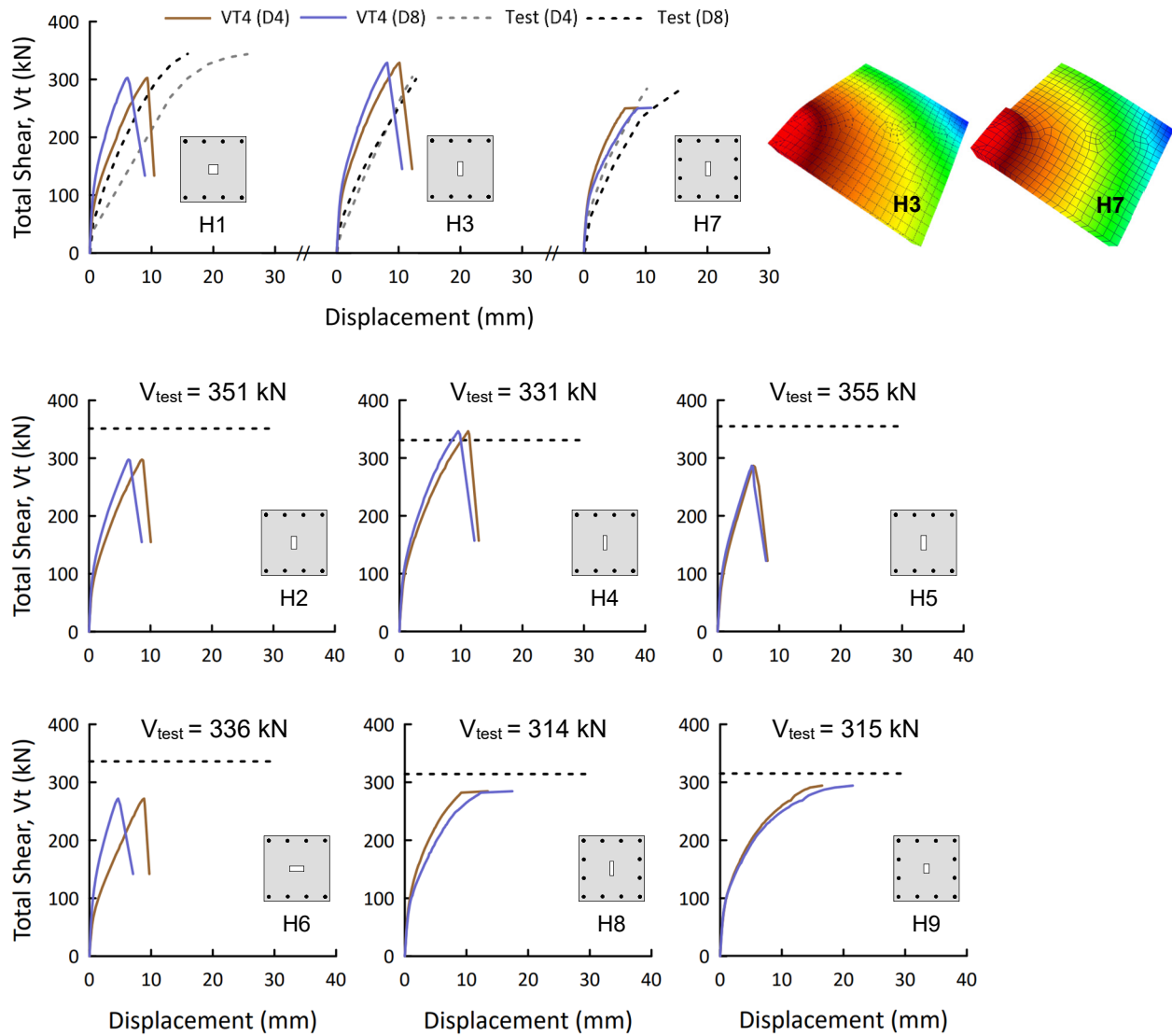
- maximum nominal coarse aggregate size ( $d_{agg}$ ) of 19 mm used for all slabs

- US No. 5 bars were used for slabs H1-H7, and slabs H8 and H9 were reinforced using US No. 4

[1 mm = 0.0394 in; 1 MPa = 145 psi; 1 kN = 224.8 lb]



**Figure 4.1** — Illustration of Hawkins et al. test specimens (a) geometry; (b) typical mesh (H3); (c) typical mesh (H7); (d) typical mesh (other slabs).  
 [all dimensions are shown in units of mm, 1 mm = 0.0394 in.]



**Figure 4.2** — Shear-displacement responses for Hawkins et al. slabs.  
 [1 mm = 0.0394 in; 1 kN = 224.81 lbs]

## 4.2 Oliveira et al. (2004) Rectangular Column Supported Slabs

Oliveira et al. (2004) studied fifteen slabs which were subdivided into three five-slab series, denoted as series LA, LB, and LC, to investigate the influences of column aspect ratio and loading pattern on the punching shear resistance of RC flat plate connections. All slabs measured  $2,280 \times 1,680 \times 130$  mm [ $90 \times 66 \times 5$  in.], and were supported on rectangular columns that were constructed with column aspect ratios ranging from 1.0 to 5.0. Further, all slabs were constructed with nominally identical in-plane reinforcement ratios where  $\rho_x = \rho_y = 1.10\%$ . The three different series were differentiated by their loading patterns. While centrally supported on thick steel bearing plates representing an intersecting column, the slabs were loaded using loading beams along the slab edges. Series LA and LB involved slabs that were loaded along two edges of the plate, and series LC involved slabs loaded along all four edges.

Out-of-plane displacements were measured using manual dial gauges, and the displacement data obtained closest to the slabs' free edges were used to compare reported and computed slab displacement responses. It should also be noted that because manual dial gauges were used to measure slab displacements, approximate displacements coinciding with slab failure that were developed by extrapolation were reported. Brittle punching shear failures were reported for all slabs. Key results from the study suggested that the MC 90, BS 9110-97 and ACI 318-02 code provisions had the tendency to overestimate punching resistance of slab-column connections with non-uniform shear stress distributions along the column perimeter. The results from the LA, LB, and LC series are presented in Figure 4.4. An overview of the properties of all slabs is reported in Table 4.2.

### 4.2.1 Nonlinear Finite Element Modelling

The same meshing strategy described in chapter three was used to mesh the slabs of Oliveira et al. Since the slabs comprising series LA, LB, and LC are identical in terms of geometry, only one series of models was constructed to represent the five variants of column geometry (i.e., L1-L5). The test specimen geometry and a typical shell element mesh employed for the Oliveira et al. slabs are shown in Figure 4.3.

All slabs were loaded using displacement-controlled loading. The master-slave displacement-controlled loading method was used for slabs of LC series to mimic the four-edge loading condition. The presence of the loading beams was not considered in the modelling process due to their negligible effect on the analyses of the slabs as previously determined by others who have modelled the Oliveira et al. slabs using different modelling strategies researchers (e.g., Setiawan et al. 2020). Slab self-weight was considered in all cases and estimated using a concrete density of  $2400 \text{ kg/m}^3$  ( $150 \text{ lb/ft.}^3$ ).



The shear force versus out of plane displacement plots presented in Figure 4.4 compare the computed results alongside those reported experimentally. The edges of supporting columns were restrained in the z-direction of the models; however, in the tests, the supporting columns were reported to experience marginal out-of-plane movements. Consequently, the load-displacement data of the tests were adjusted for comparison purposes, using the available measurements of dial gauges at the sides of the column. From Figure 4.4, it can be seen that the simple shell-based analysis procedure captured the correct mode of failure in all slabs, estimating brittle punching failures which are evident from the abrupt drop in the load resistance of the computed response. In slabs of the LA series, some level of yielding was detected in the flexural reinforcements surrounding the column prior to the shear failure in all slabs, which agrees with the results reported by Oliveira et al. for this series. In light of the fact that no case-specific calibration was done for these slabs, the computed responses seem to capture the initial stiffnesses and capacities of the slabs, for most cases. The mean computed-to-reported punching capacity ratio was 1.09, with a coefficient of variation (CoV) of 10.8 % for the LA series slabs; 1.04 with CoV of 8.0 % for the LB series slabs; and 0.87 with CoV of 10.5 % for the LC series slabs. In the case of the LB slab series, it can be seen that the analysis was effective in capturing the influence of changing column geometry and aspect ratio. However, the punching responses calculated for the LC series were found to be only marginally affected by changing column aspect ratio/geometry.

Figures 4.5 to 4.7 illustrate the through-thickness shear strain distribution of slabs L1 and L5 for column aspect ratios of one and five, respectively, for LA, LB, and LC series. The effect of the various loading patterns combined with column rectangularity on shear demand (by way of shear deformation) around the column is demonstrated in Figures 4.5 to 4.7. Comparing the results of slab-column connections with square columns in Figures 4.5a and 4.6a to those of Figure 4.7a, it can be noted that two-edge loading caused non-uniform stress distribution around the column. From Figures 4.5, 4.6, and 4.7, it can be seen that as a result of the increasing column aspect ratio, the shear demands tended to be more localized around the short side of the columns, which is expected and generally in agreement with findings reported by others (Milligan et al. 2020; Setiawan et al. 2020; and Sagaseta et al. 2014 ).

Table 4.2 presents a summary of the capacity results obtained, as well as several key parameters for each slab.

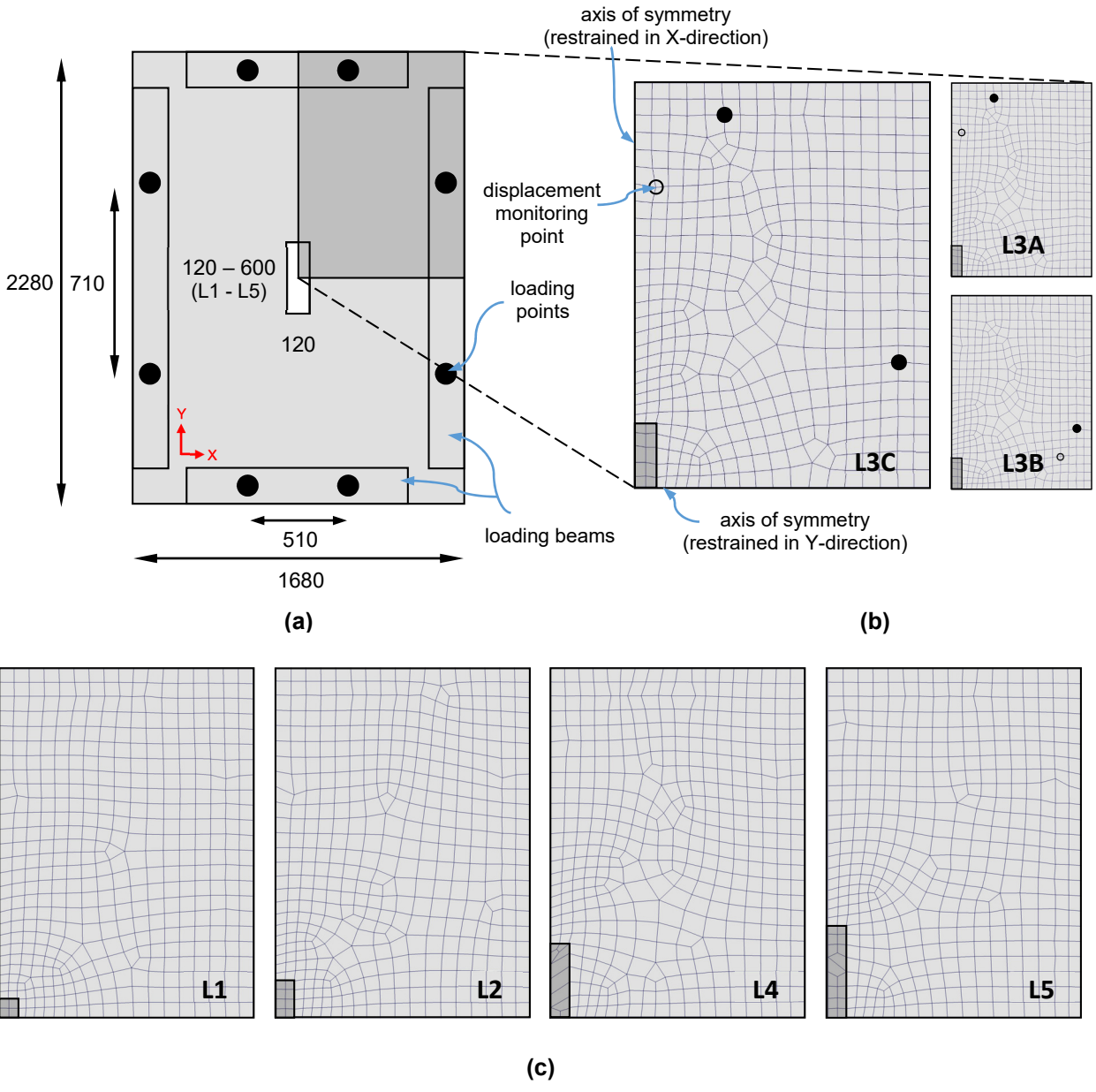
**Table 4.2** — Summary of test specimen characteristics and capacity results of Oliveira et al. (2004)

Specimen	Load*	$d$ (mm)	$\rho_x$ (%)	$\rho_y$ (%)	$f'_c$ (MPa)	Column: (mm) $C_{max} \times C_{min}$	$V_{test}$ (kN)	$V_{VT4}$ (kN)	$V_{VT4}/V_{Test}$
L1A	TE	107	1.09	1.10	57.0	120 × 120	240	246	1.02
L2A	TE	109	1.07	1.10	58.0	240 × 120	246	280	1.14
L3A	TE	108	1.08	1.10	56.0	360 × 120	241	294	1.22
L4A	TE	108	1.08	1.10	56.0	480 × 120	251	298	1.19
L5A	TE	108	1.08	1.10	57.0	600 × 120	287	258	0.90
L1B	TE	108	1.08	1.10	59.0	120 × 120	322	298	0.93
L2B	TE	106	1.10	1.10	58.0	240 × 120	361	360	1.00
L3B	TE	107	1.09	1.10	60.0	360 × 120	400	398	1.00
L4B	TE	106	1.10	1.10	54.0	480 × 120	395	432	1.09
L5B	TE	108	1.08	1.10	67.0	600 × 120	426	499	1.17
L1C	FE	107	1.09	1.10	59.0	120 × 120	318	273	0.86
L2C	FE	107	1.09	1.10	57.0	240 × 120	331	336	1.02
L3C	FE	106	1.10	1.10	54.0	360 × 120	358	329	0.92
L4C	FE	107	1.09	1.10	56.0	480 × 120	404	323	0.80
L5C	FE	109	1.07	1.10	63.0	600 × 120	446	341	0.76
								Mean =	1.00
								CoV* (%) =	13.7

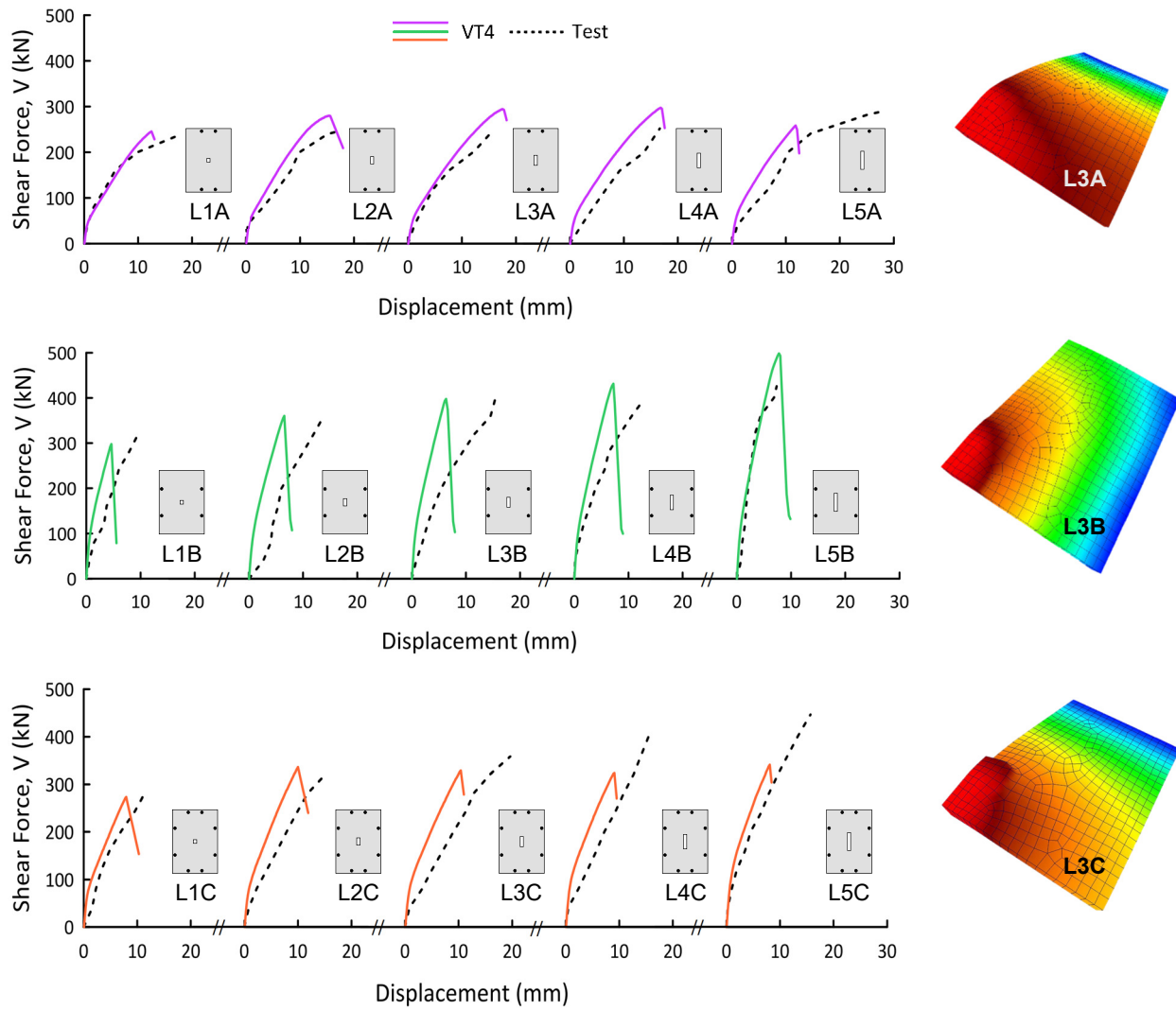
\* TE = two-edge loading; FE = four-edge loading; CoV = coefficient of variation

Additional notes:

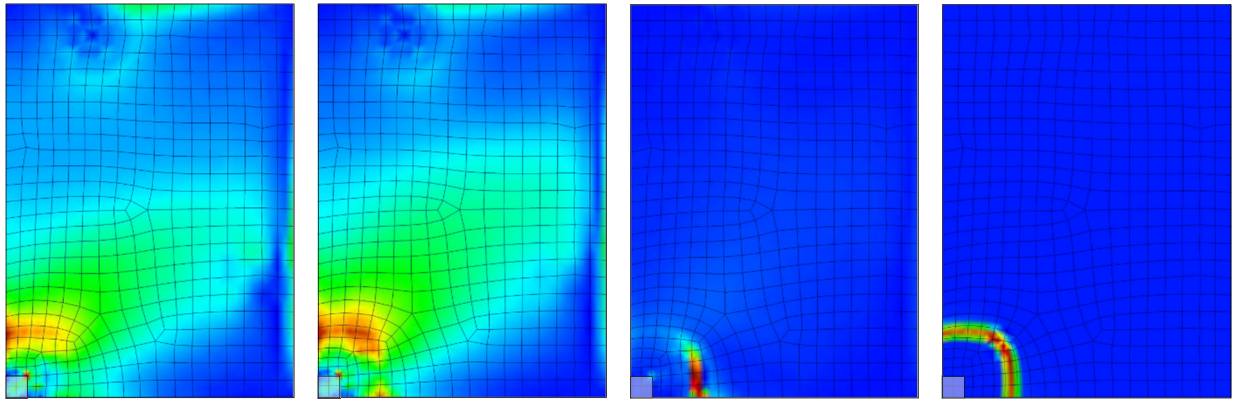
- The maximum nominal coarse aggregate size ( $d_{agg}$ ) of 16 mm used for all slabs
  - Bars with diameters of 12.5 mm, yield stress of 749 MPa, ultimate stress of 903 MPa, and modulus of elasticity of 234 GPa were used in tension (main reinforcement)
  - Bars with diameters of 6.3 mm, yield stress of 641 MPa, ultimate stress of 799 MPa, and modulus of elasticity of 234 GPa were used in compression
- [1 mm = 0.0394 in; 1 MPa = 145 psi; 1 kN = 224.8 lb]



**Figure 4.3** — Illustration of Oliveira et al. test specimens (a) geometry; (b) typical mesh (L3A, L3B, and L3C); (c) typical mesh (L1, L2, L4, and L5).  
 [all dimensions are shown in unit of mm] [1 mm = 0.0394 in]

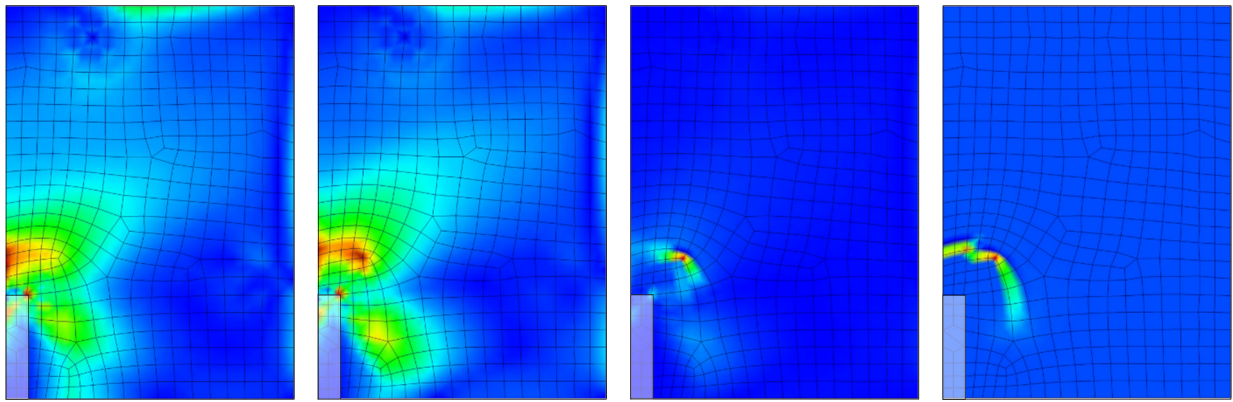


**Figure 4.4** — Shear-displacement responses for Oliveira et al. slabs; LA, LB, and LC series.  
 [1 mm = 0.0394 in; 1 kN = 224.81 lbs]



V = 0.5 Vu      V = 0.8 Vu      V = Vu      post-peak

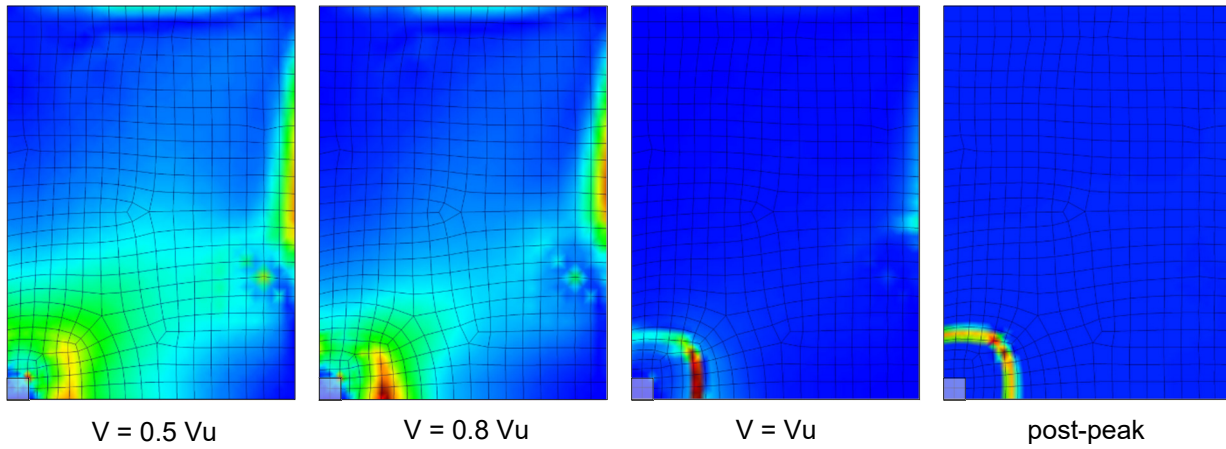
(a) principal out-of-plane strain contours for slab L1A (column aspect ratio of 1.0)



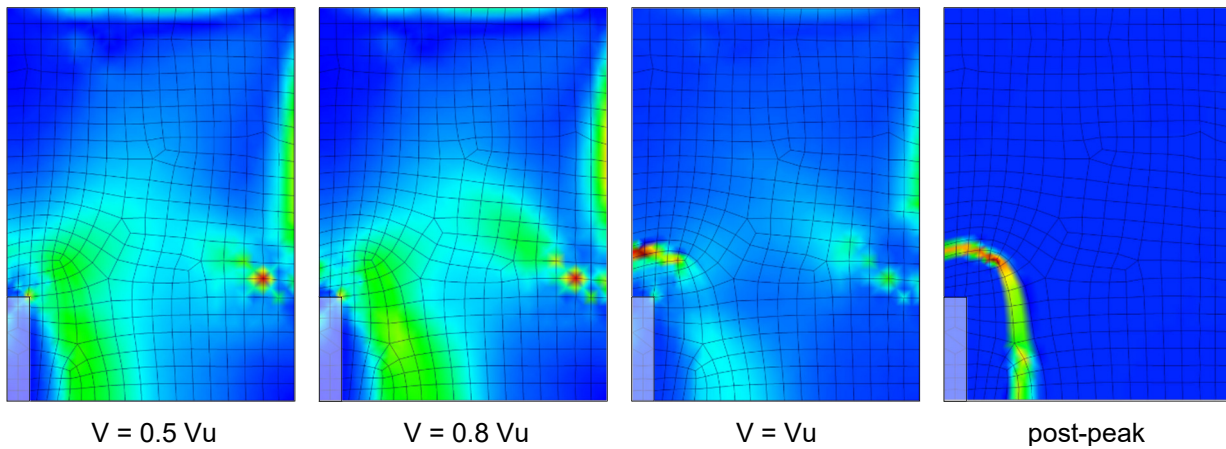
V = 0.5 Vu      V = 0.8 Vu      V = Vu      post-peak

(b) principal out-of-plane strain contours for slab L5A (column aspect ratio of 5.0)

**Figure 4.5** — Influence of column aspect ratio on shear strain distribution surrounding column, LA Series.

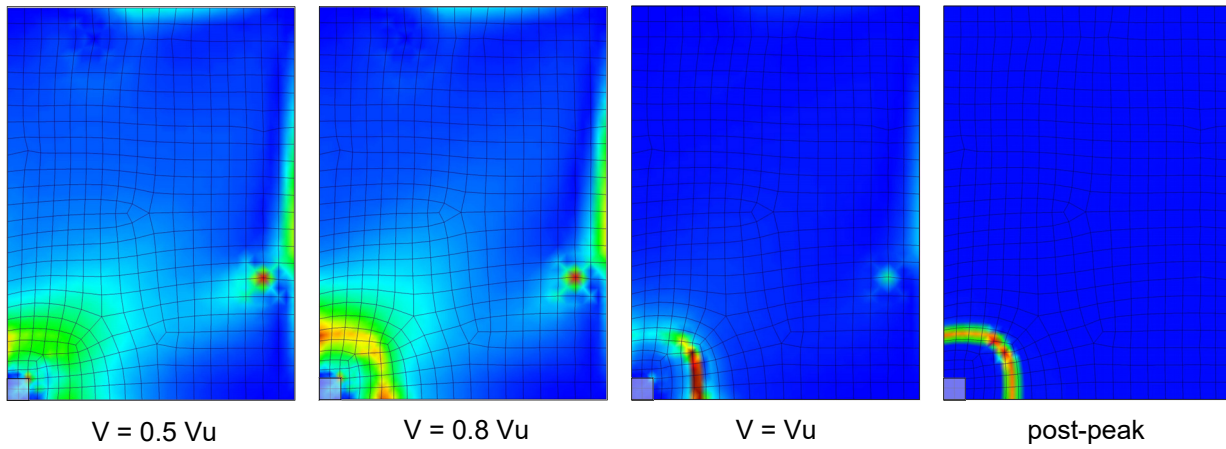


(a) principal out-of-plane strain contours for slab L1B (column aspect ratio of 1.0)

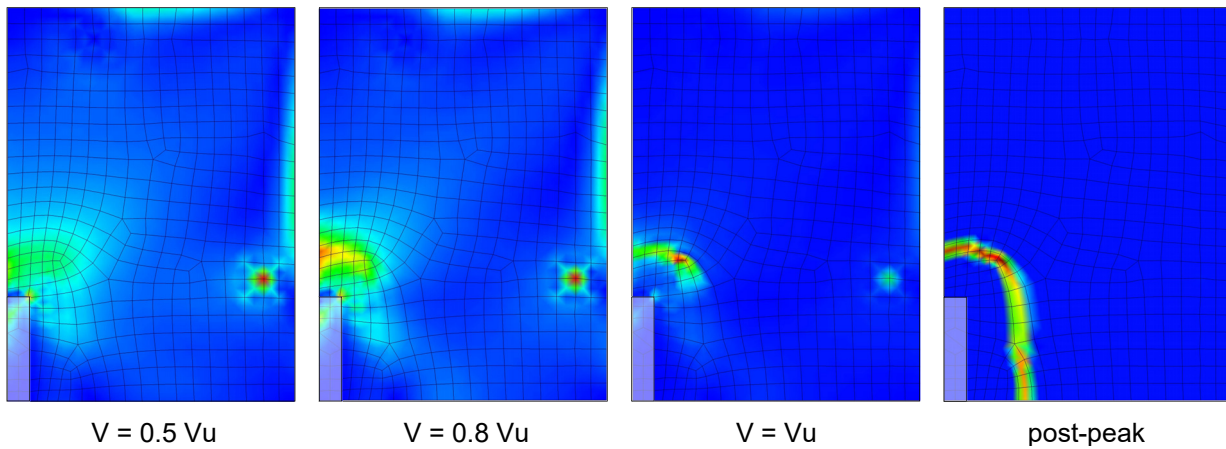


(b) principal out-of-plane strain contours for slab L5B (column aspect ratio of 5.0)

**Figure 4.6** — Influence of column aspect ratio on shear strain distribution surrounding column, LB Series.



(a) principal out-of-plane strain contours for slab L1C (column aspect ratio of 1.0)



(b) principal out-of-plane strain contours for slab L5C (column aspect ratio of 5.0)

**Figure 4.7** — Influence of column aspect ratio on shear strain distribution surrounding column, LC Series.

### 4.3 Sagaseta et al. (2011, 2014) EPFL Slabs

Two series of isolated slab-column connections were presented involving slabs tested at École Polytechnique Fédérale de Lausanne (EPFL) were presented in Sagaseta et al. (2011, 2014). Both testing programs involved slab specimens that were designed to study influences associated with non-uniform stress conditions developed in slab-column connection regions. The geometry of all slabs was  $3,000 \times 3,000 \times 250$  mm [ $118 \times 118 \times 9.8$  in.]. The PT series (Sagaseta et al. 2011) included seven slabs that were centrally supported on square columns measuring  $260 \times 260$  mm [ $10.2 \times 10.2$  in] and investigated the influence of in-plane reinforcement ratio variations in the x- and y-directions, with reinforcement ratios varying from 0.32 to 1.64 %. All slabs experienced four-edge loading, except slab PT34 which was subjected to two-edge shear loading conditions. The four slabs comprising the AM test series (Sagaseta et al. 2014) were centrally supported on rectangular columns measuring  $260 \times 780$  mm [ $10.2 \times 30.7$  in.], and were constructed with 0.75 % longitudinal reinforcement in both the x- and y- directions. In both the PT and AM test series, four inclinometers were provided at the four edges of the slabs to measure slab rotations ( $\psi$ ) about the x- and the y-axes. Additional information regarding the details of the test specimens is summarized in Table 4.3.

#### 4.3.1 Nonlinear Finite Element Modelling

One finite element mesh was used to model all PT slabs, and one mesh was also used to model all AM slabs. A total of 275 shell elements were employed in the PT series slab modelling, and 251 shells were required for the AM slabs. In the calculation of numerical slab rotations ( $\psi$ ), rotations were computed by dividing the difference of the out-of-plane displacement of the last two nodes on the x- and y-axis (closest to the edges of slabs) over the horizontal distance of the nodes; thus representing rotations at the specimen edges. The test specimen geometry and a typical shell element mesh employed for the slabs PT and AM slab series are shown in Figure 4.8.

The computed shear-rotation responses obtained for the PT and AM test series are plotted alongside the experimental data in Figures 4.9 and 4.10, respectively. From the results presented, it can be seen that the shell-based analysis procedure accurately estimated the reported responses in most cases; however, it severely underestimated the strengths of slabs PT31 and PT32. In these two cases, it can be seen that the estimated shear capacities obtained were considerably lower than what was reported experimentally, potentially due to an underestimation of the aggregate interlock performance associated with the high strength concretes used in these slabs. It should also be noted that NLFEA of slabs PT31 and PT32 done by others using case-specific calibrated high-resolution 3D solid NLFEA (e.g., Milligan et al. 2020) also led to significant underestimates for the capacities of these slabs. Slabs PT21, PT22, and PT34 were estimated to undergo flexural yielding at the connection regions prior to punching failure; however, the flexural yielding that was computed is not entirely apparent in the plots. More specifically, slabs AM01 and AM02 were estimated to



experience flexural steel yielding prior to punching; however, the degree of yielding computed was less than what was encountered experimentally. It can also be noted that the estimated pre-yield stiffness of most slabs tended to fit experimental results well.

The mean computed-to-reported shear capacity ratio was 0.94 with a CoV of 13.5 % for the PT series slabs, and 0.96 with a CoV of 3.4 % for the AM slab series. In all cases, VecTor4 captured the correct mode of failure reported for the slabs. A summary of the results obtained for all of the PT and AM slabs is reported in Table 4.3.

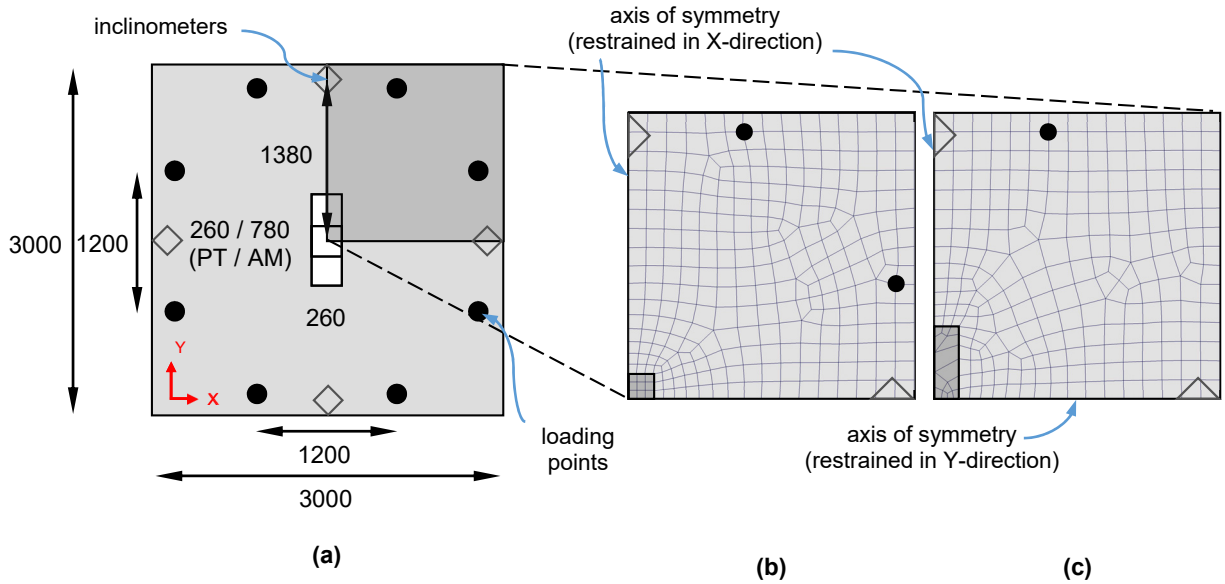
**Table 4.3** — Summary of test specimen characteristics and capacity results of Sagaseta et al. (2011 & 2014)

Specimen	Load*	$d$ (mm)	$\rho_x$ (%)	$\rho_y$ (%)	$f'_c$ (MPa)	$f_{yx}$ (MPa)	$f_{yy}$ (MPa)	Column: (mm) $C_{max} \times C_{min}$	$V_{test}$ (kN)	$V_{VT4}$ (kN)	$V_{VT4}/V_{Test}$
Sagaseta et al. (2011)											
PT21	FE	192	1.64	0.84	67.5	597	552	260 × 260	959	955	1.00
PT22	FE	196	0.82	0.82	67.0	552	552	260 × 260	989	1026	1.04
PT23	FE	189	0.85	0.36	66.0	552	568	260 × 260	591	641	1.08
PT31	FE	212	1.48	1.48	66.3	540	540	260 × 260	1433	1111	0.78
PT32	FE	215	1.46	0.75	40.0	540	558	260 × 260	1157	840	0.73
PT33	FE	212	0.76	0.32	40.2	558	533	260 × 260	602	561	0.93
PT34	TE	216	0.74	0.74	47.0	558	558	260 × 260	879	910	1.04
Sagaseta et al. (2014)											
AM01	TE	214	0.75	0.75	44.0	516	516	780 × 260	950	931	0.98
AM02	TE	208	0.75	0.75	39.7	516	516	780 × 260	919	888	0.97
AM03	TE	203	0.75	0.75	42.2	516	516	780 × 260	883	797	0.90
AM04	FE	202	0.75	0.75	44.6	516	516	780 × 260	1067	1038	0.97
										Mean =	0.95
										CoV* (%) =	10.9

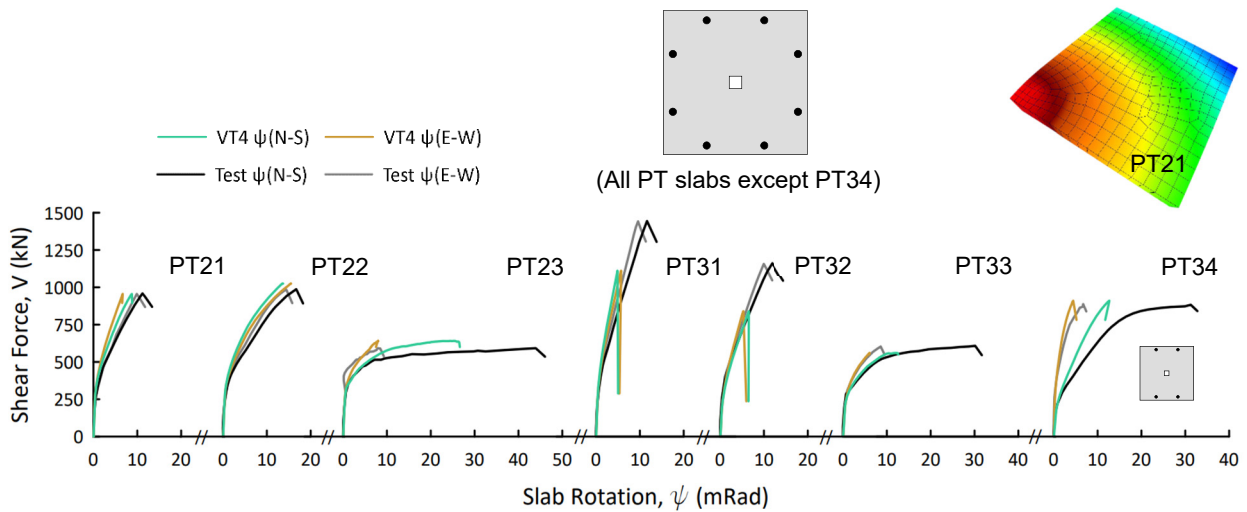
\* TE = two-edge loading; FE = four-edge loading; CoV = coefficient of variation

Additional notes:

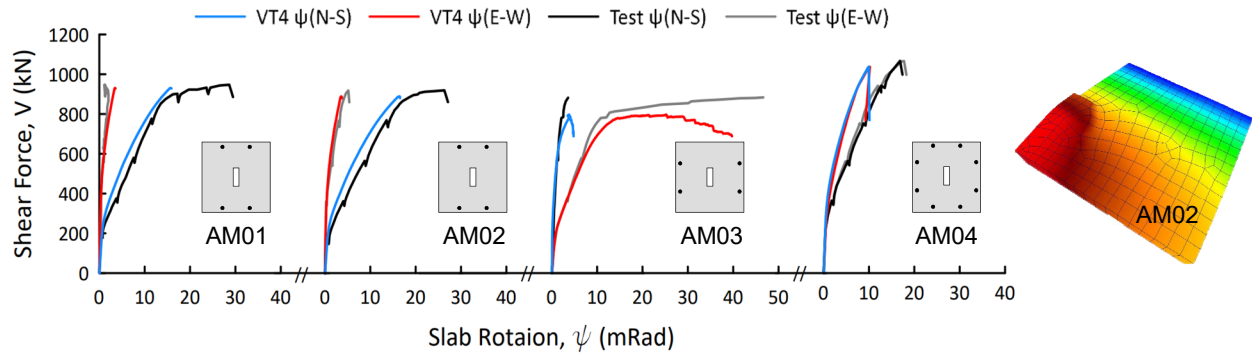
- The maximum nominal coarse aggregate size ( $d_{agg}$ ) of 16 mm used for all slabs
  - Yield stress for x-direction bars ( $f_{yx}$ ) was 597, 552, 552, 540, 540, 558, 558 MPa for slabs PT21 to PT34, respectively.
  - Yield stress for y-direction bars ( $f_{yy}$ ) was 552, 552, 568, 540, 558, 533, 558 MPa for slabs PT21 to PT34, respectively.
- [1 mm = 0.0394 in; 1 MPa = 145 psi; 1 kN = 224.8 lb]



**Figure 4.8**— Illustration of Sagaseta et al. (2011, 2014) test specimens (a) geometry; (b) finite element mesh for PT21; (c) finite element mesh for AM02.  
 [all dimensions are reported in units of mm] [1 mm = 0.0394 in]



**Figure 4.9**— Shear-rotation responses for Sagaseta et al. (2011) slabs (PT21 – PT23; PT31 – PT34).  
 [1 mRad = 0.0573 Deg ; 1 kN = 224.8 lbs]



**Figure 4.10** — Shear-rotation responses for Sagaseta et al. (2014) slabs (AM01 – AM04).  
 [1 mRad = 0.0573 Deg ; 1 kN = 224.8 lbs]

## 4.4 Summary

The adequacy of the thick-shell NLFEA program VecTor4 to capture the punching shear resisting performance of slab-column connections with a high degree of stress non-uniformity at the connection regions subjected to gravity loading was investigated. In total, thirty-five isolated slab-column connections presented in the literature were analyzed using the modelling procedure, and the computed response estimates were compared to reported experimental results. All of the test programs considered in this section of the thesis were designed with specific details and/or loading conditions that led to the development of highly non-uniform stress conditions in the slab-column connections, thus, differentiating these tests from the bulk of the punching-focused experimental work presented in the literature.

The results obtained from the DSFM-based NLFEA modelling procedure demonstrated the capability of the program to cost-effectively estimate the punching shear resisting performance of RC slabs with slab-column connections subjected to highly non-uniform punching shear stress conditions. The modelling procedure successfully estimated the governing modes of failure in all cases. Moreover, it is of great importance to note that although no case-specific calibration was used in this study, program VecTor4 estimated the total shear capacity of the slab-column connections with an acceptable level of precision that was comparable to the calibrated results of other NLFEA software programs employing far-more expensive solid element modelling procedures. For the 35 slab specimens considered in this section of the thesis, a mean numerically estimated-to-experimentally reported capacity ratio of 0.95 was obtained with a CoV of roughly 13 %.

Other findings relating to the performance of VecTor4 for the slab-column connections considered in this chapter include the following:

- The analyses showed that program VecTor4 tends to overestimate the initial stiffness of slab-column connections with stress non-uniformity and, in general, underestimated the punching shear capacity of such slab-column connections. Although flexural yielding was detected in some cases prior to the punching shear failure, in agreement with reported data, the numerical results often did not capture the extent of response softening associated with flexural yielding that was reported to occur experimentally.
- Comparing the VecTor4 computed results to the experimentally-reported results, it can be noted that VecTor4 better captured the behaviour of slab-column connections of more recent studies, Sagaseta et al. (2011) and (2014), compared to the older ones. The Hawkins et al. (1997) testing series was found to be the most challenging series of those considered.
- VecTor4 failed to capture the increasing punching capacities stemming from increased column aspect ratio in the LC series of slabs, and in slab L5A, of the Oliveira et al. (2004) testing program. Although no apparent reason was identified for this deficiency, this could be partially a by-product of neglecting the loading beams' effect on the responses of these slabs. However, based on the results of other series presented in this study (Hawkins et al. 1997), increasing the column aspect ratio does not always lead to an increase in shear capacity due to highly localized shear stress around the short side of the column. It can be of interest for future studies to further investigate complementary factors that, when coupled with column aspect ratio, impact the performance of slab-column connections with rectangular columns.
- VecTor4 estimated the response of the slabs tested in the Sagaseta et al. (2011) and (2014) testing programs. It accurately captured the initial stiffness, governing modes of failure, and ultimate punching shear capacity in most cases. However, the strengths of slabs PT31 and P32 were underestimated significantly, which is in agreement with results obtained by other researchers using more conventional solid element modelling procedures (e.g., Milligan et al. 2020).
- The results of slab-column connections subjected to non-uniform stress distribution were not as accurate as the VecTor4-based numerical results presented in Goh and Hrynyk (2020) for 25 EPFL idealized slab-column connections constructed with square slab and column geometries, uniform in-plane reinforcements in orthogonal directions, and uniform four-edge loading conditions. The results presented by Goh and Hrynyk (2020) using the layered thick-shell

elements and the same material modelling procedures as employed in this study, provided a mean computed-to-experimentally reported strength ratio of 1.01 with a CoV of 9 %. In all, VecTor4 showed a promising performance analyzing the shear performance of slab-column connections with highly non-uniform shear demands around column perimeter considering the complexities involved with the slabs.

## Chapter 5

# Slabs under Combined Gravity Loading and Unbalanced Bending Moments

It is important for the structures to be resistant to lateral loads and motions, especially in high-rise buildings located in seismic risk areas. In most flat-plate structures, the RC flat plates will be designed to carry gravity loading, while secondary systems such as shear walls or braces will be employed to support the structures against lateral loads. That stated non-uniform gravity loading conditions and/or variable slab span lengths can lead to significant bending moment demands in the slab-column connections of RC plates that are subjected to gravity-only loading conditions. Studies on flat-plate structures under gravity and lateral loading have shown that inter-storey drift demands stemming from the lateral loading, due to seismic events or even extreme wind, can negatively impact the shear resisting performance of slab-column connections (Pan et al. 1989; Pan et al. 1992; Durrani et al. 1995; Hueste et al. 1999; Robertson et al. 2006). Thus, it is of great importance to consider the deformation capacity and demands of flat plates in design, even in cases where alternative lateral load resisting systems are employed (e.g., shear walls).

In this chapter, two testing programs were studied to evaluate the suitability of the analysis procedure for estimating the behaviour of slab-column connections subjected to the combination of gravity loads with increasing monotonic and cyclic unbalanced bending moments. The first testing program presented employed for validation in this chapter was performed by Tian et al. (2008). This study included five slab-column connections and was focused on investigating the effects of reinforcement ratio and sustained gravity load level on the shear resisting performance of slab-column connections. The other testing program presented in this chapter was done by Drakatos et al. (2016), and was focused on the performance of slab-column connections with different slab reinforcement ratios under varied conditions of combined gravity and unbalanced moment connection loading scenarios.

All isolated slab-column connections were constructed without through-thickness shear reinforcement. In all cases, the specimens and loading conditions were symmetric about one axis and, as such, only one-half of the slabs and supporting test assemblies were modelled and used to simulate the structural responses of test specimens.

## 5.1 Tian et al. (2008) Slabs

Tian et al. (2008) investigated the responses of five isolated RC slab-column connections to evaluate the effect of loading combinations of shear and unbalanced bending moments as well as various flexural reinforcement ratios on the punching shear resisting performance of the connections. The main objective of introducing the unbalanced moment was to form some level of damage at the slab-column connections to investigate the shear performance of pre-damaged slab-column connections. All slabs measured  $4,270 \times 4,270 \times 152$  mm [ $168 \times 168 \times 6$  in.] and were attached to centrally located  $406 \times 406$  mm [ $16 \times 16$  in.] columns that extended 1,397 mm and 1,016 mm [55 in. and 40 in.] from the top and bottom surfaces of the slabs, respectively. The columns were used to vertically and laterally load the slab-column connections, employing hydraulic jacks. All specimens were constructed without shear reinforcement. The bottom mat of slab reinforcements consisted of twenty US No. 3 bars distributed in both planar directions (i.e., x- and y-directions). In the top mat of slabs annotated as '0.5' slabs, US No. 4 bars were used to reinforce the column strips with a reinforcement ratio of 0.5 %, and US No. 3 bars with a reinforcement ratio of 0.25 % were used elsewhere. While in the other slabs, annotated as '1.0' slabs, additional US No. 4 bars were provided within the centred width of  $c + 3d$  of the slabs in the top mat, in the planar directions, resulting in a reinforcement ratio of 1.0 %. The average effective depth of the slabs was 127 mm [5 in.], with a nominal clear cover of 13 mm [0.5 in.] on both surfaces of the slabs.

Each of the flat plate connection specimens was tested using one of three different load protocols considered in the testing program: 1) monotonic gravity loading, denoted by G-series specimens,

in which the slabs' out-of-plane displacements were restrained using four vertical struts and vertical loads producing concentric shear were applied through the columns; 2) constant gravity loading combined with cyclic lateral, denoted by L-series specimens, in which the slabs were restrained in the out-of-plane direction using eight vertical struts, and increasing amplitude reversed cyclic lateral displacements were applied through the column; and 3) the LG-series specimens were subjected to loading protocol 2 noted above until a lateral ratio of 1.25 % was achieved, and thereafter were subjected to increasing gravity shear to failure using a hydraulic jack at the bottom of the columns. Similar to the L-series, the LG-series were vertically restrained at eight points around the column for the combined loading part of the test, and later restrained at four points for the second part of the test, gravity loading, as was done in the G-series testing. Lateral loading was applied in the strong slab bending direction, perpendicular to the outer layers of in-plane slab reinforcement, with three lateral displacement cycles at each drift level. The geometry of the test specimens and the loading setups are depicted in Figure 5.1 and Figure 6.2 for slabs under gravity loading and combined loading, respectively.

All slabs experienced flexural punching failures and failed only after the development of large flexural deformations that were evidenced by slab reinforcement yielding. The results of this study concluded that initial damages caused by unbalanced moments had little effect on the ultimate shear capacity of the slabs; however, it considerably decreased connection stiffness. The comparison of the experimental results to ACI 318-05 code showed that the design provisions seemed to overestimate the shear capacity of flat plates with low in-plane reinforcement ratios; however, they significantly underestimated the drift capacity of the connections. Additional information regarding the details of the test specimens is summarized in Table 5.1.

### 5.1.1 Nonlinear Finite Element Modelling

Due to symmetric geometries and uniform reinforcement arrangements in the planar slab directions, half-slab models were developed using a common mesh for all slabs, which could be used for all combinations of loading and unbalanced moments. Intersecting columns provided in the testing program were incorporated into the models to permit the application of the lateral loads. The modelled columns were extended 1,219 mm [48 in.] from the centres of the slabs, accounting for the reported effective column height of 2,438 mm [8 in.].

In the G-series testing, gravity load was applied to the bottom of the columns, while the nodes on the centerline of the columns were restrained to restrain in-plane displacements and rotations about the x- and the y-axes. To laterally load the slabs of the L-series, a pinned condition was considered at the base of the column while still providing necessary restraints to enforce symmetry in the half-slab model. The LG-series slabs were analyzed in two steps, similar to the test program. In the first step, the slabs were analyzed under a constant gravity load and increasing cyclic drift ratio up to 1.25 %, with drift ratio increments of 0.25 %. After the first part of the analysis was completed,



the input files were modified to represent the test setup used for the second phase of testing under gravity loading. By way of the seed file option in VecTor4 (Hrynyk and Vecchio 2019b), the computed damaged state from the last load stage of the first analysis was used as the starting point for the second phase of the analysis. Note that lateral cyclic loading was performed for the slabs of this series using only one displacement cycle at each drift ratio amplitude.

The results of the analyses for the slabs of Tian et al. (2008) under combined loading and gravity loading are presented alongside the test results in Figure 5.3 and Figure 5.4, respectively. In all cases, the analyses were shown to estimate the correct modes of failure. For the specimens subjected to combinations of constant gravity loading and increasing cyclic unbalanced moment, the maximum lateral load was successfully estimated for the L- and LG-series slabs. The mean computed-to-experimental lateral load capacity ratio was 1.06, with a coefficient of variation (CoV) of 9.4 % for the slabs under combined loading conditions. In terms of drift ratio, VecTor4 significantly underestimated the drift ratio of slab L0.5.

Regarding the slabs under gravity loading, although the shear capacity of slab G0.5 was overestimated by approximately 23%, the shear capacity estimated for other specimens was in-line with that reported. In all, the mean computed-to-reported punching capacity ratio was 1.06, with a coefficient of variation (CoV) of 9.9 % for the slabs under gravity loading. Finally, the initial stiffnesses of the connections were well-computed for all the slab-column connections of this series. Although the cracking initiated in slabs of G series at the same gravity load level was reported, the analyses did not demonstrate the same level of significant stiffness reduction that was documented by Tian et al. A summary of the results obtained for all of the slabs of Tian et al. is reported in Table 5.2.

**Table 5.1** — Summary of test specimen characteristics of Tian et al. (2008)

Specimen	Load*	$d$ (mm)	$\rho$ (%)		$f'_c$ (MPa)	$f_y$ (MPa)		$f_u$ (MPa)		$B$ (mm)	$c$ (mm)
			$c + 3h$	Column Strip		No. 3 bars	No. 4 bars	No. 3 bars	No. 4 bars		
L0.5	CL	129	0.50	0.50	25.6	441	469	634	621	4,267	406
LG0.5	CL/GL	129	0.50	0.50	33.2	462	455	717	738	4,267	406
LG1.0	CL/GL	126	1.00	0.71	27.6	407	421	614	655	4,267	406
G0.5	GL	129	0.50	0.50	31.3	407	421	614	655	4,267	406
G1.0	GL	126	1.00	0.71	28.0	407	421	614	655	4,267	406

\* GL = increasing gravity loading; CL = constant gravity loading and increasing cyclic unbalanced bending moment

Additional notes:

- maximum nominal coarse aggregate size ( $d_{agg}$ ) of 9.5 mm used for all slabs  
 [1 mm = 0.0394 in; 1 MPa = 145 psi; 1 kN = 224.8 lb]

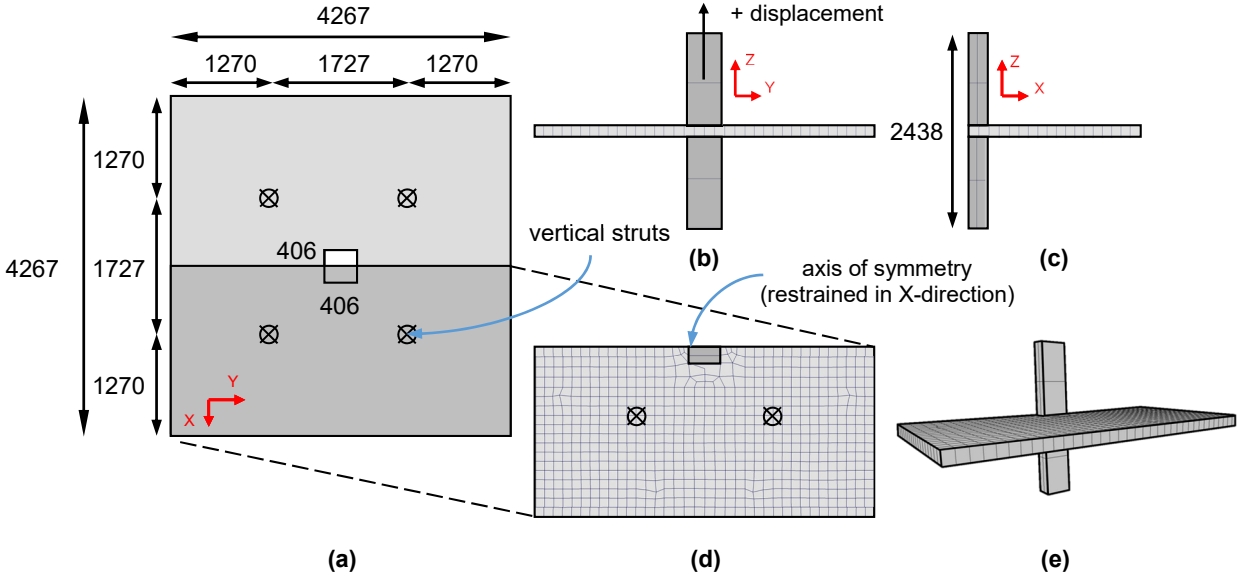
**Table 5.2** — Summary of capacity results of Tian et al. (2008)

Specimen	Load*	Combined Loading*				Gravity Loading*			$V_{VT4}/V_{test}$	$L_{VT4}/L_{test}$	$DR_{VT4}/DR_t$
		$L_{test}$ (kN)	$DR_{test}$ (%)	$L_{VT4}$ (kN)	$DR_{test}$ (%)	$V_g$ (kN)	$V_{test}$ (kN)	$V_{VT4}$ (kN)			
L0.5	CL	51	2.00	47	1.23	105	-	-	-	0.92	0.62
LG0.5	CL/GL	48	1.25	54	1.25	119	324	334	1.03	1.12	1.00
LG1.0	CL/GL	65	1.25	74	1.25	107	400	378	0.95	1.14	1.00
G0.5	GL	-	-	-	-	-	312	383	1.23	-	-
G1.0	GL	-	-	-	-	-	404	414	1.02	-	-
Mean =									1.06	1.06	0.62
CoV* (%) =									9.9	9.4	-

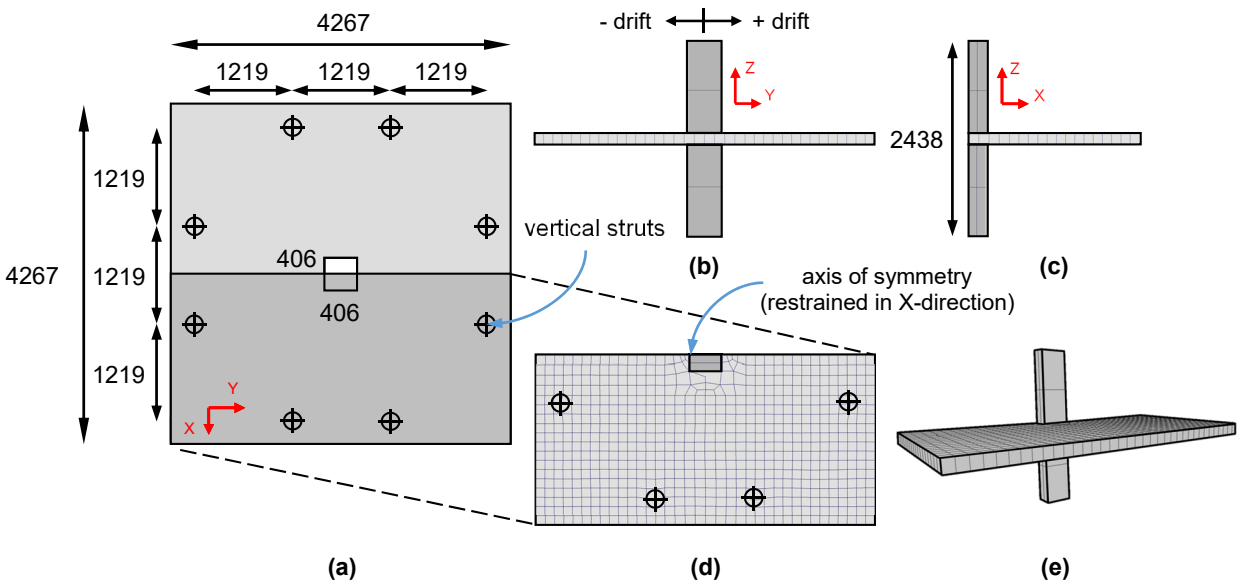
\* GL = increasing gravity loading; CL = constant gravity loading and increasing cyclic unbalanced bending moment; L = maximum applied lateral load; DR = drift ratio;  $V_g$  = constant gravity load

Additional notes:

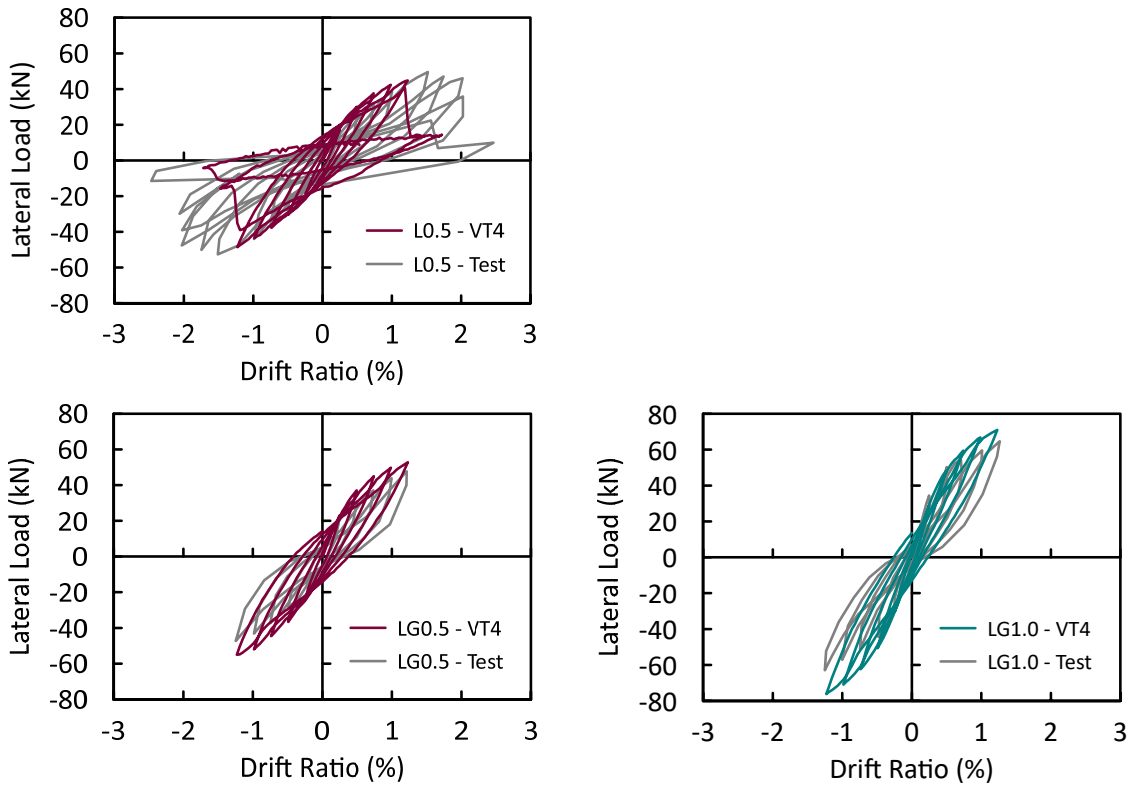
- maximum nominal coarse aggregate size ( $d_{agg}$ ) of 9.5 mm used for all slabs  
 [1 mm = 0.0394 in; 1 MPa = 145 psi; 1 kN = 224.8 lb]



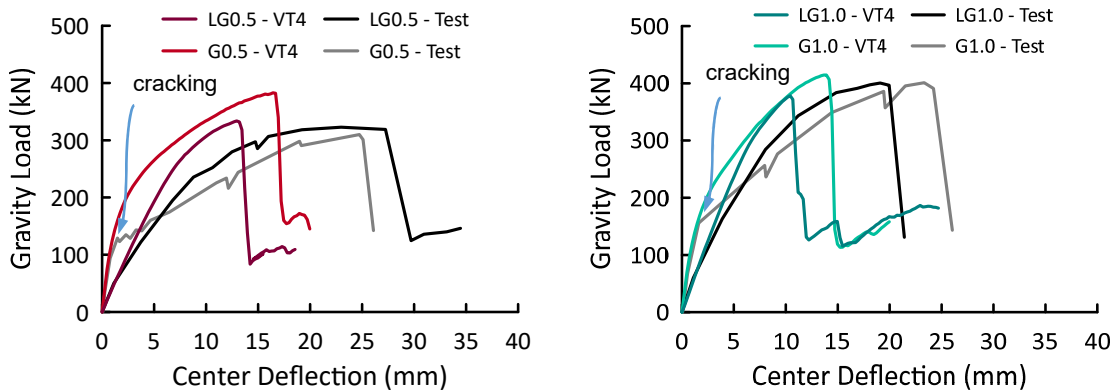
**Figure 5.1** — Illustration of Tian et al. (2008) test specimens – test setup 1: Gravity Loading  
 (a) geometry; (b) z-y elevation; (c) z-x elevation; (d) typical mesh; (e) 3D view of the model.  
 [all dimensions are shown using units of mm] [1 mm = 0.0394 in]



**Figure 5.2** — Illustration of Tian et al. (2008) test specimens – test setup 2: Combined Loading  
 (a) geometry; (b) y-z elevation; (c) x-z elevation ; (d) typical mesh; (e) 3D view of the model.  
 [all dimensions are shown using units of mm] [1 mm = 0.0394 in]



**Figure 5.3** — Combine Loading: Lateral load-drift ratio responses for Tian et al. (2008) slabs (L and LG series).  
[1 kN = 224.8 lbs]



**Figure 5.4** — Gravity Loading: Shear-deflection responses for Tian et al. (2008) slabs (G and LG series).  
[1 mm = 0.0394 in; 1 kN = 224.8 lbs]

## 5.2 Drakatos et al. (2016) Slabs

As reported by Drakatos et al. (2016), a series of thirteen isolated slab-column connections, denoted as PD specimens, were tested at EPFL under different combinations of punching shear and unbalanced moment. Slabs measuring  $3,000 \times 3,000 \times 250$  mm [ $118 \times 118 \times 9.8$  in.] were centrally supported on  $390 \times 390$  mm [ $15.4 \times 15.4$  in.] steel bearing surfaces used to represent interesting columns. To stabilize the test setup and minimize the separation of slab-column connection interfaces, four 15 mm post-tensioned bars were used to anchor the column bearing plates to the slab surfaces. The PD slabs were tested to the failure using one of three loading conditions: 1) under four-edge gravity loading (V); 2) under constant four-edge gravity loading and increasing monotonic unbalanced moment (V+M); and 3) under constant four-edge gravity loading and increasing cyclic unbalanced moment (V+C).

Hydraulic jacks were used to apply out-of-plane shear forces to the system, and unbalanced bending moments were introduced to the connections by applying two equal and opposite loads (couple loads) at the free ends of four 2,100-mm [82.7 in.] long steel beams attached to the slabs' edges. Hydraulic jacks and steel beams generated moments about the y-axis with a lever arm of 7,200 mm [283.5 in.]. All thirteen slabs of the PD series were constructed without out-of-plane shear reinforcement. In terms of the in-plane reinforcement, two reinforcement arrangements were used for the slabs of the PD series. Group A slabs were symmetrically reinforced with a reinforcement ratio of 0.75 % in the tension mat and 0.38 % in the compression mat, and Group B slabs were constructed with a reinforcement ratio of 1.50 % in the tension mat and 0.75 % in the compression mat. Additional reinforcing bars were provided at the slabs at the edges to connect the steel loading beams to the slabs. The test specimen geometry and the loading setup are shown in Figure 5.5.

The moment-rotation responses of the connections were presented for all slabs to demonstrate the shear performance of the connections under the combination of gravity loading and unbalanced bending moment. A series of inclinometers were provided at a distance of 1,380 mm [54.3 in.] from the centre of the column and at the columns to measure the rotation of the slab-column connections. The rotation of the slab-column connection ( $\psi_{scc}$ ) was calculated from the rotation of the column ( $\psi_{col}$ ) and the rotation obtained from inclinometers provided at the east ( $\psi_{max}$ ) and west ( $\psi_{min}$ ) sides of the slabs, along the axis of symmetry in the x-direction, using Equation 6.1. All slabs of this series experienced brittle punching shear failures. Additional information regarding the details of the test specimens can be found in Table 5.3.

$$\psi_{scc} = \frac{\psi_{max} - \psi_{min}}{2} - \psi_{col} \quad (6.1)$$

The results of this study were used to discuss the effects of gravity loading, reinforcement ratio, and loading history (increasing cyclic vs. increasing monotonic bending moment) of the specimens on stiffness, moment capacity, rotation, and cracking pattern of the specimens. In comparing testing results, the vertical loads were normalized using Equation 6.2.

$$v = \frac{V_{test}}{b_o \times d \times \sqrt{f'_c}} \quad (6.2)$$

where  $b_o$  is defined as the control perimeter's length, measured at a distance of  $d/2$  from the face of the column with rounded corners (see fib MC2010 for the explanation of  $b_o$  calculation).

Key findings from the experimental testing showed that: i) doubling the reinforcement ratio led to a significant increase in the stiffness of the slab-column connections, especially in cases with low gravity loading and increased the moment capacity of the connections significantly in cases where the gravity loading was higher; ii) an increase in applied gravity loading reduced the moment capacity and the apparent stiffnesses of the connections, in general, decreased slabs' ultimate rotations; and iii) the rotation at the peak moment and the moment capacity of the slab-column connections decreased in slabs with cyclic loading in comparison with monotonically loaded slabs, especially when the gravity load was lower.

### 5.2.1 Nonlinear Finite Element Modelling

Due to the symmetric geometry and loading conditions of the test specimens comprising the PD slabs, one-half of the slab-column connections and attached beams were modelled employing a typical mesh consisting of 603 shell elements. The displacement in the y-direction, as well as the rotation about the x-axis of all nodes on the axis of symmetry, were restrained to enforce the symmetry condition. Out-of-plane displacements along the column perimeters were restrained to reflect the restraints provided in the testing program. Self-weight was considered for the RC slabs; however, it was neglected for all test frame components. To simulate the application of the unbalanced moments, two equal magnitude loads acting in opposing out-of-plane directions were applied at the two free ends of the attached loading beams. Note that eight slab-column connections subjected to either increasing gravity loading (V) and or constant gravity loading combined with increasing monotonic bending moment (V+M) were analyzed using the shell-based analysis procedure.

Maximum and minimum rotations of the slabs were calculated by dividing the out-of-plane difference by the horizontal distance of the two closest nodes to the edges of the slabs at the west and east, respectively. Equation 6.1 was used to calculate the slab-column connection rotation ( $\psi_{scc-VT4}$ ) of the slabs. Contrary to the test program in which the columns experienced some level of rotation about the y-axis ( $\psi_{col-test} \neq 0$ ), in the models, the supporting columns were assumed

to have no rotation about the axes of symmetry ( $\psi_{col-VT4} = 0$ ). Thus, except for the slab-column connection rotation ( $\psi_{scc-test}$ ), which was calculated using Equation 6.1, the maximum ( $\psi_{max-test}$ ) and minimum ( $\psi_{min-test}$ ) rotations of the slabs measured during testing required correction for comparison purposes. The rotation of the columns ( $\psi_{col-test}$ ) was required to calculate the slabs' maximum and minimum rotations; however, only the maximum ( $\psi_{max-test}$ ), the minimum ( $\psi_{min-test}$ ), and the slab-column connection ( $\psi_{scc-test}$ ) rotations were presented by Drakatos et al. Consequently, the columns' rotation was calculated from Equation 6.3, and was used to find the column corrected maximum ( $\psi_{max-test}'$ ) and minimum ( $\psi_{min-test}'$ ) rotations of the slabs, using Equations 6.4 and 6.5.

$$\psi_{col-test} = \frac{\psi_{max-test} - \psi_{min-test}}{2} - \psi_{scc-test} \quad (6.3)$$

$$\psi'_{max-test} = \psi_{max-test} - \psi_{col-test} \quad (6.4)$$

$$\psi'_{min-test} = \psi_{min-test} + \psi_{col-test} \quad (6.5)$$

Figure 5.6 presented the experimental and computed moment-rotation responses of the Drakatos et al. slabs under constant shear and increasing monotonic unbalanced bending moment. Comparing the results of the analyses for slabs of Group A, except for PD3, in which the moment resistance of the slab-column connection was significantly underestimated, VecTor4 estimated the moment-rotation response of all the slabs of this group reasonably accurately. This underestimation in the moment capacity of slab PD3 can be explained by recognizing the fact the slab was under a high level of gravity load,  $0.80 V_u$ , and close to shear failure. The results obtained for the slabs of Group B suggested that program VecTor4 estimated the moment resistance of these slabs with an acceptable level of accuracy. The mean computed-to-experimentally reported moment ratio obtained for slabs of Group A was 0.87, with a coefficient of variation (CoV) of 26 %; 0.72 with a CoV of 8.3 % for slabs of Group B; and 0.82 with CoV of 23 % for all of the slabs of this series. All specimens were estimated to fail in brittle punching, as was reported experimentally.

In all, VecTor4 was successful in capturing the correct mode of failure for all the slabs of this series and predicted the moment-rotation response of the slabs with an acceptable degree of accuracy. The initial stiffness computed under the combination of gravity loading and unbalance moment for most of the slabs of this series was close to what was reported by Drakatos et al. (2016). The underestimation of the initial rotation in most slabs can be explained by the fact that the program VecTor4 tends to overestimate the initial stiffness of the slabs under gravity loading based on the result presented in Chapter 4. It can be observed that an increase in the level of the gravity load decreased the accuracy of the program in estimating the moment resistance of the slabs.

Although the moment-responses of slabs were acceptable, the large coefficients of variation computed for this series and the fact that slabs were subjected to various levels of gravity loading prior to applying unbalanced moments, it was of interest to also look into the maximum shear force resisted by slabs under constant gravity loading and increasing unbalanced moment (V+M) at the hogging slab half. Thus, Figure 5.7 compares the computed shear force-rotation responses versus that estimated based on the results reported in Drakatos et al. The maximum shear force for the hogging slab halves was calculated using Equation 6.6.

$$V_{max}(\psi) = \frac{M(\psi)^{(kN.m)}}{7.2(m)} + V_g/2 \quad (6.6)$$

The results presented in Figure 5.7 show that the maximum shear forces applied to the slab-column connections estimated by VecTor4 are indeed accurate in all slabs of this series, with the mean analytical-to-experimental maximum shear ratio of 1.00, with a coefficient of variation (CoV) of 3.2 %. It can be seen that all specimens failed shortly after the introduction of the unbalanced moment; therefore, the inconsistency in the estimation of moment resistance of the slabs and the large coefficient of variation calculated for this series could be due to the fact that many of the slabs were already close to failure prior to bending moment application. The results of the PD series are summarized in Table 5.3.



**Table 5.3** — Summary of test specimen characteristics and capacity results of Drakatos et al. (2016)

Specimen	Load*	$d$ (mm)	$\rho$ (%)	$\rho'$ (%)	$f'_c$ (MPa)	$f_y$ (MPa)	$V_{max-test}$ (kN)	$V_{VT4}$ (kN)	$k^*$ (kN/kN)	$M_{max}$ (kNm)	$M_{VT4}$ (kNm)	$V_{VT4}/V_{test}$	$M_{VT4}/M_{max}$	
Group A														
PD7 <sup>ref</sup>	V	200	0.80	0.35	39.2	507	983	1040	1.00	-	-	1.06	-	
PD1	V+M	204	0.79	0.35	37.9	559	200	199	0.26	525	518	1.00	0.99	
PD3	V+M	198	0.81	0.34	34.9	558	395	381	0.80	200	101	0.96	0.50	
PD4	V+M	201	0.80	0.35	39.0	507	261	263	0.38	527	540	1.01	1.02	
PD5	V+M	198	0.81	0.35	37.5	507	322	320	0.54	462	443	0.99	0.96	
Group B														
PD9 <sup>ref</sup>	V	195	1.61	0.74	34.3	593	1040	1064	1.00	-	-	1.02	-	
PD10	V+M	197	1.60	0.72	32.5	593	407	394	0.72	290	191	0.97	0.66	
PD12	V+M	195	1.61	0.72	35.5	546	323	310	0.49	469	367	0.96	0.78	
												Mean =	1.00	0.82
												CoV* (%) =	3.2	23.3

\* V = increasing four-edge gravity loading; V+M = constant four-edge gravity loading and increasing monotonic unbalanced bending moment; ref = reference test for the group;  $k = V_{test}/V_{test-ref}$ ; CoV = coefficient of variation;  $V_{max-test}$  indicates the shear capacity of slabs PD7 and PD9, and the maximum shear under V+M at hogging slab half at other slabs

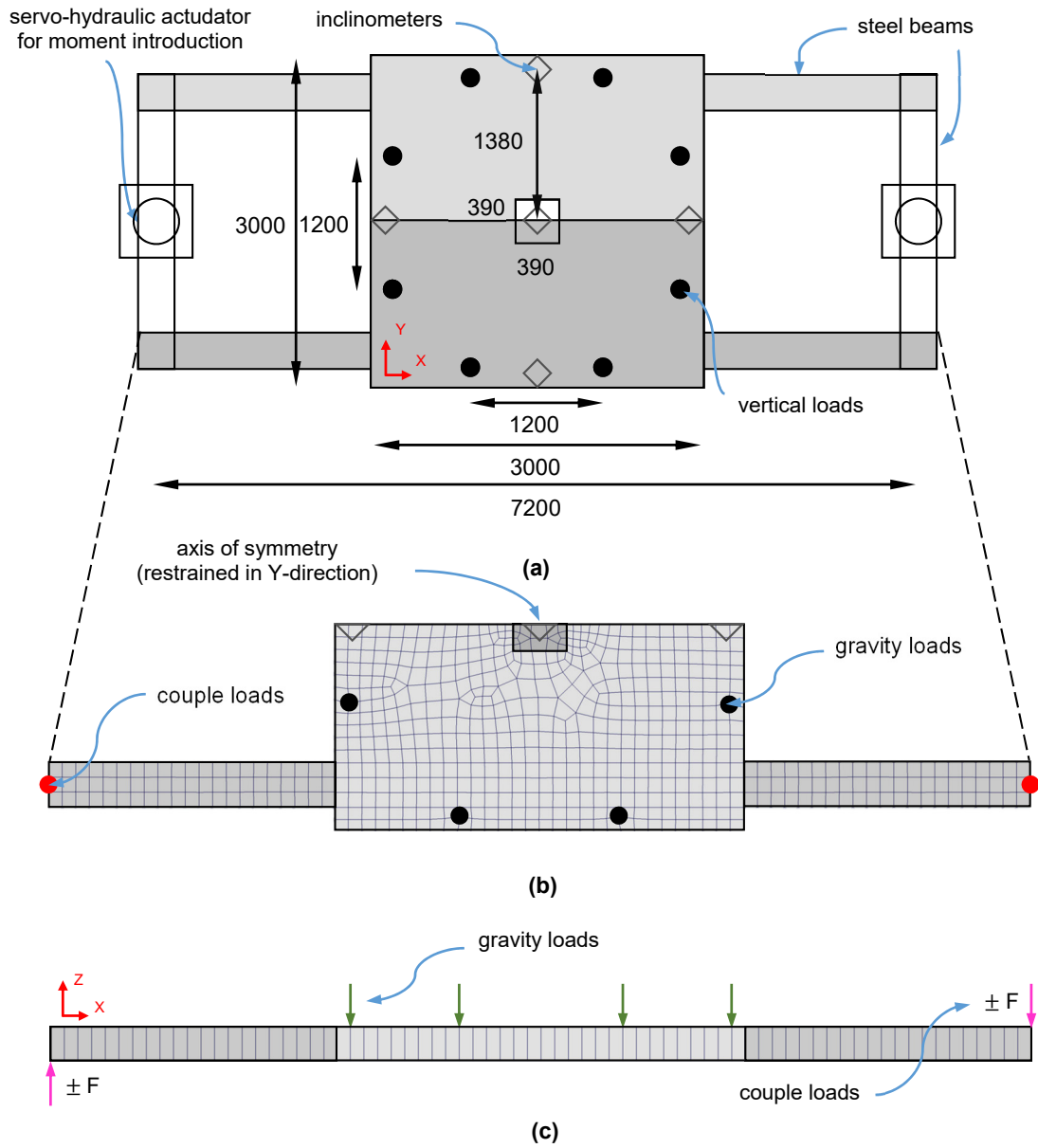
Additional notes:

- B = 3000 mm ; c = 390 mm

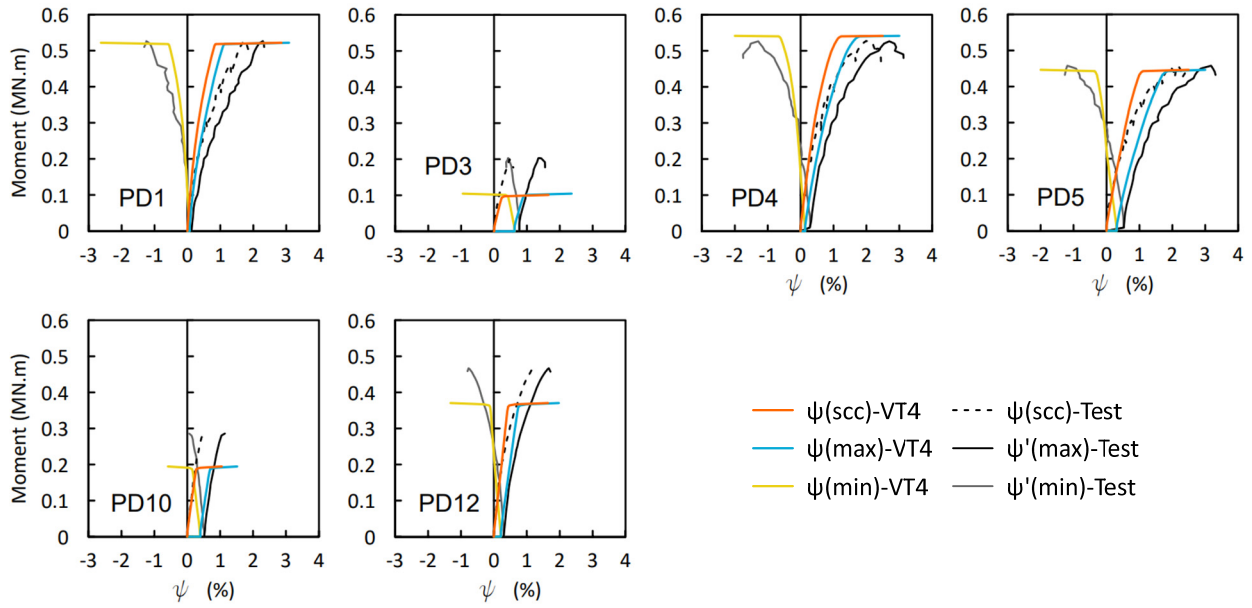
- for slabs PD7 and PD9,  $V_{test}$  is the ultimate shear, also known as  $V_{test-ref}$ ; while in other specimens, it indicates the maximum shear gravity loading

- maximum nominal coarse aggregate size ( $d_{agg}$ ) of 16 mm used for all slabs

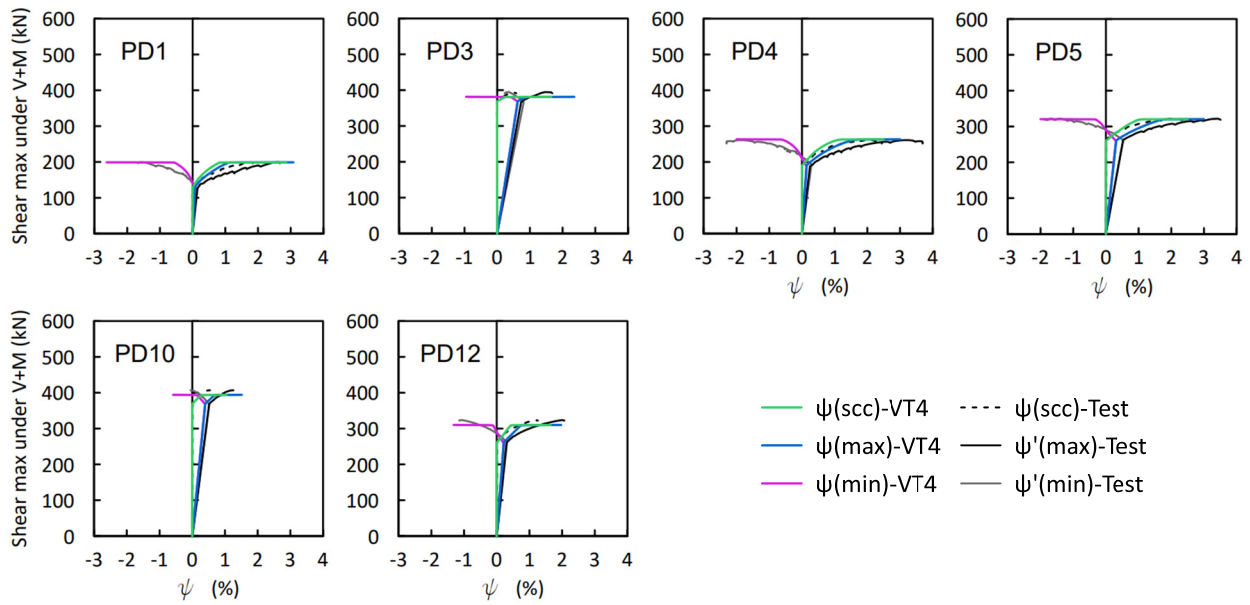
[1 mm = 0.0394 in; 1 MPa = 145 psi; 1 kN = 224.8 lb; 1 kN-m = 737.6 lb-ft]



**Figure 5.5**— Illustration of Drakatos et al. (2016) test specimens (a) geometry; (b) typical mesh; (c) x-z elevation.  
 [all dimensions are reported using units of mm] [1 mm = 0.0394 in]



**Figure 5.6** — Moment-rotation responses for Drakatos et al. (2016) slabs.  
 [1 kN-m = 737.6 lb-ft]



**Figure 5.7** — Shear-rotation responses for Drakatos et al. (2016) slabs.  
 [1 kN = 224.8 lbs]

### 5.3 Summary

The adequacy of the shell-based analysis procedure for estimating the behaviour of more complex cases was explored by analyzing thirteen single slab-column connections with high-stress non-uniformity at connection regions as the result of combined gravity loading and cyclic (or monotonic) unbalanced bending moment. Test specimens employing different in-plane reinforcement ratios were explored. In addition to the variation of load combinations and reinforcement ratios, the competency of thick-shell finite elements for estimating the punching shear capacity of pre-damaged slab-column connections was also investigated, which adds to the significance of the findings reported in this chapter. The modelling procedure and material behavioural models used for the slabs of this chapter were consistent with what was used for the slabs analyzed in Chapter 4.

The results presented in this chapter further reiterate that the DSFM-based NLFEA modelling procedure can be used to numerically estimate the shear performance of slab-column connections subjected to high levels of stress non-uniformity and disturbance at the connection regions, with an arguably acceptable level of precision in an efficient manner. In the absence of case-specific calibrations, program VecTor4 successfully captured the correct mode of failure in all slabs. The mean numerically estimated-to-experimentally reported punching shear ratio of 1.02 was computed with a CoV of 7.1 % for the slabs investigated in this chapter.

A summary of primary remarks pertaining to the analyses presented in this chapter are as follows:

- Program VecTor4 estimated the initial stiffnesses of most slab-column connections subjected to the combination of gravity loading and unbalanced bending moment with high levels of accuracy. The maximum shear resistance under gravity loading and a combination of gravity loading and increasing cyclic or monotonic unbalance moment was captured well for all test specimens, with the exception of slab G0.5 from Tian et al. (2008) testing program. In that case, the slab was reported to experience a significant loss of stiffness after cracking. In general, VecTor4 underestimated the drift ratios as well as slabs' rotation capacities in nearly all cases.
- The results of the Tian et al. (2008) L-series tests showed the suitability of using VecTor4 to analyze slab-column connections under combined gravity and cyclic unbalanced moment. From the results obtained, it can be noted that VecTor4 estimated the maximum lateral load level correctly; however, it notably underestimated the drift ratio of the slab-column connection. In the test program, the slabs of this series demonstrated some post-peak deformation prior to the

punching failure, while in the analyses, slabs instantly punched after the peak and did not show such post-peak behaviour. It might be of interest for future studies to investigate the limitations of program VecTor4 for estimating post-peak response and ductility.

- The computed moment-rotation responses of the slabs comprising the Drakatos et al. (2016) PD series were generally similar to that reported experimentally; however, the maximum moments predicted in some slabs were significantly underestimated, leading to a high coefficient of variation for the slabs of this series. However, from the analysis presented regarding the computed versus experimental shear-rotation responses in Figure 5.7, it was shown that the analysis procedure successfully estimated the shear response of the slab-column connections in all specimens with a high level of precision.

# Chapter 6

## Conclusions and Recommendations

### 6.1 Conclusions

In this thesis, forty-eight isolated slab-column connections that were constructed with no out-of-plane shear reinforcement were modelled numerically for the purpose of investigating the performance of the shell-based nonlinear finite element modelling procedure presented by Goh and Hrynyk (2020) to estimate the punching shear behaviour of RC flat plates. Previous results obtained by Goh and Hrynyk showed that the proposed DSFM-based modelling approach was capable of estimating the punching shear performance of various idealized flat plate systems and test specimens with good accuracy and consistency, obtaining a mean computed-to-experimentally reported punching shear strength ratio of 1.01 with a coefficient of variation (CoV) of 9 %.

The primary objective of this study was to further examine the suitability of the same NLFEA modelling procedure to analyze RC flat plate connections subjected to alternative loading scenarios and constructed with details that are more representative of real-world flat plate construction (e.g., connections subjected to highly-localized punching shear demands around the intersecting column due to diverse gravity loading patterns with and without unbalanced bending

moments, various in-plane reinforcement layouts, as well as different slab and column geometries). The analyses were done without the performance of material model modifications and case-specific calibrations, in a manner that was consistent with prior studies. This study was motivated by the fact that this type of the analysis approach could be used as a cost-effective alternative to commonly employed 3D solid continuum modelling.

The results of the analyses presented in Chapters 4 and 5 of this thesis confirmed the suitability of the DSFM-based nonlinear finite element modelling procedure to cost-effectively estimate punching shear performance of slab-column connections with varied, and typically highly non-uniform stress distributions developed along the perimeters of intersecting columns within RC flat plates. Without performing material model calibration exercises, the mean computed-to-reported shear capacity ratio for the 48 slabs studied in this thesis was 0.97, with a CoV of 12 %.

Further concluding remarks and findings from this study are presented hereunder:

- In all cases, the governing modes of failure were accurately captured; however, the initial stiffnesses of the slab-column connections were overestimated in the majority of cases.
- The unstructured-mesh sizes to the point technique was found to be adequate for modelling the slab column connections, which added to the cost-efficiency of the analyses by refining the mesh only within the critical area (i.e. the punching perimeter) without unnecessarily increasing the total number of elements.
- Better agreement between reported and computed responses was obtained for slab-column connection specimens from more recent test programs such as Sagaseta et al. (2011) and (2014) as well as Drakatos et al. (2016). This is likely due to the more realistic specimen sizing, refined test methods, and higher resolution data collection and documentation used in the more recent studies.
- Influences associated with asymmetric gravity loading patterns and in-plane reinforcement arrangements were well reflected in the results obtained from the analyses; however, the impact of column rectangularity on shear capacity was not well captured, with the general tendency being the underestimation of the significance of column aspect ratio (e.g., slabs of LC series and specimen L5A of Oliveira et al. (2004))
- The introduction of the unbalanced moment to the slab-column connections did not negatively affect the overall performance of VecTor4 at estimating the punching shear behaviour and strength capacity of slab-column connections with the mean numerically estimated-to-

experimentally reported punching shear ratio of 1.02 and a CoV of 7.1 %. However, the computed drift ratio of the slabs of L series (Tian et al. 2008), in which slabs were tested under constant gravity loading and increasing cyclic lateral loading, was significantly underestimated by the program, indicating deficiencies associated with the computation of the post-peak behaviour of RC flat plates.

## 6.2 Recommendations for Future Work

This research demonstrated that the layered thick-shell NFEA modelling approach developed based on the DSFM constitutive model can be employed to analyze the shear performance of RC flat plates subjected to non-uniform stress distribution at connection regions in a low-cost and acceptably accurate manner. All the outlined objectives of the study have been achieved; however, there are a few areas that should be investigated in future studies. These recommendations are summarized as follows:

- In this thesis, 48 isolated RC slab-column connections were analyzed to determine the performance of the NLFE modelling procedure for more complex cases, involving different combinations of gravity loading and unbalanced bending moment. However, there is a need to study more specimens with increasing unbalanced bending moments to have a proper judgement on the performance of the program VecTor4 in these types of loading scenarios. In this regard, it would be of interest to analyze edge and corner slab-column connections to assess the suitability of the procedure for these applications.
- Another source of stress non-uniformity in slab-column connection regions is the existence of openings, which have not been considered in this thesis. This research can be expanded by implementing the DSFM-based modelling approach to investigate the shear behaviour of RC flat plates with openings.
- The majority of existing finite element modelling techniques employing solid continuum elements and shell elements show an inadequate performance in estimating the post-peak performance of RC flat plates (Setiawan et al. 2019). The results presented in this thesis exhibited deficiencies in capturing the post-peak response of flat plates under increasing cyclic bending moments, which led to a significant underestimation of the slabs' drift ratio. It would be of great benefit to research the performance of the program in analyzing the post-peak behaviour of flat plate systems and develop VecTor4 accordingly to obtain more accurate post-peak responses.



- The displacement controlled master-slave loading technique was found to be a highly beneficial tool for executing various loading patterns. However, its current application is limited to loads that act in the same direction. This loading option can be expanded to support multi-dimensional loading scenarios, including cyclic loadings.

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Reza Abolhelm

Thu 8/25/2022 5:13 PM

To: Evan Bentz

Hello,

Thank you so much!

Kind regards,

Reza

---

Reza Abolhelm (he/him)

MASc. Student

Department of Civil and Environmental Engineering

University of Waterloo

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**From:** Evan Bentz

**Sent:** Thursday, August 25, 2022 3:41 PM

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**Figure 3-1 The Modified Compression Field Theory** : Bentz, E. C. (2000). "Sectional Analysis of Reinforced Concrete Members," Ph.D. Dissertation, University of Toronto, Department of Civil Engineering, 316 pp.

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# Appendix

## Input Files

Input Files

**Slab H1 (Hawkins et al. 1971)**



```

1          - - - - -
2          -   V e c T o r   -
3          -   J O B   D A T A   -
4          - - - - -
5
6 Job Title          (30 char max) : VT4SLAB
7 Job File Name     (8 char max)  : VT4SLAB
8 Date              (30 char max) :
9
10 STRUCTURE DATA
11 -----
12 Structure Type    : 4
13 File Name        (8 char max)  : STRUCT
14
15 LOADING DATA
16 -----
17 No. of Load Stages      : 1000
18 Starting Load Stage No. : 1
19 Load Series ID         (5 char max) : I
20
21 Load File Name          Factors
22 Case (8 char max) | Initial Final Inc Typ Rep C-Inc|
23 1 LOAD1 | 1.00000 1.00000 0.00000 1 1 1.00000
24 2 LOAD2 | 0.09100 300.00000 0.25000 1 1 1.00000
25 3 LOAD5 | 1.00000 1.00000 0.00000 1 1 1.00000
26 4 NULL | 0.00000 0.000000 0.00000 1 1 0.00000
27 5 NULL | 0.00000 0.000000 0.00000 1 1 0.00000
28
29 ANALYSIS PARAMETERS
30 -----
31 Analysis Mode (1-2) : 1
32 Seed File Name (8 char max) : NULL
33 Convergence Limit (>1.0) : 1.000005
34 Averaging Factor (<1.0) : 0.40
35 Maximum No. of Iterations : 80
36 Convergence Criteria (1-3) : 2
37 Results File Type (1-4) : 2
38 Result Output Format (1-3) : 4
39
40 MATERIAL BEHAVIOUR MODELS
41 -----
42 Concrete Compression Base Curve (0-3) : 1
43 Concrete Compression Post-Peak (0-3) : 1
44 Concrete Compression Softening (0-8) : 1
45 Concrete Tension Stiffening (0-5) : 1
46 Concrete Tension Softening (0-8) : 1
47 Concrete Tension Splitting (1-2) : 1
48 Concrete Confined Strength (0-2) : 1
49 Concrete Dilatation (0-5) : 1
50 Concrete Cracking Criterion (0-4) : 1
51 Concrete Crack Slip Check (0-2) : 1
52 Concrete Crack Width Check (0-2) : 1
53 Concrete Bond or Adhesion (0-4) : 1
54 Concrete Creep and Relaxation (0-1) : 1
55 Concrete Hysteresis (0-3) : 2
56 Reinforcement Hysteresis (0-3) : 1
57 Reinforcement Dowel Action (0-1) : 1
58 Reinforcement Buckling (0-1) : 1
59 Element Strain Histories (0-1) : 1
60 Element Slip Distortions (0-4) : 1
61 Strain Rate Effects (0-1) : 1
62 Structural Damping (0-1) : 1
63 Geometric Nonlinearity (0-1) : 1
64 Crack Allocation Process (0-1) : 1
65
66

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67
68 ANALYSIS PARAMETERS:
69 -----
70 1. INTEGRATION SCHEME:
71     1. Selective (Bending - 3 ; Shear - 2)
72     2. Full      (Bending - 3 ; Shear - 3)
73     3. Reduced   (Bending - 2 ; Shear - 2)
74
75 2. CONVERGENCE CRITERIA:
76     1. Displacements - Weighted Average
77     2. Displacements - Maximum Value
78     3. Secant Moduli - RMS
79
80 3. RESULTS FILE TYPE:
81     1. ASCII and Binary Files
82     2. ASCII Files Only
83     3. Binary Files Only
84     4. Last Load Stage Only
85
86 4. RESULTS OUTPUT FORMAT
87     Print concrete strains and stresses of:
88     1. All layers at all gauss points
89     2. Top and bottom layers at all gauss points
90     3. All layers for central gauss point only
91
92 MATERIAL BEHAVIOUR MODELS:
93 -----
94 1. OUT-OF-PLANE SHEAR:
95     0. Shear Not Considered
96     1. Considered - Uniform Shear Strain
97
98 2. GEOMETRIC NONLINEARITY:
99     0. Neglect Effect
100    1. Consider Effect
101
102 3. LOAD HISTORY:
103     0. Neglect Previous Loading Effects
104     1. Consider Previous Loading Effects
105
106 4. CONCRETE COMPRESSION BASE CURVE:
107     0. Linear Elastic
108     1. Normal (Parabolic)
109     2. High Strength
110
111 5. CONCRETE COMPRESSION SOFTENING:
112     0. Neglect Effect
113     1. Vecchio-Collins 1982 Model
114     2. Vecchio-Collins 1986 Model
115     3. Vecchio 1992-A Model
116     4. Vecchio 1992-B Model
117
118 6. CONCRETE TENSION STIFFENING:
119     0. Neglect Effect
120     1. Vecchio-Collins 1982 Model
121     2. Collins-Mitchell Model
122     3. Izumo, Maekawa et al Model
123
124 7. CONCRETE TENSION SOFTENING:
125     0. Neglect Effect
126     1. Linear Softening
127     2. Linear Softening + 10% Residual Stress
128     3. 10% Residual Stress Only
129     4. Yamamoto Model (Base Curve Only)
130     5. Yamamoto Model (Strain Hardening Considered)
131
132 8. CONCRETE STRENGTH ENHANCEMENT:

```

133           0. Biaxial Effects Neglected  
134           1. Biaxial Effects Considered  
135  
136    9. CONCRETE PLASTIC STRAINS:  
137           0. Neglect Effects  
138           1. Consider Effects  
139  
140   10. CONCRETE CRACK SLIP CHECK:  
141           0. Omit Check  
142           1. Perform Check  
143  
144   11. REINFORCEMENT STRESS RESPONSE:  
145           0. Linear Elastic  
146           1. Elastic-Plastic  
147           2. Strain Haredening Considered  
148           3. Bauschinger Effects Considered  
149  
150   12. SPLITTING FAILURE CRITERIA:  
151           0. Neglect Effects  
152           1. Consider Effects  
153  
154   NOTES:  
155   -----  
156   1. This program uses metric units only.  
157  
158   2. Do not insert or delete any line.  
159

```

1          - - - - -
2          -   S T R U C T U R E   -
3          -         D A T A       -
4          -       Version 1.0     -
5          - - - - -
6
7          STRUCTURAL PARAMETERS
8          -----
9
10         Structure title           (30 char. max.) : SLAB
11         Structure file name       (8 char. max.) : STRUCT
12         No. of reinforced concrete material types : 2
13         No. of truss element material types      : 0
14         No. of bond material types              : 0
15         No. of shell elements                  : 445
16         No. of solid elements                  : 0
17         No. of truss elements                  : 0
18         No. of link elements                   : 0
19         No. of nodal points                    : 1871
20         No. of nodes with prescribed d.o.f.    : 120
21
22
23         MATERIAL SPECIFICATIONS
24         -----
25
26         (A) GENERAL
27         <-----SHELL----->          SHELL SOLID <-----SHELL SHEAR REINFORCEMENT----->
28         MAT REF OOP   T   OS   CON REIN REIN DiaZ ROZ   Fyz   Fuz   Esz   eshz
29         euz Agg   clrT clrB Sx   Sy   Sz
30         TYP TYP SSM   (mm) (mm) LZR COMP COMP (mm) (%) (MPa) (MPa) (MPa) (mm/m)
31         (mm/m) (mm) (mm) (mm) (mm) (mm) (mm)
32         1 1 0 152.4 0 20 2 0 8 0 580 680 200000 2.5 54.3 16 0 0 0 0 152.4
33         2 1 0 152.4 0 20 2 0 8 10 580 680 200000 2.5 54.3 16 0 0 0 0 152.4
34         /
35         (B) CONCRETE
36         -----
37         MAT   f'c   f't   Ec   e'c   Mu   Cc   kc   Density
38         TYP   (MPa) (MPa) (MPa) (mm/m) (mm/m) (MPa) (MPa) (MPa) (kg/m^3)
39         1 29.64746 0 0 0 0 1.2E-05 4320 2400
40         2 59.29492 0 0 0 0 1.2E-05 4320 2400
41         /
42         (C) SMEARED REINFORCEMENT FOR SHELLS (Total no of input lines must be the same as the
43         number listed under SHELL REIN COMP)
44         -----
45         MAT REF DIR   d   DIA   As   Fy   Fu   Es   esh   eu   Cs   Dep   b/t
46         TYP (1-6) (deg) (mm) (mm) (mm^2/m) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)
47         1 1.00 90.00 27.11 15.88 1312.33 411.62 500.00 200000.00 100.00 120.00
48         80.00 0.00 0/
49         1 1.00 0.00 42.99 15.88 1312.33 411.62 500.00 200000.00 100.00 120.00
50         80.00 0.00 0/
51         2 1.00 90.00 27.11 15.88 1312.33 411.62 500.00 200000.00 100.00 120.00
52         80.00 0.00 0/
53         2 1.00 0.00 42.99 15.88 1312.33 411.62 500.00 200000.00 100.00 120.00
54         80.00 0.00 0/
55         /
56         (D) SMEARED REINFORCEMENT FOR SOLIDS (Total no of input lines must be the same as the
57         number listed under SOLID REIN COMP)
58         -----
59         MAT SRF ORIENT. RHO Db Fy Fu [Es esh eu Cs Dep b/t]
60         TYP TYP k l m % mm MPa MPa MPa me me /C me
61         /
62         (E) STEEL FOR TRUSS ELEMENTS
63         -----
64         <NOTE:> TO BE USED FOR TRUSS ELEMENTS ONLY
65         MAT REF OS DIA As Fy Fu Es esh eu Cs Dep b/t
66         TYP (1-6) (mm) (mm) (mm2) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)

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59 /
60 (F) BOND
61 -----
62 <NOTE:> TO BE USED FOR EXTERIOR/INTERIOR BONDED ELEMENTS
63 MAT REF { Ao U1 U2 U3 S1 S2 S3 }/{ CPF Cmin No. HOOK }
64 TYP TYP mm^2 MPa MPa MPa mm mm mm 0-1 mm LYR 0/1
65 /
66
67 ELEMENT INCIDENCES
68 -----
69 (A) HETEROSIS ELEMENTS
70 -----
71 <<<<< FORMAT >>>>> (counterclockwise direction)
72 ELMT INCL INC2 INC3 INC4 INC5 INC6 INC7 INC8 <INC9> [#ELMT d(ELMT) d(INCL) d(INC4)] x2 /
73 1 1796 1807 1819 1824 1832 1822 1815 1805 1816/
74 2 1871 1870 1868 1863 1858 1862 1867 1869 1866/
75 3 1699 1683 1669 1684 1700 1719 1739 1718 1701/
76 4 1833 1825 1818 1806 1795 1808 1820 1827 1817/
77 5 1768 1783 1796 1805 1815 1803 1786 1777 1792/
78 6 1868 1865 1861 1852 1839 1851 1858 1863 1857/
79 7 1731 1715 1699 1718 1739 1756 1775 1755 1735/
80 8 1832 1841 1848 1845 1838 1828 1815 1822 1834/
81 9 1849 1843 1833 1827 1820 1829 1836 1844 1835/
82 10 1861 1856 1849 1844 1836 1837 1839 1852 1847/
83 11 1860 1864 1867 1862 1858 1853 1846 1854 1859/
84 12 1848 1855 1860 1854 1846 1842 1838 1845 1850/
85 13 1700 1716 1732 1750 1769 1754 1739 1719 1734/
86 14 1732 1748 1768 1777 1786 1778 1769 1750 1762/
87 15 1795 1781 1766 1787 1804 1812 1820 1808 1799/
88 16 1766 1746 1731 1755 1775 1791 1804 1787 1770/
89 17 1858 1851 1839 1826 1813 1831 1846 1853 1840/
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91 19 1775 1794 1813 1826 1839 1821 1804 1791 1811/
92 20 1813 1793 1769 1778 1786 1803 1815 1814 1798/
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96 24 1818 1809 1802 1788 1773 1785 1795 1806 1800/
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102 30 1779 1764 1751 1727 1708 1724 1741 1760 1744/
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104 32 1751 1737 1722 1695 1671 1689 1708 1727 1710/
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107 35 1700 1684 1669 1653 1640 1645 1657 1678 1665/
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112 40 1722 1707 1692 1659 1632 1648 1671 1695 1679/
113 41 1655 1673 1691 1661 1633 1617 1601 1627 1644/
114 42 1692 1674 1656 1626 1599 1613 1632 1659 1643/
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116 44 1656 1637 1620 1593 1568 1585 1599 1626 1609/
117 45 1590 1606 1621 1594 1569 1551 1537 1564 1581/
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383 311 736 697 654 673 691 731 778 757 713/  
384 312 654 615 580 595 612 650 691 673 635/  
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386 314 922 906 902 857 811 824 838 884 862/  
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388 316 313 287 261 270 290 314 340 328 297/

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391 319 437 405 374 387 403 432 466 457 420/  
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393 321 180 204 226 235 247 229 206 191 212/  
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414 342 1363 1335 1306 1262 1218 1243 1265 1321 1291/  
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426 354 612 574 539 558 578 613 652 634 593/  
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428 356 240 217 201 216 238 256 273 257 236/  
429 357 554 608 658 665 677 628 581 568 614/  
430 358 745 774 802 775 743 702 658 703 735/  
431 359 290 264 240 257 273 298 324 303 281/  
432 360 1100 1134 1183 1125 1073 1038 996 1049 1080/  
433 361 1016 1059 1100 1049 996 958 926 967 1008/  
434 362 953 985 1016 967 926 894 861 904 938/  
435 363 466 432 403 421 439 468 505 489 456/  
436 364 340 314 290 303 324 353 381 360 332/  
437 365 403 373 340 360 381 409 439 421 388/  
438 366 900 929 953 904 861 836 809 855 882/  
439 367 913 886 850 806 770 803 843 883 845/  
440 368 802 830 853 810 768 753 743 775 793/  
441 369 853 877 900 855 809 790 768 810 834/  
442 370 206 229 247 265 282 259 238 218 242/  
443 371 247 271 300 316 330 305 282 265 291/  
444 372 300 329 358 376 389 361 330 316 344/  
445 373 358 391 426 440 459 424 389 376 407/  
446 374 426 462 498 516 533 494 459 440 478/  
447 375 498 540 581 602 618 575 533 516 555/  
448 376 1318 1360 1395 1370 1338 1290 1236 1273 1328/  
449 377 1242 1276 1318 1273 1236 1187 1136 1189 1234/  
450 378 1164 1198 1242 1189 1136 1105 1067 1114 1149/  
451 379 1073 1117 1164 1114 1067 1027 990 1035 1069/  
452 380 768 720 677 665 658 702 743 753 709/  
453 381 581 628 677 694 712 663 618 602 646/  
454 382 1338 1307 1265 1206 1157 1193 1236 1290 1250/

455 383 677 720 768 790 809 760 712 694 742/  
456 384 1265 1243 1218 1167 1118 1133 1157 1206 1188/  
457 385 1218 1200 1192 1160 1122 1120 1118 1167 1165/  
458 386 850 814 781 744 705 737 770 806 776/  
459 387 781 756 730 693 652 679 705 744 718/  
460 388 996 1038 1073 1035 990 948 907 951 989/  
461 389 1122 1071 1022 1011 998 1057 1118 1120 1063/  
462 390 1022 971 927 892 856 923 998 1011 946/  
463 391 927 888 843 800 761 805 856 892 847/  
464 392 843 803 770 728 688 724 761 800 764/  
465 393 926 958 996 951 907 871 835 878 909/  
466 394 861 894 926 878 835 799 766 815 848/  
467 395 809 836 861 815 766 740 712 760 786/  
468 396 238 259 282 299 322 296 273 256 276/  
469 397 652 613 578 604 630 666 705 679 639/  
470 398 770 737 705 666 630 656 688 728 698/  
471 399 578 542 505 529 553 589 630 604 567/  
472 400 282 305 330 352 369 347 322 299 325/  
473 401 330 361 389 410 430 397 369 352 382/  
474 402 389 424 459 476 497 464 430 410 442/  
475 403 459 494 533 552 576 536 497 476 514/  
476 404 533 575 618 643 667 619 576 552 597/  
477 405 618 663 712 740 766 717 667 643 689/  
478 406 505 468 439 460 485 519 553 529 495/  
479 407 439 409 381 399 425 455 485 460 431/  
480 408 324 298 273 296 322 345 365 346 321/  
481 409 381 353 324 346 365 396 425 399 372/  
482 410 1136 1187 1236 1193 1157 1090 1019 1076 1132/  
483 411 1067 1105 1136 1076 1019 1012 1001 1037 1058/  
484 412 1157 1133 1118 1057 998 1010 1019 1090 1068/  
485 413 630 589 553 579 609 648 688 656 616/  
486 414 553 519 485 508 537 573 609 579 544/  
487 415 990 1027 1067 1037 1001 961 917 954 992/  
488 416 907 948 990 954 917 881 839 874 908/  
489 417 322 347 369 394 418 393 365 345 366/  
490 418 369 397 430 454 477 448 418 394 423/  
491 419 430 464 497 522 545 509 477 454 486/  
492 420 835 871 907 874 839 785 732 784 829/  
493 421 766 799 835 784 732 701 667 717 749/  
494 422 576 619 667 701 732 678 621 599 649/  
495 423 497 536 576 599 621 582 545 522 560/  
496 424 425 396 365 393 418 447 474 450 419/  
497 425 485 455 425 450 474 504 537 508 480/  
498 426 761 724 688 648 609 638 672 715 680/  
499 427 856 805 761 715 672 704 739 798 755/  
500 428 998 923 856 860 866 942 1019 1010 935/  
501 429 474 447 418 448 477 503 531 501 473/  
502 430 537 504 474 501 531 563 594 566 534/  
503 431 609 573 537 566 594 632 672 638 603/  
504 432 477 509 545 571 596 564 531 503 535/  
505 433 839 881 917 898 866 828 789 813 854/  
506 434 917 961 1001 1012 1019 942 866 898 949/  
507 435 856 798 739 758 777 823 866 860 807/  
508 436 545 582 621 644 661 629 596 571 607/  
509 437 621 678 732 729 726 695 661 644 684/  
510 438 732 785 839 813 789 759 726 729 771/  
511 439 531 564 596 624 657 623 594 563 591/  
512 440 672 632 594 623 657 699 739 704 662/  
513 441 596 629 661 690 719 687 657 624 655/  
514 442 739 699 657 687 719 747 777 758 721/  
515 443 661 695 726 759 789 751 719 690 723/  
516 444 777 747 719 751 789 828 866 823 788/  
517 445 1602 1603 1605 1624 1641 1647 1658 1629 1625/  
518 /  
519 (B1) AUTO GENERATE SOLID ELEMENTS & COORDINATES FOR PRIMARY STRUCTURAL ELEMENT (BEAM OR SLAB)

```

520 -----
521 <<<<< FORMAT >>>>> (Xi, Yi, & Zi must be in increasing order)(Total solid elements
generated = Sum of NElemX x Sum of NElemY x Sum of NElemZ)(Total solid nodes generated
= (Sum of NElemX +1) x (Sum of NElemY + 1) x (Sum of NElemZ + 1))
522     Xi     NElemX   Yi     NElemY   Zi     NElemZ/
523 /
524 (B2) AUTO GENERATE SOLID ELEMENTS, COORDINATES & MAT TYPES FOR EXTENSIONS TO BEAM OR
SLAB (EG: LOAD PLATES, COLUMN STUBS OR T-BEAM FLANGES, ETC)
525 -----
526 <<<<< FORMAT >>>>> (Existing coords -> X1,Y1,Z1,X2,Y2,Z2) (Length can be + or - for new
coords)
527     X1     Y1     Z1     X2     Y2     Z2     Length  NElem  Mat/
528 /
529 (B3) SOLID ELEMENTS
530 -----
531 <<<<< FORMAT >>>>> (Note that element no must follow the last shell element no)
532 ELMT INC1 INC2 INC3 INC4 INC5 INC6 INC7 INC8 [#ELMT d(ELMT) d(INC)-Xdir] [#ELMT d(ELMT)
d(INC)-Ydir] [#ELMT d(ELMT) d(INC)-Zdir]/
533 /
534 (C1) AUTO GENERATE TRUSS ELEMENTS & MATERIAL ASSIGNMENTS
535 -----
536 <<<<< FORMAT >>>>> <X2 > X1, or Y2 > Y1, etc>
537 Mat     X1     Y1     Z1     X2     Y2     Z2     NRBarX     SpacX     NRBarY
538 SpacY     NRBarZ     SpacZ/
539 /
540 (C2) TRUSS ELEMENTS
541 -----
542 <<<<< FORMAT >>>>>
543 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC)] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC)
]/
544 /
545 (C3) AUTO GENERATE SPRING SUPPORT ELEMENTS, MATERIAL ASSIGNMENTS, COORDINATES, &
RESTRAINTS
546 -----
547 <<<<< FORMAT >>>>>
548 Mat Length X1     Y1     Z1     X2     Y2     Z2 [ NX     SX     NY     SY
549 NZ     SZ] /
550 /
551 (D1) LINK ELEMENTS
552 -----
553 <<<<< FORMAT >>>>>
554 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC)] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC) ]/
555 /
556 MATERIAL AND ELEMENT TYPE ASSIGNMENT
557 -----
558 <<<<< FORMAT >>>>> (ETYPE=1 for shell, ETYPE=2 for solid, ETYPE=3 for frame or truss)
Elmt No. MUST be in ascending order
559 ELMT MAT ETYPE [#ELMT d(ELMT)]-Xdir [#ELMT d(ELMT)]-Ydir [#ELMT d(ELMT)]-Zdir/
560 1 1 1/
561 2 1 1/
562 3 1 1/
563 4 1 1/
564 5 1 1/
565 6 1 1/
566 7 1 1/
567 8 1 1/
568 9 1 1/
569 10 1 1/
570 11 1 1/
571 12 1 1/
572 13 1 1/
573 14 1 1/

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573 15 1 1/  
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575 17 1 1/  
576 18 1 1/  
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578 20 1 1/  
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581 23 1 1/  
582 24 1 1/  
583 25 1 1/  
584 26 1 1/  
585 27 1 1/  
586 28 1 1/  
587 29 1 1/  
588 30 1 1/  
589 31 1 1/  
590 32 1 1/  
591 33 1 1/  
592 34 1 1/  
593 35 1 1/  
594 36 1 1/  
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596 38 1 1/  
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620 62 1 1/  
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622 64 1 1/  
623 65 1 1/  
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625 67 1 1/  
626 68 1 1/  
627 69 1 1/  
628 70 1 1/  
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630 72 1 1/  
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632 74 1 1/  
633 75 1 1/  
634 76 1 1/  
635 77 1 1/  
636 78 1 1/  
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638 80 1 1/

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704 146 1 1/

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814 256 2 1/  
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 997 439 1 1/  
 998 440 1 1/  
 999 441 1 1/  
 1000 442 1 1/  
 1001 443 1 1/  
 1002 444 1 1/  
 1003 445 1 1/  
 1004 /

COORDINATES

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1008 <<<<< FORMAT >>>>> (units = mm)  
 1009 TOP or C/L <BOT>  
 1010 NODE TYPE X Y Z <X Y Z> [#NODE d(NODE) d(X) d(Y) d(Z)]-Xdir [#NODE  
 d(NODE) d(X) d(Y) d(Z)]-Ydir [#NODE d(NODE) d(X) d(Y) d(Z)]-Zdir  
 1011 1 1 1066.800 1066.800 76.000 1066.800 1066.800 -76.000/  
 1012 2 1 1039.906 1066.800 76.000 1039.906 1066.800 -76.000/  
 1013 3 1 1066.800 1039.906 76.000 1066.800 1039.906 -76.000/  
 1014 4 1 1040.111 1040.104 76.000 1040.111 1040.104 -76.000/  
 1015 5 1 1066.800 1013.012 76.000 1066.800 1013.012 -76.000/  
 1016 6 1 1013.012 1066.800 76.000 1013.012 1066.800 -76.000/  
 1017 7 1 1013.421 1040.302 76.000 1013.421 1040.302 -76.000/  
 1018 8 1 1040.315 1013.408 76.000 1040.315 1013.408 -76.000/  
 1019 9 1 1013.830 1013.804 76.000 1013.830 1013.804 -76.000/  
 1020 10 1 986.118 1066.800 76.000 986.118 1066.800 -76.000/  
 1021 11 1 1066.800 986.118 76.000 1066.800 986.118 -76.000/  
 1022 12 1 1040.454 986.591 76.000 1040.454 986.591 -76.000/  
 1023 13 1 986.536 1040.262 76.000 986.536 1040.262 -76.000/  
 1024 14 1 1014.108 987.064 76.000 1014.108 987.064 -76.000/  
 1025 15 1 986.955 1013.723 76.000 986.955 1013.723 -76.000/  
 1026 16 1 959.224 1066.800 76.000 959.224 1066.800 -76.000/  
 1027 17 1 1066.800 959.224 76.000 1066.800 959.224 -76.000/  
 1028 18 1 1040.593 959.774 76.000 1040.593 959.774 -76.000/  
 1029 19 1 959.652 1040.221 76.000 959.652 1040.221 -76.000/  
 1030 20 1 987.501 987.214 76.000 987.501 987.214 -76.000/  
 1031 21 1 1014.385 960.324 76.000 1014.385 960.324 -76.000/  
 1032 22 1 960.080 1013.643 76.000 960.080 1013.643 -76.000/  
 1033 23 1 988.046 960.704 76.000 988.046 960.704 -76.000/

1034	24	1	960.893	987.364	76.000	960.893	987.364	-76.000/
1035	25	1	932.329	1066.800	76.000	932.329	1066.800	-76.000/
1036	26	1	1066.800	932.329	76.000	1066.800	932.329	-76.000/
1037	27	1	1040.857	933.164	76.000	1040.857	933.164	-76.000/
1038	28	1	932.745	1040.295	76.000	932.745	1040.295	-76.000/
1039	29	1	1014.915	933.998	76.000	1014.915	933.998	-76.000/
1040	30	1	933.160	1013.790	76.000	933.160	1013.790	-76.000/
1041	31	1	961.707	961.085	76.000	961.707	961.085	-76.000/
1042	32	1	988.926	934.737	76.000	988.926	934.737	-76.000/
1043	33	1	934.168	987.826	76.000	934.168	987.826	-76.000/
1044	34	1	905.435	1066.800	76.000	905.435	1066.800	-76.000/
1045	35	1	1066.800	905.435	76.000	1066.800	905.435	-76.000/
1046	36	1	1041.122	906.554	76.000	1041.122	906.554	-76.000/
1047	37	1	905.838	1040.369	76.000	905.838	1040.369	-76.000/
1048	38	1	1015.444	907.673	76.000	1015.444	907.673	-76.000/
1049	39	1	962.938	935.475	76.000	962.938	935.475	-76.000/
1050	40	1	935.177	961.862	76.000	935.177	961.862	-76.000/
1051	41	1	906.240	1013.938	76.000	906.240	1013.938	-76.000/
1052	42	1	989.806	908.769	76.000	989.806	908.769	-76.000/
1053	43	1	907.443	988.288	76.000	907.443	988.288	-76.000/
1054	44	1	937.230	936.997	76.000	937.230	936.997	-76.000/
1055	45	1	964.169	909.866	76.000	964.169	909.866	-76.000/
1056	46	1	1066.800	878.541	76.000	1066.800	878.541	-76.000/
1057	47	1	878.541	1066.800	76.000	878.541	1066.800	-76.000/
1058	48	1	1041.267	879.805	76.000	1041.267	879.805	-76.000/
1059	49	1	908.647	962.639	76.000	908.647	962.639	-76.000/
1060	50	1	878.679	1040.345	76.000	878.679	1040.345	-76.000/
1061	51	1	1015.734	881.069	76.000	1015.734	881.069	-76.000/
1062	52	1	878.818	1013.890	76.000	878.818	1013.890	-76.000/
1063	53	1	990.104	882.115	76.000	990.104	882.115	-76.000/
1064	54	1	939.284	912.133	76.000	939.284	912.133	-76.000/
1065	55	1	911.523	938.519	76.000	911.523	938.519	-76.000/
1066	56	1	879.808	988.066	76.000	879.808	988.066	-76.000/
1067	57	1	964.474	883.161	76.000	964.474	883.161	-76.000/
1068	58	1	880.799	962.242	76.000	880.799	962.242	-76.000/
1069	59	1	851.647	1066.800	76.000	851.647	1066.800	-76.000/
1070	60	1	1066.800	851.647	76.000	1066.800	851.647	-76.000/
1071	61	1	1041.412	853.056	76.000	1041.412	853.056	-76.000/
1072	62	1	914.400	914.400	76.000	914.400	914.400	-76.000/
1073	63	1	851.521	1040.321	76.000	851.521	1040.321	-76.000/
1074	64	1	1016.025	854.465	76.000	1016.025	854.465	-76.000/
1075	65	1	851.395	1013.842	76.000	851.395	1013.842	-76.000/
1076	66	1	938.989	884.543	76.000	938.989	884.543	-76.000/
1077	67	1	990.402	855.461	76.000	990.402	855.461	-76.000/
1078	68	1	882.981	937.377	76.000	882.981	937.377	-76.000/
1079	69	1	852.173	987.844	76.000	852.173	987.844	-76.000/
1080	70	1	964.779	856.457	76.000	964.779	856.457	-76.000/
1081	71	1	913.503	885.925	76.000	913.503	885.925	-76.000/
1082	72	1	852.952	961.845	76.000	852.952	961.845	-76.000/
1083	73	1	885.162	912.512	76.000	885.162	912.512	-76.000/
1084	74	1	1041.551	826.320	76.000	1041.551	826.320	-76.000/
1085	75	1	824.753	1066.800	76.000	824.753	1066.800	-76.000/
1086	76	1	1066.800	824.753	76.000	1066.800	824.753	-76.000/
1087	77	1	824.088	1040.235	76.000	824.088	1040.235	-76.000/
1088	78	1	1016.303	827.888	76.000	1016.303	827.888	-76.000/
1089	79	1	938.693	856.954	76.000	938.693	856.954	-76.000/
1090	80	1	823.424	1013.670	76.000	823.424	1013.670	-76.000/
1091	81	1	854.438	936.235	76.000	854.438	936.235	-76.000/
1092	82	1	990.721	828.920	76.000	990.721	828.920	-76.000/
1093	83	1	824.029	987.534	76.000	824.029	987.534	-76.000/
1094	84	1	885.108	884.912	76.000	885.108	884.912	-76.000/
1095	85	1	965.140	829.953	76.000	965.140	829.953	-76.000/
1096	86	1	912.606	857.450	76.000	912.606	857.450	-76.000/
1097	87	1	855.925	910.625	76.000	855.925	910.625	-76.000/
1098	88	1	824.634	961.397	76.000	824.634	961.397	-76.000/
1099	89	1	1041.691	799.585	76.000	1041.691	799.585	-76.000/

1100	90	1	939.199	830.479	76.000	939.199	830.479	-76.000/
1101	91	1	797.859	1066.800	76.000	797.859	1066.800	-76.000/
1102	92	1	1066.800	797.859	76.000	1066.800	797.859	-76.000/
1103	93	1	1016.581	801.310	76.000	1016.581	801.310	-76.000/
1104	94	1	796.656	1040.149	76.000	796.656	1040.149	-76.000/
1105	95	1	826.009	935.625	76.000	826.009	935.625	-76.000/
1106	96	1	991.041	802.379	76.000	991.041	802.379	-76.000/
1107	97	1	795.453	1013.498	76.000	795.453	1013.498	-76.000/
1108	98	1	885.054	857.312	76.000	885.054	857.312	-76.000/
1109	99	1	856.714	883.900	76.000	856.714	883.900	-76.000/
1110	100	1	913.259	831.006	76.000	913.259	831.006	-76.000/
1111	101	1	965.501	803.448	76.000	965.501	803.448	-76.000/
1112	102	1	795.884	987.224	76.000	795.884	987.224	-76.000/
1113	103	1	827.385	909.853	76.000	827.385	909.853	-76.000/
1114	104	1	796.315	960.949	76.000	796.315	960.949	-76.000/
1115	105	1	939.706	804.005	76.000	939.706	804.005	-76.000/
1116	106	1	1041.864	773.035	76.000	1041.864	773.035	-76.000/
1117	107	1	1066.800	770.965	76.000	1066.800	770.965	-76.000/
1118	108	1	770.965	1066.800	76.000	770.965	1066.800	-76.000/
1119	109	1	1016.927	775.105	76.000	1016.927	775.105	-76.000/
1120	110	1	857.503	857.174	76.000	857.503	857.174	-76.000/
1121	111	1	886.029	831.096	76.000	886.029	831.096	-76.000/
1122	112	1	769.544	1040.264	76.000	769.544	1040.264	-76.000/
1123	113	1	797.580	935.015	76.000	797.580	935.015	-76.000/
1124	114	1	991.522	776.280	76.000	991.522	776.280	-76.000/
1125	115	1	828.513	883.505	76.000	828.513	883.505	-76.000/
1126	116	1	768.124	1013.728	76.000	768.124	1013.728	-76.000/
1127	117	1	913.911	804.562	76.000	913.911	804.562	-76.000/
1128	118	1	966.116	777.456	76.000	966.116	777.456	-76.000/
1129	119	1	768.070	987.394	76.000	768.070	987.394	-76.000/
1130	120	1	798.845	909.081	76.000	798.845	909.081	-76.000/
1131	121	1	858.799	831.186	76.000	858.799	831.186	-76.000/
1132	122	1	940.290	778.086	76.000	940.290	778.086	-76.000/
1133	123	1	829.641	857.156	76.000	829.641	857.156	-76.000/
1134	124	1	768.015	961.060	76.000	768.015	961.060	-76.000/
1135	125	1	887.003	804.879	76.000	887.003	804.879	-76.000/
1136	126	1	1042.037	746.485	76.000	1042.037	746.485	-76.000/
1137	127	1	1017.274	748.899	76.000	1017.274	748.899	-76.000/
1138	128	1	744.071	1066.800	76.000	744.071	1066.800	-76.000/
1139	129	1	1066.800	744.071	76.000	1066.800	744.071	-76.000/
1140	130	1	800.312	883.110	76.000	800.312	883.110	-76.000/
1141	131	1	992.002	750.182	76.000	992.002	750.182	-76.000/
1142	132	1	769.300	935.049	76.000	769.300	935.049	-76.000/
1143	133	1	742.433	1040.379	76.000	742.433	1040.379	-76.000/
1144	134	1	914.463	778.716	76.000	914.463	778.716	-76.000/
1145	135	1	740.796	1013.959	76.000	740.796	1013.959	-76.000/
1146	136	1	966.731	751.464	76.000	966.731	751.464	-76.000/
1147	137	1	831.146	831.174	76.000	831.146	831.174	-76.000/
1148	138	1	860.095	805.197	76.000	860.095	805.197	-76.000/
1149	139	1	770.585	909.038	76.000	770.585	909.038	-76.000/
1150	140	1	740.255	987.565	76.000	740.255	987.565	-76.000/
1151	141	1	801.780	857.138	76.000	801.780	857.138	-76.000/
1152	142	1	887.807	779.081	76.000	887.807	779.081	-76.000/
1153	143	1	940.873	752.167	76.000	940.873	752.167	-76.000/
1154	144	1	739.715	961.171	76.000	739.715	961.171	-76.000/
1155	145	1	772.129	883.081	76.000	772.129	883.081	-76.000/
1156	146	1	1042.052	719.756	76.000	1042.052	719.756	-76.000/
1157	147	1	1017.305	722.336	76.000	1017.305	722.336	-76.000/
1158	148	1	915.015	752.871	76.000	915.015	752.871	-76.000/
1159	149	1	717.176	1066.800	76.000	717.176	1066.800	-76.000/
1160	150	1	1066.800	717.176	76.000	1066.800	717.176	-76.000/
1161	151	1	992.164	723.899	76.000	992.164	723.899	-76.000/
1162	152	1	832.651	805.193	76.000	832.651	805.193	-76.000/
1163	153	1	741.021	935.083	76.000	741.021	935.083	-76.000/
1164	154	1	715.264	1040.576	76.000	715.264	1040.576	-76.000/
1165	155	1	803.494	831.163	76.000	803.494	831.163	-76.000/

1166	156	1	861.150	779.446	76.000	861.150	779.446	-76.000/
1167	157	1	967.024	725.462	76.000	967.024	725.462	-76.000/
1168	158	1	713.352	1014.351	76.000	713.352	1014.351	-76.000/
1169	159	1	773.672	857.124	76.000	773.672	857.124	-76.000/
1170	160	1	888.610	753.283	76.000	888.610	753.283	-76.000/
1171	161	1	742.326	908.994	76.000	742.326	908.994	-76.000/
1172	162	1	712.651	988.046	76.000	712.651	988.046	-76.000/
1173	163	1	941.305	726.297	76.000	941.305	726.297	-76.000/
1174	164	1	833.905	779.365	76.000	833.905	779.365	-76.000/
1175	165	1	805.207	805.188	76.000	805.207	805.188	-76.000/
1176	166	1	711.950	961.742	76.000	711.950	961.742	-76.000/
1177	167	1	743.945	883.052	76.000	743.945	883.052	-76.000/
1178	168	1	915.587	727.133	76.000	915.587	727.133	-76.000/
1179	169	1	862.205	753.695	76.000	862.205	753.695	-76.000/
1180	170	1	1017.336	695.773	76.000	1017.336	695.773	-76.000/
1181	171	1	775.741	831.160	76.000	775.741	831.160	-76.000/
1182	172	1	1042.068	693.028	76.000	1042.068	693.028	-76.000/
1183	173	1	1066.800	690.282	76.000	1066.800	690.282	-76.000/
1184	174	1	690.282	1066.800	76.000	690.282	1066.800	-76.000/
1185	175	1	992.326	697.616	76.000	992.326	697.616	-76.000/
1186	176	1	713.099	935.545	76.000	713.099	935.545	-76.000/
1187	177	1	688.095	1040.772	76.000	688.095	1040.772	-76.000/
1188	178	1	967.317	699.460	76.000	967.317	699.460	-76.000/
1189	179	1	889.245	727.471	76.000	889.245	727.471	-76.000/
1190	180	1	745.565	857.109	76.000	745.565	857.109	-76.000/
1191	181	1	685.908	1014.744	76.000	685.908	1014.744	-76.000/
1192	182	1	714.248	909.349	76.000	714.248	909.349	-76.000/
1193	183	1	941.737	700.427	76.000	941.737	700.427	-76.000/
1194	184	1	806.661	779.284	76.000	806.661	779.284	-76.000/
1195	185	1	835.160	753.538	76.000	835.160	753.538	-76.000/
1196	186	1	685.046	988.528	76.000	685.046	988.528	-76.000/
1197	187	1	777.811	805.197	76.000	777.811	805.197	-76.000/
1198	188	1	916.158	701.395	76.000	916.158	701.395	-76.000/
1199	189	1	862.903	727.808	76.000	862.903	727.808	-76.000/
1200	190	1	716.093	883.379	76.000	716.093	883.379	-76.000/
1201	191	1	747.989	831.158	76.000	747.989	831.158	-76.000/
1202	192	1	684.184	962.313	76.000	684.184	962.313	-76.000/
1203	193	1	1017.297	669.407	76.000	1017.297	669.407	-76.000/
1204	194	1	1042.049	666.398	76.000	1042.049	666.398	-76.000/
1205	195	1	992.268	671.323	76.000	992.268	671.323	-76.000/
1206	196	1	663.388	1066.800	76.000	663.388	1066.800	-76.000/
1207	197	1	1066.800	663.388	76.000	1066.800	663.388	-76.000/
1208	198	1	685.177	936.008	76.000	685.177	936.008	-76.000/
1209	199	1	889.880	701.658	76.000	889.880	701.658	-76.000/
1210	200	1	967.238	673.239	76.000	967.238	673.239	-76.000/
1211	201	1	808.115	753.380	76.000	808.115	753.380	-76.000/
1212	202	1	661.233	1040.846	76.000	661.233	1040.846	-76.000/
1213	203	1	779.442	779.118	76.000	779.442	779.118	-76.000/
1214	204	1	717.937	857.409	76.000	717.937	857.409	-76.000/
1215	205	1	836.234	727.734	76.000	836.234	727.734	-76.000/
1216	206	1	750.414	805.206	76.000	750.414	805.206	-76.000/
1217	207	1	659.077	1014.892	76.000	659.077	1014.892	-76.000/
1218	208	1	686.171	909.704	76.000	686.171	909.704	-76.000/
1219	209	1	941.629	674.085	76.000	941.629	674.085	-76.000/
1220	210	1	657.874	988.806	76.000	657.874	988.806	-76.000/
1221	211	1	863.602	701.922	76.000	863.602	701.922	-76.000/
1222	212	1	720.423	831.280	76.000	720.423	831.280	-76.000/
1223	213	1	916.021	674.931	76.000	916.021	674.931	-76.000/
1224	214	1	688.240	883.706	76.000	688.240	883.706	-76.000/
1225	215	1	656.672	962.720	76.000	656.672	962.720	-76.000/
1226	216	1	781.074	753.039	76.000	781.074	753.039	-76.000/
1227	217	1	809.564	727.659	76.000	809.564	727.659	-76.000/
1228	218	1	752.224	778.952	76.000	752.224	778.952	-76.000/
1229	219	1	1017.259	643.041	76.000	1017.259	643.041	-76.000/
1230	220	1	1042.029	639.767	76.000	1042.029	639.767	-76.000/
1231	221	1	992.209	645.030	76.000	992.209	645.030	-76.000/

1232	222	1	657.516	936.338	76.000	657.516	936.338	-76.000/
1233	223	1	889.981	675.303	76.000	889.981	675.303	-76.000/
1234	224	1	636.494	1066.800	76.000	636.494	1066.800	-76.000/
1235	225	1	1066.800	636.494	76.000	1066.800	636.494	-76.000/
1236	226	1	690.309	857.708	76.000	690.309	857.708	-76.000/
1237	227	1	837.308	701.930	76.000	837.308	701.930	-76.000/
1238	228	1	967.158	647.019	76.000	967.158	647.019	-76.000/
1239	229	1	722.910	805.150	76.000	722.910	805.150	-76.000/
1240	230	1	634.371	1040.920	76.000	634.371	1040.920	-76.000/
1241	231	1	941.521	647.743	76.000	941.521	647.743	-76.000/
1242	232	1	658.360	909.956	76.000	658.360	909.956	-76.000/
1243	233	1	632.247	1015.041	76.000	632.247	1015.041	-76.000/
1244	234	1	863.942	675.675	76.000	863.942	675.675	-76.000/
1245	235	1	692.857	831.401	76.000	692.857	831.401	-76.000/
1246	236	1	782.560	727.062	76.000	782.560	727.062	-76.000/
1247	237	1	630.703	989.084	76.000	630.703	989.084	-76.000/
1248	238	1	754.034	752.698	76.000	754.034	752.698	-76.000/
1249	239	1	915.884	648.467	76.000	915.884	648.467	-76.000/
1250	240	1	811.014	701.938	76.000	811.014	701.938	-76.000/
1251	241	1	660.487	883.641	76.000	660.487	883.641	-76.000/
1252	242	1	724.865	778.609	76.000	724.865	778.609	-76.000/
1253	243	1	629.159	963.127	76.000	629.159	963.127	-76.000/
1254	244	1	1017.073	616.053	76.000	1017.073	616.053	-76.000/
1255	245	1	837.646	675.389	76.000	837.646	675.389	-76.000/
1256	246	1	890.083	648.948	76.000	890.083	648.948	-76.000/
1257	247	1	695.405	805.095	76.000	695.405	805.095	-76.000/
1258	248	1	992.034	618.361	76.000	992.034	618.361	-76.000/
1259	249	1	1041.937	612.826	76.000	1041.937	612.826	-76.000/
1260	250	1	662.615	857.326	76.000	662.615	857.326	-76.000/
1261	251	1	629.855	936.668	76.000	629.855	936.668	-76.000/
1262	252	1	966.994	620.670	76.000	966.994	620.670	-76.000/
1263	253	1	609.600	1066.800	76.000	609.600	1066.800	-76.000/
1264	254	1	1066.800	609.600	76.000	1066.800	609.600	-76.000/
1265	255	1	607.218	1041.033	76.000	607.218	1041.033	-76.000/
1266	256	1	755.556	726.465	76.000	755.556	726.465	-76.000/
1267	257	1	784.046	701.085	76.000	784.046	701.085	-76.000/
1268	258	1	941.453	621.458	76.000	941.453	621.458	-76.000/
1269	259	1	726.821	752.068	76.000	726.821	752.068	-76.000/
1270	260	1	630.550	910.208	76.000	630.550	910.208	-76.000/
1271	261	1	864.282	649.429	76.000	864.282	649.429	-76.000/
1272	262	1	604.837	1015.266	76.000	604.837	1015.266	-76.000/
1273	263	1	665.108	830.964	76.000	665.108	830.964	-76.000/
1274	264	1	811.349	675.103	76.000	811.349	675.103	-76.000/
1275	265	1	697.507	778.266	76.000	697.507	778.266	-76.000/
1276	266	1	915.911	622.246	76.000	915.911	622.246	-76.000/
1277	267	1	603.403	989.234	76.000	603.403	989.234	-76.000/
1278	268	1	632.735	883.576	76.000	632.735	883.576	-76.000/
1279	269	1	601.968	963.203	76.000	601.968	963.203	-76.000/
1280	270	1	837.983	648.849	76.000	837.983	648.849	-76.000/
1281	271	1	667.601	804.601	76.000	667.601	804.601	-76.000/
1282	272	1	890.102	622.333	76.000	890.102	622.333	-76.000/
1283	273	1	757.078	700.232	76.000	757.078	700.232	-76.000/
1284	274	1	634.920	856.944	76.000	634.920	856.944	-76.000/
1285	275	1	1016.888	589.065	76.000	1016.888	589.065	-76.000/
1286	276	1	728.290	725.234	76.000	728.290	725.234	-76.000/
1287	277	1	991.859	591.693	76.000	991.859	591.693	-76.000/
1288	278	1	1041.844	585.885	76.000	1041.844	585.885	-76.000/
1289	279	1	602.412	936.687	76.000	602.412	936.687	-76.000/
1290	280	1	966.830	594.321	76.000	966.830	594.321	-76.000/
1291	281	1	784.578	674.019	76.000	784.578	674.019	-76.000/
1292	282	1	699.609	751.438	76.000	699.609	751.438	-76.000/
1293	283	1	582.706	1066.800	76.000	582.706	1066.800	-76.000/
1294	284	1	1066.800	582.706	76.000	1066.800	582.706	-76.000/
1295	285	1	580.066	1041.146	76.000	580.066	1041.146	-76.000/
1296	286	1	941.384	595.173	76.000	941.384	595.173	-76.000/
1297	287	1	864.292	622.419	76.000	864.292	622.419	-76.000/

1298	288	1	602.857	910.171	76.000	602.857	910.171	-76.000/
1299	289	1	637.358	830.526	76.000	637.358	830.526	-76.000/
1300	290	1	811.685	648.268	76.000	811.685	648.268	-76.000/
1301	291	1	669.888	777.396	76.000	669.888	777.396	-76.000/
1302	292	1	577.427	1015.492	76.000	577.427	1015.492	-76.000/
1303	293	1	915.939	596.025	76.000	915.939	596.025	-76.000/
1304	294	1	576.102	989.385	76.000	576.102	989.385	-76.000/
1305	295	1	604.914	883.259	76.000	604.914	883.259	-76.000/
1306	296	1	729.759	698.400	76.000	729.759	698.400	-76.000/
1307	297	1	838.128	621.613	76.000	838.128	621.613	-76.000/
1308	298	1	757.806	672.935	76.000	757.806	672.935	-76.000/
1309	299	1	701.024	724.002	76.000	701.024	724.002	-76.000/
1310	300	1	639.796	804.108	76.000	639.796	804.108	-76.000/
1311	301	1	574.777	963.278	76.000	574.777	963.278	-76.000/
1312	302	1	890.121	595.718	76.000	890.121	595.718	-76.000/
1313	303	1	785.110	646.953	76.000	785.110	646.953	-76.000/
1314	304	1	606.972	856.348	76.000	606.972	856.348	-76.000/
1315	305	1	672.175	750.190	76.000	672.175	750.190	-76.000/
1316	306	1	1016.776	562.628	76.000	1016.776	562.628	-76.000/
1317	307	1	991.684	565.106	76.000	991.684	565.106	-76.000/
1318	308	1	1041.788	559.220	76.000	1041.788	559.220	-76.000/
1319	309	1	574.970	936.706	76.000	574.970	936.706	-76.000/
1320	310	1	966.591	567.583	76.000	966.591	567.583	-76.000/
1321	311	1	555.812	1066.800	76.000	555.812	1066.800	-76.000/
1322	312	1	1066.800	555.812	76.000	1066.800	555.812	-76.000/
1323	313	1	864.303	595.410	76.000	864.303	595.410	-76.000/
1324	314	1	811.964	620.806	76.000	811.964	620.806	-76.000/
1325	315	1	941.173	568.277	76.000	941.173	568.277	-76.000/
1326	316	1	642.268	776.526	76.000	642.268	776.526	-76.000/
1327	317	1	552.974	1041.211	76.000	552.974	1041.211	-76.000/
1328	318	1	609.462	829.636	76.000	609.462	829.636	-76.000/
1329	319	1	575.163	910.134	76.000	575.163	910.134	-76.000/
1330	320	1	550.137	1015.621	76.000	550.137	1015.621	-76.000/
1331	321	1	730.702	671.016	76.000	730.702	671.016	-76.000/
1332	322	1	702.440	696.567	76.000	702.440	696.567	-76.000/
1333	323	1	915.754	568.970	76.000	915.754	568.970	-76.000/
1334	324	1	758.534	645.638	76.000	758.534	645.638	-76.000/
1335	325	1	673.777	722.479	76.000	673.777	722.479	-76.000/
1336	326	1	577.094	882.943	76.000	577.094	882.943	-76.000/
1337	327	1	548.622	989.442	76.000	548.622	989.442	-76.000/
1338	328	1	838.273	594.377	76.000	838.273	594.377	-76.000/
1339	329	1	611.952	802.924	76.000	611.952	802.924	-76.000/
1340	330	1	644.741	748.943	76.000	644.741	748.943	-76.000/
1341	331	1	890.092	568.777	76.000	890.092	568.777	-76.000/
1342	332	1	785.487	619.282	76.000	785.487	619.282	-76.000/
1343	333	1	547.106	963.262	76.000	547.106	963.262	-76.000/
1344	334	1	579.025	855.752	76.000	579.025	855.752	-76.000/
1345	335	1	1016.664	536.192	76.000	1016.664	536.192	-76.000/
1346	336	1	991.508	538.519	76.000	991.508	538.519	-76.000/
1347	337	1	1041.732	532.555	76.000	1041.732	532.555	-76.000/
1348	338	1	966.353	540.846	76.000	966.353	540.846	-76.000/
1349	339	1	547.245	936.437	76.000	547.245	936.437	-76.000/
1350	340	1	812.243	593.345	76.000	812.243	593.345	-76.000/
1351	341	1	864.431	568.584	76.000	864.431	568.584	-76.000/
1352	342	1	528.918	1066.800	76.000	528.918	1066.800	-76.000/
1353	343	1	1066.800	528.918	76.000	1066.800	528.918	-76.000/
1354	344	1	614.535	774.761	76.000	614.535	774.761	-76.000/
1355	345	1	703.597	669.097	76.000	703.597	669.097	-76.000/
1356	346	1	731.644	643.633	76.000	731.644	643.633	-76.000/
1357	347	1	675.380	694.767	76.000	675.380	694.767	-76.000/
1358	348	1	940.961	541.380	76.000	940.961	541.380	-76.000/
1359	349	1	581.566	828.746	76.000	581.566	828.746	-76.000/
1360	350	1	525.882	1041.275	76.000	525.882	1041.275	-76.000/
1361	351	1	547.383	909.611	76.000	547.383	909.611	-76.000/
1362	352	1	646.530	720.956	76.000	646.530	720.956	-76.000/
1363	353	1	759.010	617.757	76.000	759.010	617.757	-76.000/



1364	354	1	915.569	541.915	76.000	915.569	541.915	-76.000/
1365	355	1	522.847	1015.751	76.000	522.847	1015.751	-76.000/
1366	356	1	838.509	567.161	76.000	838.509	567.161	-76.000/
1367	357	1	549.178	882.034	76.000	549.178	882.034	-76.000/
1368	358	1	584.108	801.739	76.000	584.108	801.739	-76.000/
1369	359	1	521.141	989.498	76.000	521.141	989.498	-76.000/
1370	360	1	785.864	591.610	76.000	785.864	591.610	-76.000/
1371	361	1	617.118	746.597	76.000	617.118	746.597	-76.000/
1372	362	1	890.064	541.836	76.000	890.064	541.836	-76.000/
1373	363	1	519.436	963.246	76.000	519.436	963.246	-76.000/
1374	364	1	550.974	854.457	76.000	550.974	854.457	-76.000/
1375	365	1	704.755	641.628	76.000	704.755	641.628	-76.000/
1376	366	1	676.591	666.918	76.000	676.591	666.918	-76.000/
1377	367	1	1016.544	509.624	76.000	1016.544	509.624	-76.000/
1378	368	1	991.349	511.943	76.000	991.349	511.943	-76.000/
1379	369	1	648.319	692.968	76.000	648.319	692.968	-76.000/
1380	370	1	1041.672	505.824	76.000	1041.672	505.824	-76.000/
1381	371	1	966.154	514.261	76.000	966.154	514.261	-76.000/
1382	372	1	732.175	615.569	76.000	732.175	615.569	-76.000/
1383	373	1	812.588	565.738	76.000	812.588	565.738	-76.000/
1384	374	1	864.558	541.757	76.000	864.558	541.757	-76.000/
1385	375	1	519.519	936.167	76.000	519.519	936.167	-76.000/
1386	376	1	586.801	772.995	76.000	586.801	772.995	-76.000/
1387	377	1	1066.800	502.024	76.000	1066.800	502.024	-76.000/
1388	378	1	502.024	1066.800	76.000	502.024	1066.800	-76.000/
1389	379	1	940.825	514.867	76.000	940.825	514.867	-76.000/
1390	380	1	553.593	826.432	76.000	553.593	826.432	-76.000/
1391	381	1	759.486	589.876	76.000	759.486	589.876	-76.000/
1392	382	1	619.077	718.217	76.000	619.077	718.217	-76.000/
1393	383	1	498.961	1041.224	76.000	498.961	1041.224	-76.000/
1394	384	1	519.603	909.088	76.000	519.603	909.088	-76.000/
1395	385	1	915.497	515.473	76.000	915.497	515.473	-76.000/
1396	386	1	495.898	1015.648	76.000	495.898	1015.648	-76.000/
1397	387	1	838.746	539.944	76.000	838.746	539.944	-76.000/
1398	388	1	786.376	563.898	76.000	786.376	563.898	-76.000/
1399	389	1	589.494	744.252	76.000	589.494	744.252	-76.000/
1400	390	1	521.263	881.125	76.000	521.263	881.125	-76.000/
1401	391	1	556.212	798.407	76.000	556.212	798.407	-76.000/
1402	392	1	493.964	989.274	76.000	493.964	989.274	-76.000/
1403	393	1	677.803	639.069	76.000	677.803	639.069	-76.000/
1404	394	1	649.585	664.739	76.000	649.585	664.739	-76.000/
1405	395	1	890.094	514.981	76.000	890.094	514.981	-76.000/
1406	396	1	705.339	613.381	76.000	705.339	613.381	-76.000/
1407	397	1	621.037	689.837	76.000	621.037	689.837	-76.000/
1408	398	1	492.029	962.901	76.000	492.029	962.901	-76.000/
1409	399	1	732.705	587.505	76.000	732.705	587.505	-76.000/
1410	400	1	522.923	853.162	76.000	522.923	853.162	-76.000/
1411	401	1	1016.424	483.057	76.000	1016.424	483.057	-76.000/
1412	402	1	991.189	485.367	76.000	991.189	485.367	-76.000/
1413	403	1	812.933	538.131	76.000	812.933	538.131	-76.000/
1414	404	1	965.954	487.676	76.000	965.954	487.676	-76.000/
1415	405	1	864.691	514.490	76.000	864.691	514.490	-76.000/
1416	406	1	1041.612	479.093	76.000	1041.612	479.093	-76.000/
1417	407	1	558.927	769.338	76.000	558.927	769.338	-76.000/
1418	408	1	491.927	935.269	76.000	491.927	935.269	-76.000/
1419	409	1	760.163	562.059	76.000	760.163	562.059	-76.000/
1420	410	1	591.625	715.478	76.000	591.625	715.478	-76.000/
1421	411	1	475.129	1066.800	76.000	475.129	1066.800	-76.000/
1422	412	1	1066.800	475.129	76.000	1066.800	475.129	-76.000/
1423	413	1	940.690	488.353	76.000	940.690	488.353	-76.000/
1424	414	1	525.619	824.118	76.000	525.619	824.118	-76.000/
1425	415	1	472.039	1041.173	76.000	472.039	1041.173	-76.000/
1426	416	1	491.824	907.637	76.000	491.824	907.637	-76.000/
1427	417	1	915.425	489.030	76.000	915.425	489.030	-76.000/
1428	418	1	650.850	636.510	76.000	650.850	636.510	-76.000/
1429	419	1	678.424	610.582	76.000	678.424	610.582	-76.000/

1430	420	1	839.102	512.573	76.000	839.102	512.573	-76.000/
1431	421	1	786.887	536.186	76.000	786.887	536.186	-76.000/
1432	422	1	468.948	1015.545	76.000	468.948	1015.545	-76.000/
1433	423	1	622.499	661.409	76.000	622.499	661.409	-76.000/
1434	424	1	561.643	740.268	76.000	561.643	740.268	-76.000/
1435	425	1	705.924	585.135	76.000	705.924	585.135	-76.000/
1436	426	1	528.316	795.075	76.000	528.316	795.075	-76.000/
1437	427	1	493.349	878.562	76.000	493.349	878.562	-76.000/
1438	428	1	466.786	989.050	76.000	466.786	989.050	-76.000/
1439	429	1	890.124	488.127	76.000	890.124	488.127	-76.000/
1440	430	1	593.755	686.705	76.000	593.755	686.705	-76.000/
1441	431	1	733.299	559.490	76.000	733.299	559.490	-76.000/
1442	432	1	813.513	510.655	76.000	813.513	510.655	-76.000/
1443	433	1	464.623	962.556	76.000	464.623	962.556	-76.000/
1444	434	1	494.874	849.487	76.000	494.874	849.487	-76.000/
1445	435	1	1016.260	456.074	76.000	1016.260	456.074	-76.000/
1446	436	1	991.031	458.578	76.000	991.031	458.578	-76.000/
1447	437	1	864.824	487.223	76.000	864.824	487.223	-76.000/
1448	438	1	965.802	461.082	76.000	965.802	461.082	-76.000/
1449	439	1	760.840	534.242	76.000	760.840	534.242	-76.000/
1450	440	1	531.054	765.680	76.000	531.054	765.680	-76.000/
1451	441	1	1041.530	452.155	76.000	1041.530	452.155	-76.000/
1452	442	1	563.913	711.058	76.000	563.913	711.058	-76.000/
1453	443	1	464.334	934.371	76.000	464.334	934.371	-76.000/
1454	444	1	940.622	461.723	76.000	940.622	461.723	-76.000/
1455	445	1	448.235	1066.800	76.000	448.235	1066.800	-76.000/
1456	446	1	1066.800	448.235	76.000	1066.800	448.235	-76.000/
1457	447	1	651.509	607.783	76.000	651.509	607.783	-76.000/
1458	448	1	623.960	632.981	76.000	623.960	632.981	-76.000/
1459	449	1	497.510	819.642	76.000	497.510	819.642	-76.000/
1460	450	1	679.046	582.096	76.000	679.046	582.096	-76.000/
1461	451	1	445.031	1041.239	76.000	445.031	1041.239	-76.000/
1462	452	1	915.443	462.365	76.000	915.443	462.365	-76.000/
1463	453	1	464.044	906.185	76.000	464.044	906.185	-76.000/
1464	454	1	595.413	658.078	76.000	595.413	658.078	-76.000/
1465	455	1	706.434	556.921	76.000	706.434	556.921	-76.000/
1466	456	1	787.453	508.325	76.000	787.453	508.325	-76.000/
1467	457	1	839.458	485.201	76.000	839.458	485.201	-76.000/
1468	458	1	441.827	1015.679	76.000	441.827	1015.679	-76.000/
1469	459	1	533.791	736.284	76.000	533.791	736.284	-76.000/
1470	460	1	733.892	531.474	76.000	733.892	531.474	-76.000/
1471	461	1	890.247	461.497	76.000	890.247	461.497	-76.000/
1472	462	1	500.145	789.798	76.000	500.145	789.798	-76.000/
1473	463	1	465.435	875.999	76.000	465.435	875.999	-76.000/
1474	464	1	566.183	681.848	76.000	566.183	681.848	-76.000/
1475	465	1	439.622	988.938	76.000	439.622	988.938	-76.000/
1476	466	1	814.092	483.179	76.000	814.092	483.179	-76.000/
1477	467	1	437.418	962.197	76.000	437.418	962.197	-76.000/
1478	468	1	761.394	505.995	76.000	761.394	505.995	-76.000/
1479	469	1	865.052	460.630	76.000	865.052	460.630	-76.000/
1480	470	1	466.826	845.812	76.000	466.826	845.812	-76.000/
1481	471	1	990.873	431.790	76.000	990.873	431.790	-76.000/
1482	472	1	1016.097	429.092	76.000	1016.097	429.092	-76.000/
1483	473	1	624.786	604.314	76.000	624.786	604.314	-76.000/
1484	474	1	652.169	579.057	76.000	652.169	579.057	-76.000/
1485	475	1	965.650	434.487	76.000	965.650	434.487	-76.000/
1486	476	1	536.201	706.637	76.000	536.201	706.637	-76.000/
1487	477	1	597.070	629.452	76.000	597.070	629.452	-76.000/
1488	478	1	502.888	760.171	76.000	502.888	760.171	-76.000/
1489	479	1	1041.448	425.217	76.000	1041.448	425.217	-76.000/
1490	480	1	679.470	553.812	76.000	679.470	553.812	-76.000/
1491	481	1	436.794	933.397	76.000	436.794	933.397	-76.000/
1492	482	1	940.555	435.094	76.000	940.555	435.094	-76.000/
1493	483	1	421.341	1066.800	76.000	421.341	1066.800	-76.000/
1494	484	1	1066.800	421.341	76.000	1066.800	421.341	-76.000/
1495	485	1	706.945	528.706	76.000	706.945	528.706	-76.000/

1496	486	1	568.109	652.812	76.000	568.109	652.812	-76.000/
1497	487	1	469.400	815.166	76.000	469.400	815.166	-76.000/
1498	488	1	915.460	435.700	76.000	915.460	435.700	-76.000/
1499	489	1	788.019	480.463	76.000	788.019	480.463	-76.000/
1500	490	1	418.023	1041.306	76.000	418.023	1041.306	-76.000/
1501	491	1	839.777	458.452	76.000	839.777	458.452	-76.000/
1502	492	1	436.169	904.596	76.000	436.169	904.596	-76.000/
1503	493	1	414.705	1015.813	76.000	414.705	1015.813	-76.000/
1504	494	1	505.630	730.545	76.000	505.630	730.545	-76.000/
1505	495	1	734.410	502.900	76.000	734.410	502.900	-76.000/
1506	496	1	890.370	434.868	76.000	890.370	434.868	-76.000/
1507	497	1	538.612	676.990	76.000	538.612	676.990	-76.000/
1508	498	1	471.974	784.520	76.000	471.974	784.520	-76.000/
1509	499	1	412.459	988.826	76.000	412.459	988.826	-76.000/
1510	500	1	436.917	873.018	76.000	436.917	873.018	-76.000/
1511	501	1	625.612	575.646	76.000	625.612	575.646	-76.000/
1512	502	1	814.502	456.275	76.000	814.502	456.275	-76.000/
1513	503	1	598.063	600.844	76.000	598.063	600.844	-76.000/
1514	504	1	652.507	550.702	76.000	652.507	550.702	-76.000/
1515	505	1	761.947	477.747	76.000	761.947	477.747	-76.000/
1516	506	1	865.281	434.036	76.000	865.281	434.036	-76.000/
1517	507	1	410.213	961.839	76.000	410.213	961.839	-76.000/
1518	508	1	679.895	525.527	76.000	679.895	525.527	-76.000/
1519	509	1	570.034	623.777	76.000	570.034	623.777	-76.000/
1520	510	1	990.662	405.547	76.000	990.662	405.547	-76.000/
1521	511	1	965.458	408.496	76.000	965.458	408.496	-76.000/
1522	512	1	1015.866	402.598	76.000	1015.866	402.598	-76.000/
1523	513	1	437.666	841.440	76.000	437.666	841.440	-76.000/
1524	514	1	508.084	700.075	76.000	508.084	700.075	-76.000/
1525	515	1	1041.333	398.522	76.000	1041.333	398.522	-76.000/
1526	516	1	474.722	754.663	76.000	474.722	754.663	-76.000/
1527	517	1	940.465	409.484	76.000	940.465	409.484	-76.000/
1528	518	1	409.254	932.423	76.000	409.254	932.423	-76.000/
1529	519	1	707.427	499.806	76.000	707.427	499.806	-76.000/
1530	520	1	394.447	1066.800	76.000	394.447	1066.800	-76.000/
1531	521	1	1066.800	394.447	76.000	1066.800	394.447	-76.000/
1532	522	1	540.805	647.546	76.000	540.805	647.546	-76.000/
1533	523	1	915.473	410.473	76.000	915.473	410.473	-76.000/
1534	524	1	788.587	453.120	76.000	788.587	453.120	-76.000/
1535	525	1	840.096	431.704	76.000	840.096	431.704	-76.000/
1536	526	1	391.369	1041.138	76.000	391.369	1041.138	-76.000/
1537	527	1	440.648	809.948	76.000	440.648	809.948	-76.000/
1538	528	1	408.294	903.007	76.000	408.294	903.007	-76.000/
1539	529	1	734.928	474.326	76.000	734.928	474.326	-76.000/
1540	530	1	388.290	1015.476	76.000	388.290	1015.476	-76.000/
1541	531	1	599.055	572.236	76.000	599.055	572.236	-76.000/
1542	532	1	890.494	409.300	76.000	890.494	409.300	-76.000/
1543	533	1	477.469	724.805	76.000	477.469	724.805	-76.000/
1544	534	1	625.805	547.259	76.000	625.805	547.259	-76.000/
1545	535	1	571.552	595.735	76.000	571.552	595.735	-76.000/
1546	536	1	510.538	669.606	76.000	510.538	669.606	-76.000/
1547	537	1	652.845	522.348	76.000	652.845	522.348	-76.000/
1548	538	1	385.952	988.433	76.000	385.952	988.433	-76.000/
1549	539	1	814.911	429.372	76.000	814.911	429.372	-76.000/
1550	540	1	443.629	778.455	76.000	443.629	778.455	-76.000/
1551	541	1	408.400	870.038	76.000	408.400	870.038	-76.000/
1552	542	1	762.673	449.965	76.000	762.673	449.965	-76.000/
1553	543	1	865.515	408.127	76.000	865.515	408.127	-76.000/
1554	544	1	680.015	496.468	76.000	680.015	496.468	-76.000/
1555	545	1	542.998	618.102	76.000	542.998	618.102	-76.000/
1556	546	1	383.613	961.390	76.000	383.613	961.390	-76.000/
1557	547	1	990.451	379.304	76.000	990.451	379.304	-76.000/
1558	548	1	965.266	382.504	76.000	965.266	382.504	-76.000/
1559	549	1	1015.636	376.103	76.000	1015.636	376.103	-76.000/
1560	550	1	940.375	383.875	76.000	940.375	383.875	-76.000/
1561	551	1	1041.218	371.828	76.000	1041.218	371.828	-76.000/

1562	552	1	479.967	693.513	76.000	479.967	693.513	-76.000/
1563	553	1	707.910	470.905	76.000	707.910	470.905	-76.000/
1564	554	1	408.506	837.068	76.000	408.506	837.068	-76.000/
1565	555	1	446.356	747.625	76.000	446.356	747.625	-76.000/
1566	556	1	382.295	931.511	76.000	382.295	931.511	-76.000/
1567	557	1	915.485	385.246	76.000	915.485	385.246	-76.000/
1568	558	1	789.155	425.777	76.000	789.155	425.777	-76.000/
1569	559	1	840.424	405.562	76.000	840.424	405.562	-76.000/
1570	560	1	513.182	639.688	76.000	513.182	639.688	-76.000/
1571	561	1	367.553	1066.800	76.000	367.553	1066.800	-76.000/
1572	562	1	1066.800	367.553	76.000	1066.800	367.553	-76.000/
1573	563	1	599.103	543.816	76.000	599.103	543.816	-76.000/
1574	564	1	573.069	567.694	76.000	573.069	567.694	-76.000/
1575	565	1	364.714	1040.970	76.000	364.714	1040.970	-76.000/
1576	566	1	625.998	518.872	76.000	625.998	518.872	-76.000/
1577	567	1	735.773	446.018	76.000	735.773	446.018	-76.000/
1578	568	1	411.895	804.729	76.000	411.895	804.729	-76.000/
1579	569	1	890.617	383.732	76.000	890.617	383.732	-76.000/
1580	570	1	380.977	901.632	76.000	380.977	901.632	-76.000/
1581	571	1	545.040	590.627	76.000	545.040	590.627	-76.000/
1582	572	1	361.876	1015.140	76.000	361.876	1015.140	-76.000/
1583	573	1	652.604	493.130	76.000	652.604	493.130	-76.000/
1584	574	1	815.334	402.997	76.000	815.334	402.997	-76.000/
1585	575	1	449.082	716.795	76.000	449.082	716.795	-76.000/
1586	576	1	482.465	662.222	76.000	482.465	662.222	-76.000/
1587	577	1	359.444	988.040	76.000	359.444	988.040	-76.000/
1588	578	1	763.398	422.183	76.000	763.398	422.183	-76.000/
1589	579	1	680.136	467.409	76.000	680.136	467.409	-76.000/
1590	580	1	865.749	382.218	76.000	865.749	382.218	-76.000/
1591	581	1	415.284	772.390	76.000	415.284	772.390	-76.000/
1592	582	1	515.825	609.770	76.000	515.825	609.770	-76.000/
1593	583	1	964.983	357.154	76.000	964.983	357.154	-76.000/
1594	584	1	378.583	865.607	76.000	378.583	865.607	-76.000/
1595	585	1	990.199	353.294	76.000	990.199	353.294	-76.000/
1596	586	1	357.013	960.941	76.000	357.013	960.941	-76.000/
1597	587	1	940.184	359.621	76.000	940.184	359.621	-76.000/
1598	588	1	1015.415	349.435	76.000	1015.415	349.435	-76.000/
1599	589	1	708.873	442.071	76.000	708.873	442.071	-76.000/
1600	590	1	915.385	362.088	76.000	915.385	362.088	-76.000/
1601	591	1	573.017	540.025	76.000	573.017	540.025	-76.000/
1602	592	1	1041.108	345.047	76.000	1041.108	345.047	-76.000/
1603	593	1	789.872	399.295	76.000	789.872	399.295	-76.000/
1604	594	1	599.151	515.396	76.000	599.151	515.396	-76.000/
1605	595	1	840.753	379.420	76.000	840.753	379.420	-76.000/
1606	596	1	547.083	563.153	76.000	547.083	563.153	-76.000/
1607	597	1	451.378	684.979	76.000	451.378	684.979	-76.000/
1608	598	1	355.337	930.599	76.000	355.337	930.599	-76.000/
1609	599	1	485.558	631.830	76.000	485.558	631.830	-76.000/
1610	600	1	340.659	1066.800	76.000	340.659	1066.800	-76.000/
1611	601	1	1066.800	340.659	76.000	1066.800	340.659	-76.000/
1612	602	1	417.990	740.588	76.000	417.990	740.588	-76.000/
1613	603	1	625.293	489.561	76.000	625.293	489.561	-76.000/
1614	604	1	736.617	417.710	76.000	736.617	417.710	-76.000/
1615	605	1	890.604	359.820	76.000	890.604	359.820	-76.000/
1616	606	1	338.097	1040.987	76.000	338.097	1040.987	-76.000/
1617	607	1	519.557	583.912	76.000	519.557	583.912	-76.000/
1618	608	1	376.188	829.583	76.000	376.188	829.583	-76.000/
1619	609	1	652.363	463.913	76.000	652.363	463.913	-76.000/
1620	610	1	353.661	900.256	76.000	353.661	900.256	-76.000/
1621	611	1	335.535	1015.173	76.000	335.535	1015.173	-76.000/
1622	612	1	815.756	376.622	76.000	815.756	376.622	-76.000/
1623	613	1	764.410	395.592	76.000	764.410	395.592	-76.000/
1624	614	1	381.681	796.783	76.000	381.681	796.783	-76.000/
1625	615	1	865.822	357.552	76.000	865.822	357.552	-76.000/
1626	616	1	681.079	438.038	76.000	681.079	438.038	-76.000/
1627	617	1	333.176	988.736	76.000	333.176	988.736	-76.000/

1628	618	1	420.696	708.786	76.000	420.696	708.786	-76.000/
1629	619	1	453.673	653.163	76.000	453.673	653.163	-76.000/
1630	620	1	964.701	331.804	76.000	964.701	331.804	-76.000/
1631	621	1	488.651	601.438	76.000	488.651	601.438	-76.000/
1632	622	1	939.993	335.367	76.000	939.993	335.367	-76.000/
1633	623	1	572.965	512.356	76.000	572.965	512.356	-76.000/
1634	624	1	546.931	536.235	76.000	546.931	536.235	-76.000/
1635	625	1	330.817	962.299	76.000	330.817	962.299	-76.000/
1636	626	1	915.286	338.930	76.000	915.286	338.930	-76.000/
1637	627	1	989.948	327.285	76.000	989.948	327.285	-76.000/
1638	628	1	387.175	763.984	76.000	387.175	763.984	-76.000/
1639	629	1	523.290	558.054	76.000	523.290	558.054	-76.000/
1640	630	1	709.836	413.236	76.000	709.836	413.236	-76.000/
1641	631	1	1015.195	322.766	76.000	1015.195	322.766	-76.000/
1642	632	1	597.983	485.991	76.000	597.983	485.991	-76.000/
1643	633	1	348.765	861.177	76.000	348.765	861.177	-76.000/
1644	634	1	790.589	372.812	76.000	790.589	372.812	-76.000/
1645	635	1	840.822	354.462	76.000	840.822	354.462	-76.000/
1646	636	1	330.024	934.813	76.000	330.024	934.813	-76.000/
1647	637	1	1040.997	318.265	76.000	1040.997	318.265	-76.000/
1648	638	1	624.589	460.249	76.000	624.589	460.249	-76.000/
1649	639	1	738.213	390.902	76.000	738.213	390.902	-76.000/
1650	640	1	890.591	335.909	76.000	890.591	335.909	-76.000/
1651	641	1	313.765	1066.800	76.000	313.765	1066.800	-76.000/
1652	642	1	1066.800	313.765	76.000	1066.800	313.765	-76.000/
1653	643	1	422.788	676.445	76.000	422.788	676.445	-76.000/
1654	644	1	494.074	577.197	76.000	494.074	577.197	-76.000/
1655	645	1	329.230	907.328	76.000	329.230	907.328	-76.000/
1656	646	1	390.048	732.650	76.000	390.048	732.650	-76.000/
1657	647	1	311.480	1041.003	76.000	311.480	1041.003	-76.000/
1658	648	1	653.285	434.006	76.000	653.285	434.006	-76.000/
1659	649	1	456.410	620.059	76.000	456.410	620.059	-76.000/
1660	650	1	815.821	351.372	76.000	815.821	351.372	-76.000/
1661	651	1	309.195	1015.207	76.000	309.195	1015.207	-76.000/
1662	652	1	765.423	369.002	76.000	765.423	369.002	-76.000/
1663	653	1	914.843	321.865	76.000	914.843	321.865	-76.000/
1664	654	1	865.895	332.887	76.000	865.895	332.887	-76.000/
1665	655	1	523.384	532.638	76.000	523.384	532.638	-76.000/
1666	656	1	682.022	408.667	76.000	682.022	408.667	-76.000/
1667	657	1	546.780	509.317	76.000	546.780	509.317	-76.000/
1668	658	1	343.869	822.097	76.000	343.869	822.097	-76.000/
1669	659	1	939.470	314.221	76.000	939.470	314.221	-76.000/
1670	660	1	306.909	989.432	76.000	306.909	989.432	-76.000/
1671	661	1	499.497	552.956	76.000	499.497	552.956	-76.000/
1672	662	1	570.763	483.569	76.000	570.763	483.569	-76.000/
1673	663	1	392.922	701.315	76.000	392.922	701.315	-76.000/
1674	664	1	964.098	306.576	76.000	964.098	306.576	-76.000/
1675	665	1	351.468	788.838	76.000	351.468	788.838	-76.000/
1676	666	1	712.015	386.211	76.000	712.015	386.211	-76.000/
1677	667	1	424.881	644.104	76.000	424.881	644.104	-76.000/
1678	668	1	304.622	963.656	76.000	304.622	963.656	-76.000/
1679	669	1	989.429	301.160	76.000	989.429	301.160	-76.000/
1680	670	1	791.081	347.715	76.000	791.081	347.715	-76.000/
1681	671	1	322.498	869.010	76.000	322.498	869.010	-76.000/
1682	672	1	596.815	456.586	76.000	596.815	456.586	-76.000/
1683	673	1	840.891	329.505	76.000	840.891	329.505	-76.000/
1684	674	1	889.913	315.297	76.000	889.913	315.297	-76.000/
1685	675	1	304.711	939.028	76.000	304.711	939.028	-76.000/
1686	676	1	1014.759	295.744	76.000	1014.759	295.744	-76.000/
1687	677	1	359.066	755.578	76.000	359.066	755.578	-76.000/
1688	678	1	459.147	586.954	76.000	459.147	586.954	-76.000/
1689	679	1	739.808	364.094	76.000	739.808	364.094	-76.000/
1690	680	1	624.274	429.891	76.000	624.274	429.891	-76.000/
1691	681	1	1040.779	291.307	76.000	1040.779	291.307	-76.000/
1692	682	1	914.400	304.800	76.000	914.400	304.800	-76.000/
1693	683	1	304.800	914.400	76.000	304.800	914.400	-76.000/

1694	684	1	469.868	566.805	76.000	469.868	566.805	-76.000/
1695	685	1	286.871	1066.800	76.000	286.871	1066.800	-76.000/
1696	686	1	1066.800	286.871	76.000	1066.800	286.871	-76.000/
1697	687	1	523.477	507.222	76.000	523.477	507.222	-76.000/
1698	688	1	654.207	404.098	76.000	654.207	404.098	-76.000/
1699	689	1	394.284	669.636	76.000	394.284	669.636	-76.000/
1700	690	1	499.836	529.042	76.000	499.836	529.042	-76.000/
1701	691	1	815.886	326.123	76.000	815.886	326.123	-76.000/
1702	692	1	284.594	1040.800	76.000	284.594	1040.800	-76.000/
1703	693	1	766.341	344.057	76.000	766.341	344.057	-76.000/
1704	694	1	362.107	724.711	76.000	362.107	724.711	-76.000/
1705	695	1	480.589	546.656	76.000	480.589	546.656	-76.000/
1706	696	1	938.948	293.074	76.000	938.948	293.074	-76.000/
1707	697	1	864.984	308.729	76.000	864.984	308.729	-76.000/
1708	698	1	684.934	380.720	76.000	684.934	380.720	-76.000/
1709	699	1	543.543	481.148	76.000	543.543	481.148	-76.000/
1710	700	1	282.318	1014.800	76.000	282.318	1014.800	-76.000/
1711	701	1	427.262	608.287	76.000	427.262	608.287	-76.000/
1712	702	1	326.308	800.359	76.000	326.308	800.359	-76.000/
1713	703	1	315.765	830.692	76.000	315.765	830.692	-76.000/
1714	704	1	568.560	454.782	76.000	568.560	454.782	-76.000/
1715	705	1	714.194	359.187	76.000	714.194	359.187	-76.000/
1716	706	1	279.775	988.667	76.000	279.775	988.667	-76.000/
1717	707	1	963.496	281.348	76.000	963.496	281.348	-76.000/
1718	708	1	889.236	294.685	76.000	889.236	294.685	-76.000/
1719	709	1	330.688	772.725	76.000	330.688	772.725	-76.000/
1720	710	1	791.573	322.617	76.000	791.573	322.617	-76.000/
1721	711	1	296.230	876.844	76.000	296.230	876.844	-76.000/
1722	712	1	365.148	693.844	76.000	365.148	693.844	-76.000/
1723	713	1	840.121	304.863	76.000	840.121	304.863	-76.000/
1724	714	1	988.909	275.035	76.000	988.909	275.035	-76.000/
1725	715	1	595.262	425.777	76.000	595.262	425.777	-76.000/
1726	716	1	277.233	962.533	76.000	277.233	962.533	-76.000/
1727	717	1	395.646	637.958	76.000	395.646	637.958	-76.000/
1728	718	1	741.796	339.350	76.000	741.796	339.350	-76.000/
1729	719	1	500.175	505.128	76.000	500.175	505.128	-76.000/
1730	720	1	335.068	745.092	76.000	335.068	745.092	-76.000/
1731	721	1	521.290	482.547	76.000	521.290	482.547	-76.000/
1732	722	1	1014.323	268.722	76.000	1014.323	268.722	-76.000/
1733	723	1	479.315	523.521	76.000	479.315	523.521	-76.000/
1734	724	1	623.958	399.533	76.000	623.958	399.533	-76.000/
1735	725	1	275.460	936.314	76.000	275.460	936.314	-76.000/
1736	726	1	461.682	540.356	76.000	461.682	540.356	-76.000/
1737	727	1	1040.562	264.349	76.000	1040.562	264.349	-76.000/
1738	728	1	657.852	375.229	76.000	657.852	375.229	-76.000/
1739	729	1	445.663	556.413	76.000	445.663	556.413	-76.000/
1740	730	1	767.260	319.112	76.000	767.260	319.112	-76.000/
1741	731	1	815.259	300.997	76.000	815.259	300.997	-76.000/
1742	732	1	429.643	572.471	76.000	429.643	572.471	-76.000/
1743	733	1	259.976	1066.800	76.000	259.976	1066.800	-76.000/
1744	734	1	1066.800	259.976	76.000	1066.800	259.976	-76.000/
1745	735	1	302.671	804.947	76.000	302.671	804.947	-76.000/
1746	736	1	864.072	284.571	76.000	864.072	284.571	-76.000/
1747	737	1	687.846	352.773	76.000	687.846	352.773	-76.000/
1748	738	1	273.687	910.094	76.000	273.687	910.094	-76.000/
1749	739	1	540.305	452.978	76.000	540.305	452.978	-76.000/
1750	740	1	365.780	662.828	76.000	365.780	662.828	-76.000/
1751	741	1	257.709	1040.597	76.000	257.709	1040.597	-76.000/
1752	742	1	336.928	715.746	76.000	336.928	715.746	-76.000/
1753	743	1	308.746	778.620	76.000	308.746	778.620	-76.000/
1754	744	1	717.251	334.643	76.000	717.251	334.643	-76.000/
1755	745	1	287.660	839.288	76.000	287.660	839.288	-76.000/
1756	746	1	255.441	1014.393	76.000	255.441	1014.393	-76.000/
1757	747	1	499.037	483.946	76.000	499.037	483.946	-76.000/
1758	748	1	913.429	266.727	76.000	913.429	266.727	-76.000/
1759	749	1	396.135	604.196	76.000	396.135	604.196	-76.000/

1760	750	1	790.866	298.396	76.000	790.866	298.396	-76.000/
1761	751	1	478.040	500.385	76.000	478.040	500.385	-76.000/
1762	752	1	252.642	987.902	76.000	252.642	987.902	-76.000/
1763	753	1	309.908	756.613	76.000	309.908	756.613	-76.000/
1764	754	1	938.277	258.913	76.000	938.277	258.913	-76.000/
1765	755	1	562.212	422.835	76.000	562.212	422.835	-76.000/
1766	756	1	743.784	314.605	76.000	743.784	314.605	-76.000/
1767	757	1	839.352	280.221	76.000	839.352	280.221	-76.000/
1768	758	1	519.102	457.871	76.000	519.102	457.871	-76.000/
1769	759	1	458.793	517.999	76.000	458.793	517.999	-76.000/
1770	760	1	338.788	686.401	76.000	338.788	686.401	-76.000/
1771	761	1	593.709	394.968	76.000	593.709	394.968	-76.000/
1772	762	1	963.125	251.098	76.000	963.125	251.098	-76.000/
1773	763	1	265.954	875.245	76.000	265.954	875.245	-76.000/
1774	764	1	628.477	369.675	76.000	628.477	369.675	-76.000/
1775	765	1	249.843	961.410	76.000	249.843	961.410	-76.000/
1776	766	1	366.412	631.811	76.000	366.412	631.811	-76.000/
1777	767	1	988.620	245.960	76.000	988.620	245.960	-76.000/
1778	768	1	311.070	734.605	76.000	311.070	734.605	-76.000/
1779	769	1	888.073	260.688	76.000	888.073	260.688	-76.000/
1780	770	1	661.498	346.359	76.000	661.498	346.359	-76.000/
1781	771	1	438.883	528.787	76.000	438.883	528.787	-76.000/
1782	772	1	766.473	295.795	76.000	766.473	295.795	-76.000/
1783	773	1	1014.115	240.822	76.000	1014.115	240.822	-76.000/
1784	774	1	279.034	809.535	76.000	279.034	809.535	-76.000/
1785	775	1	289.577	779.201	76.000	289.577	779.201	-76.000/
1786	776	1	692.354	326.800	76.000	692.354	326.800	-76.000/
1787	777	1	497.898	462.763	76.000	497.898	462.763	-76.000/
1788	778	1	814.632	275.871	76.000	814.632	275.871	-76.000/
1789	779	1	1040.458	236.952	76.000	1040.458	236.952	-76.000/
1790	780	1	246.208	933.599	76.000	246.208	933.599	-76.000/
1791	781	1	720.308	310.098	76.000	720.308	310.098	-76.000/
1792	782	1	233.082	1066.800	76.000	233.082	1066.800	-76.000/
1793	783	1	1066.800	233.082	76.000	1066.800	233.082	-76.000/
1794	784	1	396.623	570.434	76.000	396.623	570.434	-76.000/
1795	785	1	418.973	539.574	76.000	418.973	539.574	-76.000/
1796	786	1	338.664	656.451	76.000	338.664	656.451	-76.000/
1797	787	1	231.123	1040.571	76.000	231.123	1040.571	-76.000/
1798	788	1	476.768	474.156	76.000	476.768	474.156	-76.000/
1799	789	1	455.904	495.642	76.000	455.904	495.642	-76.000/
1800	790	1	311.749	706.781	76.000	311.749	706.781	-76.000/
1801	791	1	862.716	254.648	76.000	862.716	254.648	-76.000/
1802	792	1	745.024	293.510	76.000	745.024	293.510	-76.000/
1803	793	1	288.566	754.568	76.000	288.566	754.568	-76.000/
1804	794	1	229.163	1014.341	76.000	229.163	1014.341	-76.000/
1805	795	1	790.159	274.175	76.000	790.159	274.175	-76.000/
1806	796	1	258.221	840.395	76.000	258.221	840.395	-76.000/
1807	797	1	242.573	905.788	76.000	242.573	905.788	-76.000/
1808	798	1	529.161	419.893	76.000	529.161	419.893	-76.000/
1809	799	1	365.007	600.104	76.000	365.007	600.104	-76.000/
1810	800	1	599.101	364.122	76.000	599.101	364.122	-76.000/
1811	801	1	226.357	987.808	76.000	226.357	987.808	-76.000/
1812	802	1	270.408	779.782	76.000	270.408	779.782	-76.000/
1813	803	1	632.996	339.817	76.000	632.996	339.817	-76.000/
1814	804	1	837.177	251.850	76.000	837.177	251.850	-76.000/
1815	805	1	555.863	390.888	76.000	555.863	390.888	-76.000/
1816	806	1	667.457	318.958	76.000	667.457	318.958	-76.000/
1817	807	1	502.329	433.910	76.000	502.329	433.910	-76.000/
1818	808	1	723.575	291.225	76.000	723.575	291.225	-76.000/
1819	809	1	312.428	678.958	76.000	312.428	678.958	-76.000/
1820	810	1	287.555	729.935	76.000	287.555	729.935	-76.000/
1821	811	1	765.685	272.478	76.000	765.685	272.478	-76.000/
1822	812	1	223.551	961.274	76.000	223.551	961.274	-76.000/
1823	813	1	432.104	501.160	76.000	432.104	501.160	-76.000/
1824	814	1	696.862	300.827	76.000	696.862	300.827	-76.000/
1825	815	1	338.540	626.500	76.000	338.540	626.500	-76.000/

1826	816	1	937.607	224.751	76.000	937.607	224.751	-76.000/
1827	817	1	912.459	228.654	76.000	912.459	228.654	-76.000/
1828	818	1	962.755	220.849	76.000	962.755	220.849	-76.000/
1829	819	1	235.678	873.645	76.000	235.678	873.645	-76.000/
1830	820	1	988.331	216.885	76.000	988.331	216.885	-76.000/
1831	821	1	251.389	809.544	76.000	251.389	809.544	-76.000/
1832	822	1	1013.908	212.922	76.000	1013.908	212.922	-76.000/
1833	823	1	475.496	447.926	76.000	475.496	447.926	-76.000/
1834	824	1	746.264	272.415	76.000	746.264	272.415	-76.000/
1835	825	1	811.638	249.052	76.000	811.638	249.052	-76.000/
1836	826	1	1040.354	209.555	76.000	1040.354	209.555	-76.000/
1837	827	1	219.135	933.544	76.000	219.135	933.544	-76.000/
1838	828	1	454.499	464.365	76.000	454.499	464.365	-76.000/
1839	829	1	388.737	539.244	76.000	388.737	539.244	-76.000/
1840	830	1	267.224	752.523	76.000	267.224	752.523	-76.000/
1841	831	1	886.910	226.690	76.000	886.910	226.690	-76.000/
1842	832	1	206.188	1066.800	76.000	206.188	1066.800	-76.000/
1843	833	1	1066.800	206.188	76.000	1066.800	206.188	-76.000/
1844	834	1	287.088	702.009	76.000	287.088	702.009	-76.000/
1845	835	1	363.602	568.397	76.000	363.602	568.397	-76.000/
1846	836	1	311.548	650.074	76.000	311.548	650.074	-76.000/
1847	837	1	204.537	1040.545	76.000	204.537	1040.545	-76.000/
1848	838	1	726.843	272.351	76.000	726.843	272.351	-76.000/
1849	839	1	408.303	506.677	76.000	408.303	506.677	-76.000/
1850	840	1	785.799	248.500	76.000	785.799	248.500	-76.000/
1851	841	1	202.885	1014.289	76.000	202.885	1014.289	-76.000/
1852	842	1	861.361	224.726	76.000	861.361	224.726	-76.000/
1853	843	1	604.494	333.275	76.000	604.494	333.275	-76.000/
1854	844	1	214.720	905.813	76.000	214.720	905.813	-76.000/
1855	845	1	639.231	311.879	76.000	639.231	311.879	-76.000/
1856	846	1	228.783	841.503	76.000	228.783	841.503	-76.000/
1857	847	1	565.231	358.360	76.000	565.231	358.360	-76.000/
1858	848	1	336.748	596.037	76.000	336.748	596.037	-76.000/
1859	849	1	703.776	277.121	76.000	703.776	277.121	-76.000/
1860	850	1	673.417	291.556	76.000	673.417	291.556	-76.000/
1861	851	1	200.072	987.714	76.000	200.072	987.714	-76.000/
1862	852	1	244.557	778.693	76.000	244.557	778.693	-76.000/
1863	853	1	264.041	725.265	76.000	264.041	725.265	-76.000/
1864	854	1	428.088	471.750	76.000	428.088	471.750	-76.000/
1865	855	1	286.622	674.084	76.000	286.622	674.084	-76.000/
1866	856	1	518.018	386.808	76.000	518.018	386.808	-76.000/
1867	857	1	759.961	247.949	76.000	759.961	247.949	-76.000/
1868	858	1	835.002	223.479	76.000	835.002	223.479	-76.000/
1869	859	1	197.258	961.138	76.000	197.258	961.138	-76.000/
1870	860	1	485.556	409.948	76.000	485.556	409.948	-76.000/
1871	861	1	310.668	621.190	76.000	310.668	621.190	-76.000/
1872	862	1	735.325	250.682	76.000	735.325	250.682	-76.000/
1873	863	1	223.745	809.553	76.000	223.745	809.553	-76.000/
1874	864	1	961.797	191.367	76.000	961.797	191.367	-76.000/
1875	865	1	987.693	188.260	76.000	987.693	188.260	-76.000/
1876	866	1	453.094	433.089	76.000	453.094	433.089	-76.000/
1877	867	1	936.432	194.243	76.000	936.432	194.243	-76.000/
1878	868	1	205.464	873.857	76.000	205.464	873.857	-76.000/
1879	869	1	808.643	222.232	76.000	808.643	222.232	-76.000/
1880	870	1	1013.588	185.152	76.000	1013.588	185.152	-76.000/
1881	871	1	358.500	538.914	76.000	358.500	538.914	-76.000/
1882	872	1	911.068	197.119	76.000	911.068	197.119	-76.000/
1883	873	1	241.534	750.184	76.000	241.534	750.184	-76.000/
1884	874	1	380.851	508.054	76.000	380.851	508.054	-76.000/
1885	875	1	192.062	933.488	76.000	192.062	933.488	-76.000/
1886	876	1	1040.194	182.223	76.000	1040.194	182.223	-76.000/
1887	877	1	262.428	697.237	76.000	262.428	697.237	-76.000/
1888	878	1	334.956	565.574	76.000	334.956	565.574	-76.000/
1889	879	1	179.294	1066.800	76.000	179.294	1066.800	-76.000/
1890	880	1	1066.800	179.294	76.000	1066.800	179.294	-76.000/
1891	881	1	401.676	479.134	76.000	401.676	479.134	-76.000/



1892	882	1	285.282	645.509	76.000	285.282	645.509	-76.000/
1893	883	1	611.005	304.801	76.000	611.005	304.801	-76.000/
1894	884	1	710.690	253.414	76.000	710.690	253.414	-76.000/
1895	885	1	178.300	1040.645	76.000	178.300	1040.645	-76.000/
1896	886	1	645.467	283.941	76.000	645.467	283.941	-76.000/
1897	887	1	885.239	196.226	76.000	885.239	196.226	-76.000/
1898	888	1	574.599	325.833	76.000	574.599	325.833	-76.000/
1899	889	1	683.977	263.017	76.000	683.977	263.017	-76.000/
1900	890	1	781.440	222.826	76.000	781.440	222.826	-76.000/
1901	891	1	177.306	1014.490	76.000	177.306	1014.490	-76.000/
1902	892	1	531.361	352.599	76.000	531.361	352.599	-76.000/
1903	893	1	186.866	905.839	76.000	186.866	905.839	-76.000/
1904	894	1	308.489	591.970	76.000	308.489	591.970	-76.000/
1905	895	1	175.036	988.270	76.000	175.036	988.270	-76.000/
1906	896	1	859.411	195.333	76.000	859.411	195.333	-76.000/
1907	897	1	218.707	777.604	76.000	218.707	777.604	-76.000/
1908	898	1	424.072	442.340	76.000	424.072	442.340	-76.000/
1909	899	1	238.510	721.676	76.000	238.510	721.676	-76.000/
1910	900	1	260.816	669.210	76.000	260.816	669.210	-76.000/
1911	901	1	196.208	841.900	76.000	196.208	841.900	-76.000/
1912	902	1	754.237	223.421	76.000	754.237	223.421	-76.000/
1913	903	1	172.765	962.050	76.000	172.765	962.050	-76.000/
1914	904	1	283.943	616.934	76.000	283.943	616.934	-76.000/
1915	905	1	832.842	194.638	76.000	832.842	194.638	-76.000/
1916	906	1	724.387	228.949	76.000	724.387	228.949	-76.000/
1917	907	1	353.399	509.431	76.000	353.399	509.431	-76.000/
1918	908	1	374.964	480.916	76.000	374.964	480.916	-76.000/
1919	909	1	330.631	537.083	76.000	330.631	537.083	-76.000/
1920	910	1	168.659	935.866	76.000	168.659	935.866	-76.000/
1921	911	1	215.843	747.845	76.000	215.843	747.845	-76.000/
1922	912	1	582.288	297.518	76.000	582.288	297.518	-76.000/
1923	913	1	617.517	276.327	76.000	617.517	276.327	-76.000/
1924	914	1	653.704	255.666	76.000	653.704	255.666	-76.000/
1925	915	1	236.627	693.404	76.000	236.627	693.404	-76.000/
1926	916	1	987.054	159.634	76.000	987.054	159.634	-76.000/
1927	917	1	395.049	451.591	76.000	395.049	451.591	-76.000/
1928	918	1	806.274	193.942	76.000	806.274	193.942	-76.000/
1929	919	1	193.270	808.532	76.000	193.270	808.532	-76.000/
1930	920	1	1013.269	157.382	76.000	1013.269	157.382	-76.000/
1931	921	1	960.840	161.886	76.000	960.840	161.886	-76.000/
1932	922	1	694.536	234.477	76.000	694.536	234.477	-76.000/
1933	923	1	487.995	362.173	76.000	487.995	362.173	-76.000/
1934	924	1	175.250	874.069	76.000	175.250	874.069	-76.000/
1935	925	1	1040.035	154.891	76.000	1040.035	154.891	-76.000/
1936	926	1	306.311	562.750	76.000	306.311	562.750	-76.000/
1937	927	1	544.704	318.390	76.000	544.704	318.390	-76.000/
1938	928	1	935.258	163.735	76.000	935.258	163.735	-76.000/
1939	929	1	259.016	640.944	76.000	259.016	640.944	-76.000/
1940	930	1	152.400	1066.800	76.000	152.400	1066.800	-76.000/
1941	931	1	1066.800	152.400	76.000	1066.800	152.400	-76.000/
1942	932	1	909.676	165.584	76.000	909.676	165.584	-76.000/
1943	933	1	152.064	1040.745	76.000	152.064	1040.745	-76.000/
1944	934	1	164.553	909.682	76.000	164.553	909.682	-76.000/
1945	935	1	457.119	382.688	76.000	457.119	382.688	-76.000/
1946	936	1	151.728	1014.691	76.000	151.728	1014.691	-76.000/
1947	937	1	778.760	194.447	76.000	778.760	194.447	-76.000/
1948	938	1	281.634	588.455	76.000	281.634	588.455	-76.000/
1949	939	1	883.568	165.762	76.000	883.568	165.762	-76.000/
1950	940	1	150.000	988.826	76.000	150.000	988.826	-76.000/
1951	941	1	212.979	718.086	76.000	212.979	718.086	-76.000/
1952	942	1	426.243	403.202	76.000	426.243	403.202	-76.000/
1953	943	1	190.331	775.163	76.000	190.331	775.163	-76.000/
1954	944	1	234.745	665.132	76.000	234.745	665.132	-76.000/
1955	945	1	148.273	962.962	76.000	148.273	962.962	-76.000/
1956	946	1	503.209	333.977	76.000	503.209	333.977	-76.000/
1957	947	1	857.461	165.941	76.000	857.461	165.941	-76.000/

1958	948	1	348.252	482.698	76.000	348.252	482.698	-76.000/
1959	949	1	405.969	417.488	76.000	405.969	417.488	-76.000/
1960	950	1	751.246	194.952	76.000	751.246	194.952	-76.000/
1961	951	1	326.305	508.592	76.000	326.305	508.592	-76.000/
1962	952	1	156.837	883.785	76.000	156.837	883.785	-76.000/
1963	953	1	257.217	612.678	76.000	257.217	612.678	-76.000/
1964	954	1	369.077	453.778	76.000	369.077	453.778	-76.000/
1965	955	1	589.977	269.203	76.000	589.977	269.203	-76.000/
1966	956	1	145.256	938.244	76.000	145.256	938.244	-76.000/
1967	957	1	163.634	842.298	76.000	163.634	842.298	-76.000/
1968	958	1	302.761	535.252	76.000	302.761	535.252	-76.000/
1969	959	1	553.570	290.234	76.000	553.570	290.234	-76.000/
1970	960	1	623.432	248.315	76.000	623.432	248.315	-76.000/
1971	961	1	385.694	431.774	76.000	385.694	431.774	-76.000/
1972	962	1	830.682	165.796	76.000	830.682	165.796	-76.000/
1973	963	1	661.942	227.390	76.000	661.942	227.390	-76.000/
1974	964	1	722.007	198.115	76.000	722.007	198.115	-76.000/
1975	965	1	210.826	689.571	76.000	210.826	689.571	-76.000/
1976	966	1	188.162	745.138	76.000	188.162	745.138	-76.000/
1977	967	1	279.325	559.976	76.000	279.325	559.976	-76.000/
1978	968	1	142.240	913.525	76.000	142.240	913.525	-76.000/
1979	969	1	1013.397	130.970	76.000	1013.397	130.970	-76.000/
1980	970	1	986.935	132.618	76.000	986.935	132.618	-76.000/
1981	971	1	518.423	305.780	76.000	518.423	305.780	-76.000/
1982	972	1	232.769	637.227	76.000	232.769	637.227	-76.000/
1983	973	1	1040.099	128.985	76.000	1040.099	128.985	-76.000/
1984	974	1	960.473	134.266	76.000	960.473	134.266	-76.000/
1985	975	1	803.904	165.652	76.000	803.904	165.652	-76.000/
1986	976	1	1066.800	127.000	76.000	1066.800	127.000	-76.000/
1987	977	1	127.000	1066.800	76.000	127.000	1066.800	-76.000/
1988	978	1	126.944	1040.704	76.000	126.944	1040.704	-76.000/
1989	979	1	162.795	807.510	76.000	162.795	807.510	-76.000/
1990	980	1	934.461	135.655	76.000	934.461	135.655	-76.000/
1991	981	1	149.120	857.888	76.000	149.120	857.888	-76.000/
1992	982	1	126.889	1014.609	76.000	126.889	1014.609	-76.000/
1993	983	1	692.767	201.278	76.000	692.767	201.278	-76.000/
1994	984	1	908.450	137.044	76.000	908.450	137.044	-76.000/
1995	985	1	254.778	584.939	76.000	254.778	584.939	-76.000/
1996	986	1	125.685	988.707	76.000	125.685	988.707	-76.000/
1997	987	1	138.423	893.502	76.000	138.423	893.502	-76.000/
1998	988	1	776.079	166.068	76.000	776.079	166.068	-76.000/
1999	989	1	321.979	482.417	76.000	321.979	482.417	-76.000/
2000	990	1	343.105	455.965	76.000	343.105	455.965	-76.000/
2001	991	1	882.158	137.365	76.000	882.158	137.365	-76.000/
2002	992	1	362.268	432.620	76.000	362.268	432.620	-76.000/
2003	993	1	124.480	962.805	76.000	124.480	962.805	-76.000/
2004	994	1	185.993	715.114	76.000	185.993	715.114	-76.000/
2005	995	1	208.674	661.055	76.000	208.674	661.055	-76.000/
2006	996	1	299.212	507.753	76.000	299.212	507.753	-76.000/
2007	997	1	562.437	262.078	76.000	562.437	262.078	-76.000/
2008	998	1	457.973	337.538	76.000	457.973	337.538	-76.000/
2009	999	1	595.606	241.772	76.000	595.606	241.772	-76.000/
2010	1000	1	161.955	772.722	76.000	161.955	772.722	-76.000/
2011	1001	1	376.340	411.957	76.000	376.340	411.957	-76.000/
2012	1002	1	134.606	873.478	76.000	134.606	873.478	-76.000/
2013	1003	1	855.865	137.685	76.000	855.865	137.685	-76.000/
2014	1004	1	629.347	220.303	76.000	629.347	220.303	-76.000/
2015	1005	1	230.793	609.323	76.000	230.793	609.323	-76.000/
2016	1006	1	122.329	937.877	76.000	122.329	937.877	-76.000/
2017	1007	1	527.852	280.089	76.000	527.852	280.089	-76.000/
2018	1008	1	276.119	533.019	76.000	276.119	533.019	-76.000/
2019	1009	1	748.255	166.483	76.000	748.255	166.483	-76.000/
2020	1010	1	428.682	355.427	76.000	428.682	355.427	-76.000/
2021	1011	1	475.057	315.354	76.000	475.057	315.354	-76.000/
2022	1012	1	387.866	392.637	76.000	387.866	392.637	-76.000/
2023	1013	1	120.177	912.948	76.000	120.177	912.948	-76.000/

2024	1014	1	829.013	137.624	76.000	829.013	137.624	-76.000/
2025	1015	1	661.773	196.222	76.000	661.773	196.222	-76.000/
2026	1016	1	252.340	557.201	76.000	252.340	557.201	-76.000/
2027	1017	1	184.129	686.274	76.000	184.129	686.274	-76.000/
2028	1018	1	134.187	830.283	76.000	134.187	830.283	-76.000/
2029	1019	1	399.392	373.316	76.000	399.392	373.316	-76.000/
2030	1020	1	160.482	742.432	76.000	160.482	742.432	-76.000/
2031	1021	1	206.522	633.511	76.000	206.522	633.511	-76.000/
2032	1022	1	492.141	293.170	76.000	492.141	293.170	-76.000/
2033	1023	1	1013.525	104.557	76.000	1013.525	104.557	-76.000/
2034	1024	1	1040.163	103.079	76.000	1040.163	103.079	-76.000/
2035	1025	1	719.627	167.281	76.000	719.627	167.281	-76.000/
2036	1026	1	986.815	105.601	76.000	986.815	105.601	-76.000/
2037	1027	1	338.842	433.465	76.000	338.842	433.465	-76.000/
2038	1028	1	117.989	891.121	76.000	117.989	891.121	-76.000/
2039	1029	1	101.600	1066.800	76.000	101.600	1066.800	-76.000/
2040	1030	1	1066.800	101.600	76.000	1066.800	101.600	-76.000/
2041	1031	1	101.825	1040.663	76.000	101.825	1040.663	-76.000/
2042	1032	1	960.106	106.645	76.000	960.106	106.645	-76.000/
2043	1033	1	102.050	1014.527	76.000	102.050	1014.527	-76.000/
2044	1034	1	802.162	137.562	76.000	802.162	137.562	-76.000/
2045	1035	1	317.653	456.242	76.000	317.653	456.242	-76.000/
2046	1036	1	124.994	849.788	76.000	124.994	849.788	-76.000/
2047	1037	1	355.459	411.461	76.000	355.459	411.461	-76.000/
2048	1038	1	295.707	482.136	76.000	295.707	482.136	-76.000/
2049	1039	1	933.665	107.574	76.000	933.665	107.574	-76.000/
2050	1040	1	228.392	581.831	76.000	228.392	581.831	-76.000/
2051	1041	1	101.369	988.587	76.000	101.369	988.587	-76.000/
2052	1042	1	537.282	254.398	76.000	537.282	254.398	-76.000/
2053	1043	1	567.780	235.228	76.000	567.780	235.228	-76.000/
2054	1044	1	134.127	798.610	76.000	134.127	798.610	-76.000/
2055	1045	1	115.801	869.293	76.000	115.801	869.293	-76.000/
2056	1046	1	601.235	214.341	76.000	601.235	214.341	-76.000/
2057	1047	1	907.224	108.504	76.000	907.224	108.504	-76.000/
2058	1048	1	100.688	962.647	76.000	100.688	962.647	-76.000/
2059	1049	1	272.912	506.061	76.000	272.912	506.061	-76.000/
2060	1050	1	774.357	137.767	76.000	774.357	137.767	-76.000/
2061	1051	1	690.998	168.078	76.000	690.998	168.078	-76.000/
2062	1052	1	159.008	712.141	76.000	159.008	712.141	-76.000/
2063	1053	1	182.265	657.435	76.000	182.265	657.435	-76.000/
2064	1054	1	880.747	108.967	76.000	880.747	108.967	-76.000/
2065	1055	1	99.401	937.509	76.000	99.401	937.509	-76.000/
2066	1056	1	502.134	269.944	76.000	502.134	269.944	-76.000/
2067	1057	1	439.984	317.717	76.000	439.984	317.717	-76.000/
2068	1058	1	361.005	391.088	76.000	361.005	391.088	-76.000/
2069	1059	1	249.476	530.785	76.000	249.476	530.785	-76.000/
2070	1060	1	204.370	605.967	76.000	204.370	605.967	-76.000/
2071	1061	1	630.779	191.166	76.000	630.779	191.166	-76.000/
2072	1062	1	134.068	766.936	76.000	134.068	766.936	-76.000/
2073	1063	1	456.318	299.544	76.000	456.318	299.544	-76.000/
2074	1064	1	854.270	109.430	76.000	854.270	109.430	-76.000/
2075	1065	1	98.114	912.371	76.000	98.114	912.371	-76.000/
2076	1066	1	746.553	137.971	76.000	746.553	137.971	-76.000/
2077	1067	1	334.579	410.965	76.000	334.579	410.965	-76.000/
2078	1068	1	413.962	331.490	76.000	413.962	331.490	-76.000/
2079	1069	1	313.923	433.150	76.000	313.923	433.150	-76.000/
2080	1070	1	225.991	554.339	76.000	225.991	554.339	-76.000/
2081	1071	1	472.651	281.371	76.000	472.651	281.371	-76.000/
2082	1072	1	97.555	888.740	76.000	97.555	888.740	-76.000/
2083	1073	1	292.202	456.519	76.000	292.202	456.519	-76.000/
2084	1074	1	827.345	109.451	76.000	827.345	109.451	-76.000/
2085	1075	1	157.432	682.978	76.000	157.432	682.978	-76.000/
2086	1076	1	366.551	370.714	76.000	366.551	370.714	-76.000/
2087	1077	1	542.601	228.957	76.000	542.601	228.957	-76.000/
2088	1078	1	180.211	629.874	76.000	180.211	629.874	-76.000/
2089	1079	1	661.605	165.054	76.000	661.605	165.054	-76.000/

2090	1080	1	269.678	480.463	76.000	269.678	480.463	-76.000/
2091	1081	1	1013.418	78.514	76.000	1013.418	78.514	-76.000/
2092	1082	1	1040.109	77.357	76.000	1040.109	77.357	-76.000/
2093	1083	1	512.127	246.718	76.000	512.127	246.718	-76.000/
2094	1084	1	133.096	737.489	76.000	133.096	737.489	-76.000/
2095	1085	1	573.124	208.378	76.000	573.124	208.378	-76.000/
2096	1086	1	96.996	865.108	76.000	96.996	865.108	-76.000/
2097	1087	1	1066.800	76.200	76.000	1066.800	76.200	-76.000/
2098	1088	1	76.200	1066.800	76.000	76.200	1066.800	-76.000/
2099	1089	1	76.502	1040.500	76.000	76.502	1040.500	-76.000/
2100	1090	1	387.940	345.262	76.000	387.940	345.262	-76.000/
2101	1091	1	986.678	79.283	76.000	986.678	79.283	-76.000/
2102	1092	1	76.803	1014.199	76.000	76.803	1014.199	-76.000/
2103	1093	1	718.274	138.336	76.000	718.274	138.336	-76.000/
2104	1094	1	100.868	841.688	76.000	100.868	841.688	-76.000/
2105	1095	1	959.938	80.051	76.000	959.938	80.051	-76.000/
2106	1096	1	202.006	578.722	76.000	202.006	578.722	-76.000/
2107	1097	1	76.425	988.011	76.000	76.425	988.011	-76.000/
2108	1098	1	104.739	818.268	76.000	104.739	818.268	-76.000/
2109	1099	1	800.420	109.472	76.000	800.420	109.472	-76.000/
2110	1100	1	246.613	504.370	76.000	246.613	504.370	-76.000/
2111	1101	1	933.271	80.749	76.000	933.271	80.749	-76.000/
2112	1102	1	603.024	186.399	76.000	603.024	186.399	-76.000/
2113	1103	1	481.649	260.730	76.000	481.649	260.730	-76.000/
2114	1104	1	76.046	961.823	76.000	76.046	961.823	-76.000/
2115	1105	1	334.144	389.539	76.000	334.144	389.539	-76.000/
2116	1106	1	906.605	81.447	76.000	906.605	81.447	-76.000/
2117	1107	1	155.856	653.814	76.000	155.856	653.814	-76.000/
2118	1108	1	75.153	936.218	76.000	75.153	936.218	-76.000/
2119	1109	1	105.460	789.709	76.000	105.460	789.709	-76.000/
2120	1110	1	223.203	528.091	76.000	223.203	528.091	-76.000/
2121	1111	1	132.125	708.042	76.000	132.125	708.042	-76.000/
2122	1112	1	772.635	109.466	76.000	772.635	109.466	-76.000/
2123	1113	1	689.995	138.701	76.000	689.995	138.701	-76.000/
2124	1114	1	310.193	410.057	76.000	310.193	410.057	-76.000/
2125	1115	1	879.840	81.699	76.000	879.840	81.699	-76.000/
2126	1116	1	178.158	602.314	76.000	178.158	602.314	-76.000/
2127	1117	1	289.005	432.834	76.000	289.005	432.834	-76.000/
2128	1118	1	421.995	297.896	76.000	421.995	297.896	-76.000/
2129	1119	1	632.211	162.029	76.000	632.211	162.029	-76.000/
2130	1120	1	437.578	283.734	76.000	437.578	283.734	-76.000/
2131	1121	1	74.260	910.612	76.000	74.260	910.612	-76.000/
2132	1122	1	453.161	269.572	76.000	453.161	269.572	-76.000/
2133	1123	1	517.421	222.687	76.000	517.421	222.687	-76.000/
2134	1124	1	547.919	203.517	76.000	547.919	203.517	-76.000/
2135	1125	1	266.443	454.864	76.000	266.443	454.864	-76.000/
2136	1126	1	490.647	240.089	76.000	490.647	240.089	-76.000/
2137	1127	1	853.076	81.952	76.000	853.076	81.952	-76.000/
2138	1128	1	106.180	761.150	76.000	106.180	761.150	-76.000/
2139	1129	1	199.642	551.477	76.000	199.642	551.477	-76.000/
2140	1130	1	74.004	885.923	76.000	74.004	885.923	-76.000/
2141	1131	1	744.851	109.459	76.000	744.851	109.459	-76.000/
2142	1132	1	358.793	345.640	76.000	358.793	345.640	-76.000/
2143	1133	1	399.242	307.552	76.000	399.242	307.552	-76.000/
2144	1134	1	243.648	478.789	76.000	243.648	478.789	-76.000/
2145	1135	1	575.270	181.632	76.000	575.270	181.632	-76.000/
2146	1136	1	333.710	368.112	76.000	333.710	368.112	-76.000/
2147	1137	1	130.841	679.369	76.000	130.841	679.369	-76.000/
2148	1138	1	153.901	626.237	76.000	153.901	626.237	-76.000/
2149	1139	1	826.096	81.946	76.000	826.096	81.946	-76.000/
2150	1140	1	73.747	861.234	76.000	73.747	861.234	-76.000/
2151	1141	1	661.240	136.448	76.000	661.240	136.448	-76.000/
2152	1142	1	1040.055	51.635	76.000	1040.055	51.635	-76.000/
2153	1143	1	461.164	251.516	76.000	461.164	251.516	-76.000/
2154	1144	1	1013.310	52.471	76.000	1013.310	52.471	-76.000/
2155	1145	1	51.178	1040.336	76.000	51.178	1040.336	-76.000/

2156	1146	1	50.800	1066.800	76.000	50.800	1066.800	-76.000/
2157	1147	1	1066.800	50.800	76.000	1066.800	50.800	-76.000/
2158	1148	1	51.556	1013.872	76.000	51.556	1013.872	-76.000/
2159	1149	1	309.106	388.664	76.000	309.106	388.664	-76.000/
2160	1150	1	986.540	52.964	76.000	986.540	52.964	-76.000/
2161	1151	1	76.062	836.609	76.000	76.062	836.609	-76.000/
2162	1152	1	175.998	575.615	76.000	175.998	575.615	-76.000/
2163	1153	1	105.711	732.546	76.000	105.711	732.546	-76.000/
2164	1154	1	220.415	501.843	76.000	220.415	501.843	-76.000/
2165	1155	1	51.480	987.435	76.000	51.480	987.435	-76.000/
2166	1156	1	959.770	53.457	76.000	959.770	53.457	-76.000/
2167	1157	1	376.488	317.207	76.000	376.488	317.207	-76.000/
2168	1158	1	604.814	158.458	76.000	604.814	158.458	-76.000/
2169	1159	1	716.921	109.391	76.000	716.921	109.391	-76.000/
2170	1160	1	441.250	261.667	76.000	441.250	261.667	-76.000/
2171	1161	1	799.116	81.940	76.000	799.116	81.940	-76.000/
2172	1162	1	78.377	811.984	76.000	78.377	811.984	-76.000/
2173	1163	1	51.403	960.999	76.000	51.403	960.999	-76.000/
2174	1164	1	285.807	409.149	76.000	285.807	409.149	-76.000/
2175	1165	1	426.444	271.505	76.000	426.444	271.505	-76.000/
2176	1166	1	932.878	53.924	76.000	932.878	53.924	-76.000/
2177	1167	1	411.638	281.344	76.000	411.638	281.344	-76.000/
2178	1168	1	495.452	217.365	76.000	495.452	217.365	-76.000/
2179	1169	1	263.709	430.944	76.000	263.709	430.944	-76.000/
2180	1170	1	50.905	934.926	76.000	50.905	934.926	-76.000/
2181	1171	1	522.715	198.655	76.000	522.715	198.655	-76.000/
2182	1172	1	196.929	525.397	76.000	196.929	525.397	-76.000/
2183	1173	1	905.985	54.390	76.000	905.985	54.390	-76.000/
2184	1174	1	129.557	650.695	76.000	129.557	650.695	-76.000/
2185	1175	1	469.167	233.460	76.000	469.167	233.460	-76.000/
2186	1176	1	78.932	783.993	76.000	78.932	783.993	-76.000/
2187	1177	1	151.946	598.660	76.000	151.946	598.660	-76.000/
2188	1178	1	105.242	703.943	76.000	105.242	703.943	-76.000/
2189	1179	1	771.608	81.931	76.000	771.608	81.931	-76.000/
2190	1180	1	550.266	177.704	76.000	550.266	177.704	-76.000/
2191	1181	1	50.406	908.853	76.000	50.406	908.853	-76.000/
2192	1182	1	632.485	134.195	76.000	632.485	134.195	-76.000/
2193	1183	1	240.684	453.209	76.000	240.684	453.209	-76.000/
2194	1184	1	688.992	109.323	76.000	688.992	109.323	-76.000/
2195	1185	1	446.001	245.553	76.000	446.001	245.553	-76.000/
2196	1186	1	878.934	54.432	76.000	878.934	54.432	-76.000/
2197	1187	1	329.647	346.018	76.000	329.647	346.018	-76.000/
2198	1188	1	389.846	288.672	76.000	389.846	288.672	-76.000/
2199	1189	1	308.020	367.272	76.000	308.020	367.272	-76.000/
2200	1190	1	173.839	548.916	76.000	173.839	548.916	-76.000/
2201	1191	1	50.452	883.106	76.000	50.452	883.106	-76.000/
2202	1192	1	429.340	253.762	76.000	429.340	253.762	-76.000/
2203	1193	1	351.036	320.565	76.000	351.036	320.565	-76.000/
2204	1194	1	217.742	476.500	76.000	217.742	476.500	-76.000/
2205	1195	1	851.882	54.474	76.000	851.882	54.474	-76.000/
2206	1196	1	577.416	154.886	76.000	577.416	154.886	-76.000/
2207	1197	1	79.488	756.003	76.000	79.488	756.003	-76.000/
2208	1198	1	284.069	387.790	76.000	284.069	387.790	-76.000/
2209	1199	1	744.100	81.923	76.000	744.100	81.923	-76.000/
2210	1200	1	415.310	259.277	76.000	415.310	259.277	-76.000/
2211	1201	1	50.498	857.360	76.000	50.498	857.360	-76.000/
2212	1202	1	127.896	623.219	76.000	127.896	623.219	-76.000/
2213	1203	1	104.251	675.760	76.000	104.251	675.760	-76.000/
2214	1204	1	450.752	229.439	76.000	450.752	229.439	-76.000/
2215	1205	1	500.258	194.641	76.000	500.258	194.641	-76.000/
2216	1206	1	368.053	295.999	76.000	368.053	295.999	-76.000/
2217	1207	1	473.483	212.043	76.000	473.483	212.043	-76.000/
2218	1208	1	824.848	54.440	76.000	824.848	54.440	-76.000/
2219	1209	1	194.217	499.317	76.000	194.217	499.317	-76.000/
2220	1210	1	1039.955	25.818	76.000	1039.955	25.818	-76.000/
2221	1211	1	660.875	107.842	76.000	660.875	107.842	-76.000/

2222	1212	1	25.400	1066.800	76.000	25.400	1066.800	-76.000/
2223	1213	1	1066.800	25.400	76.000	1066.800	25.400	-76.000/
2224	1214	1	260.975	407.025	76.000	260.975	407.025	-76.000/
2225	1215	1	25.589	1040.096	76.000	25.589	1040.096	-76.000/
2226	1216	1	149.991	572.507	76.000	149.991	572.507	-76.000/
2227	1217	1	1013.111	26.235	76.000	1013.111	26.235	-76.000/
2228	1218	1	401.281	264.792	76.000	401.281	264.792	-76.000/
2229	1219	1	25.778	1013.392	76.000	25.778	1013.392	-76.000/
2230	1220	1	51.257	831.530	76.000	51.257	831.530	-76.000/
2231	1221	1	605.385	131.437	76.000	605.385	131.437	-76.000/
2232	1222	1	430.839	239.590	76.000	430.839	239.590	-76.000/
2233	1223	1	986.254	26.482	76.000	986.254	26.482	-76.000/
2234	1224	1	25.740	986.701	76.000	25.740	986.701	-76.000/
2235	1225	1	79.145	727.994	76.000	79.145	727.994	-76.000/
2236	1226	1	525.263	173.775	76.000	525.263	173.775	-76.000/
2237	1227	1	238.413	429.055	76.000	238.413	429.055	-76.000/
2238	1228	1	716.380	81.811	76.000	716.380	81.811	-76.000/
2239	1229	1	959.397	26.729	76.000	959.397	26.729	-76.000/
2240	1230	1	25.702	960.011	76.000	25.702	960.011	-76.000/
2241	1231	1	171.529	523.323	76.000	171.529	523.323	-76.000/
2242	1232	1	797.813	54.407	76.000	797.813	54.407	-76.000/
2243	1233	1	52.015	805.699	76.000	52.015	805.699	-76.000/
2244	1234	1	305.441	346.640	76.000	305.441	346.640	-76.000/
2245	1235	1	932.478	26.962	76.000	932.478	26.962	-76.000/
2246	1236	1	325.583	323.923	76.000	325.583	323.923	-76.000/
2247	1237	1	552.613	151.891	76.000	552.613	151.891	-76.000/
2248	1238	1	25.452	933.502	76.000	25.452	933.502	-76.000/
2249	1239	1	414.514	243.025	76.000	414.514	243.025	-76.000/
2250	1240	1	103.259	647.577	76.000	103.259	647.577	-76.000/
2251	1241	1	215.069	451.156	76.000	215.069	451.156	-76.000/
2252	1242	1	282.330	366.431	76.000	282.330	366.431	-76.000/
2253	1243	1	380.449	269.791	76.000	380.449	269.791	-76.000/
2254	1244	1	126.235	595.742	76.000	126.235	595.742	-76.000/
2255	1245	1	905.560	27.195	76.000	905.560	27.195	-76.000/
2256	1246	1	25.203	906.994	76.000	25.203	906.994	-76.000/
2257	1247	1	432.338	225.419	76.000	432.338	225.419	-76.000/
2258	1248	1	78.803	699.984	76.000	78.803	699.984	-76.000/
2259	1249	1	632.759	106.360	76.000	632.759	106.360	-76.000/
2260	1250	1	343.706	299.535	76.000	343.706	299.535	-76.000/
2261	1251	1	453.764	208.959	76.000	453.764	208.959	-76.000/
2262	1252	1	52.405	778.278	76.000	52.405	778.278	-76.000/
2263	1253	1	770.582	54.397	76.000	770.582	54.397	-76.000/
2264	1254	1	688.660	81.698	76.000	688.660	81.698	-76.000/
2265	1255	1	477.800	190.627	76.000	477.800	190.627	-76.000/
2266	1256	1	260.480	385.268	76.000	260.480	385.268	-76.000/
2267	1257	1	148.036	546.355	76.000	148.036	546.355	-76.000/
2268	1258	1	878.562	27.216	76.000	878.562	27.216	-76.000/
2269	1259	1	191.835	474.210	76.000	191.835	474.210	-76.000/
2270	1260	1	578.285	128.680	76.000	578.285	128.680	-76.000/
2271	1261	1	25.226	880.648	76.000	25.226	880.648	-76.000/
2272	1262	1	398.189	246.459	76.000	398.189	246.459	-76.000/
2273	1263	1	502.451	170.450	76.000	502.451	170.450	-76.000/
2274	1264	1	851.564	27.237	76.000	851.564	27.237	-76.000/
2275	1265	1	359.618	274.791	76.000	359.618	274.791	-76.000/
2276	1266	1	52.796	750.856	76.000	52.796	750.856	-76.000/
2277	1267	1	236.143	404.901	76.000	236.143	404.901	-76.000/
2278	1268	1	169.219	497.730	76.000	169.219	497.730	-76.000/
2279	1269	1	743.350	54.387	76.000	743.350	54.387	-76.000/
2280	1270	1	25.249	854.303	76.000	25.249	854.303	-76.000/
2281	1271	1	101.891	620.201	76.000	101.891	620.201	-76.000/
2282	1272	1	413.717	226.773	76.000	413.717	226.773	-76.000/
2283	1273	1	302.861	326.009	76.000	302.861	326.009	-76.000/
2284	1274	1	527.811	148.895	76.000	527.811	148.895	-76.000/
2285	1275	1	78.072	672.115	76.000	78.072	672.115	-76.000/
2286	1276	1	281.235	347.263	76.000	281.235	347.263	-76.000/
2287	1277	1	124.525	569.723	76.000	124.525	569.723	-76.000/

2288	1278	1	660.922	80.630	76.000	660.922	80.630	-76.000/
2289	1279	1	1066.800	0.000	76.000	1066.800	0.000	-76.000/
2290	1280	1	0.000	1066.800	76.000	0.000	1066.800	-76.000/
2291	1281	1	605.956	104.417	76.000	605.956	104.417	-76.000/
2292	1282	1	0.000	1039.856	76.000	0.000	1039.856	-76.000/
2293	1283	1	1039.856	0.000	76.000	1039.856	0.000	-76.000/
2294	1284	1	213.119	426.316	76.000	213.119	426.316	-76.000/
2295	1285	1	824.575	27.220	76.000	824.575	27.220	-76.000/
2296	1286	1	0.000	1012.911	76.000	0.000	1012.911	-76.000/
2297	1287	1	1012.911	0.000	76.000	1012.911	0.000	-76.000/
2298	1288	1	25.628	827.916	76.000	25.628	827.916	-76.000/
2299	1289	1	434.044	205.874	76.000	434.044	205.874	-76.000/
2300	1290	1	319.358	303.072	76.000	319.358	303.072	-76.000/
2301	1291	1	377.166	250.054	76.000	377.166	250.054	-76.000/
2302	1292	1	456.775	188.478	76.000	456.775	188.478	-76.000/
2303	1293	1	0.000	985.967	76.000	0.000	985.967	-76.000/
2304	1294	1	985.967	0.000	76.000	985.967	0.000	-76.000/
2305	1295	1	146.128	521.249	76.000	146.128	521.249	-76.000/
2306	1296	1	259.985	363.511	76.000	259.985	363.511	-76.000/
2307	1297	1	52.579	723.441	76.000	52.579	723.441	-76.000/
2308	1298	1	553.452	126.294	76.000	553.452	126.294	-76.000/
2309	1299	1	715.840	54.230	76.000	715.840	54.230	-76.000/
2310	1300	1	0.000	959.023	76.000	0.000	959.023	-76.000/
2311	1301	1	959.023	0.000	76.000	959.023	0.000	-76.000/
2312	1302	1	189.454	449.103	76.000	189.454	449.103	-76.000/
2313	1303	1	797.585	27.203	76.000	797.585	27.203	-76.000/
2314	1304	1	26.008	801.528	76.000	26.008	801.528	-76.000/
2315	1305	1	479.638	167.126	76.000	479.638	167.126	-76.000/
2316	1306	1	395.096	228.127	76.000	395.096	228.127	-76.000/
2317	1307	1	336.376	278.506	76.000	336.376	278.506	-76.000/
2318	1308	1	0.000	932.079	76.000	0.000	932.079	-76.000/
2319	1309	1	932.079	0.000	76.000	932.079	0.000	-76.000/
2320	1310	1	236.891	382.746	76.000	236.891	382.746	-76.000/
2321	1311	1	77.342	644.245	76.000	77.342	644.245	-76.000/
2322	1312	1	100.523	592.825	76.000	100.523	592.825	-76.000/
2323	1313	1	166.944	472.853	76.000	166.944	472.853	-76.000/
2324	1314	1	633.184	79.562	76.000	633.184	79.562	-76.000/
2325	1315	1	504.644	146.260	76.000	504.644	146.260	-76.000/
2326	1316	1	0.000	905.134	76.000	0.000	905.134	-76.000/
2327	1317	1	905.134	0.000	76.000	905.134	0.000	-76.000/
2328	1318	1	280.139	328.095	76.000	280.139	328.095	-76.000/
2329	1319	1	122.815	543.704	76.000	122.815	543.704	-76.000/
2330	1320	1	414.273	206.522	76.000	414.273	206.522	-76.000/
2331	1321	1	356.143	253.650	76.000	356.143	253.650	-76.000/
2332	1322	1	52.363	696.026	76.000	52.363	696.026	-76.000/
2333	1323	1	261.874	346.602	76.000	261.874	346.602	-76.000/
2334	1324	1	579.154	102.474	76.000	579.154	102.474	-76.000/
2335	1325	1	26.203	774.345	76.000	26.203	774.345	-76.000/
2336	1326	1	770.497	27.198	76.000	770.497	27.198	-76.000/
2337	1327	1	688.329	54.073	76.000	688.329	54.073	-76.000/
2338	1328	1	296.664	306.213	76.000	296.664	306.213	-76.000/
2339	1329	1	435.749	186.329	76.000	435.749	186.329	-76.000/
2340	1330	1	878.190	0.000	76.000	878.190	0.000	-76.000/
2341	1331	1	0.000	878.190	76.000	0.000	878.190	-76.000/
2342	1332	1	211.170	401.476	76.000	211.170	401.476	-76.000/
2343	1333	1	144.221	496.143	76.000	144.221	496.143	-76.000/
2344	1334	1	528.619	123.907	76.000	528.619	123.907	-76.000/
2345	1335	1	373.882	230.318	76.000	373.882	230.318	-76.000/
2346	1336	1	458.140	165.444	76.000	458.140	165.444	-76.000/
2347	1337	1	76.309	617.288	76.000	76.309	617.288	-76.000/
2348	1338	1	313.134	282.220	76.000	313.134	282.220	-76.000/
2349	1339	1	0.000	851.246	76.000	0.000	851.246	-76.000/
2350	1340	1	851.246	0.000	76.000	851.246	0.000	-76.000/
2351	1341	1	26.398	747.163	76.000	26.398	747.163	-76.000/
2352	1342	1	743.410	27.193	76.000	743.410	27.193	-76.000/
2353	1343	1	237.640	360.591	76.000	237.640	360.591	-76.000/

2354	1344	1	187.825	423.577	76.000	187.825	423.577	-76.000/
2355	1345	1	99.058	566.939	76.000	99.058	566.939	-76.000/
2356	1346	1	263.763	329.693	76.000	263.763	329.693	-76.000/
2357	1347	1	51.894	668.470	76.000	51.894	668.470	-76.000/
2358	1348	1	606.691	78.183	76.000	606.691	78.183	-76.000/
2359	1349	1	394.503	207.170	76.000	394.503	207.170	-76.000/
2360	1350	1	660.969	53.418	76.000	660.969	53.418	-76.000/
2361	1351	1	332.782	257.074	76.000	332.782	257.074	-76.000/
2362	1352	1	121.148	518.901	76.000	121.148	518.901	-76.000/
2363	1353	1	481.477	143.624	76.000	481.477	143.624	-76.000/
2364	1354	1	554.291	100.696	76.000	554.291	100.696	-76.000/
2365	1355	1	164.670	447.976	76.000	164.670	447.976	-76.000/
2366	1356	1	824.302	0.000	76.000	824.302	0.000	-76.000/
2367	1357	1	0.000	824.302	76.000	0.000	824.302	-76.000/
2368	1358	1	242.513	345.941	76.000	242.513	345.941	-76.000/
2369	1359	1	414.830	186.271	76.000	414.830	186.271	-76.000/
2370	1360	1	273.969	309.353	76.000	273.969	309.353	-76.000/
2371	1361	1	26.290	719.983	76.000	26.290	719.983	-76.000/
2372	1362	1	716.182	27.115	76.000	716.182	27.115	-76.000/
2373	1363	1	352.669	232.508	76.000	352.669	232.508	-76.000/
2374	1364	1	505.348	121.846	76.000	505.348	121.846	-76.000/
2375	1365	1	212.068	375.700	76.000	212.068	375.700	-76.000/
2376	1366	1	142.053	471.496	76.000	142.053	471.496	-76.000/
2377	1367	1	75.275	590.331	76.000	75.275	590.331	-76.000/
2378	1368	1	797.357	0.000	76.000	797.357	0.000	-76.000/
2379	1369	1	0.000	797.357	76.000	0.000	797.357	-76.000/
2380	1370	1	290.467	286.416	76.000	290.467	286.416	-76.000/
2381	1371	1	51.426	640.914	76.000	51.426	640.914	-76.000/
2382	1372	1	247.387	331.291	76.000	247.387	331.291	-76.000/
2383	1373	1	436.642	163.762	76.000	436.642	163.762	-76.000/
2384	1374	1	97.593	541.054	76.000	97.593	541.054	-76.000/
2385	1375	1	633.609	52.764	76.000	633.609	52.764	-76.000/
2386	1376	1	580.197	76.804	76.000	580.197	76.804	-76.000/
2387	1377	1	372.982	208.797	76.000	372.982	208.797	-76.000/
2388	1378	1	186.197	398.051	76.000	186.197	398.051	-76.000/
2389	1379	1	26.181	692.803	76.000	26.181	692.803	-76.000/
2390	1380	1	459.506	142.410	76.000	459.506	142.410	-76.000/
2391	1381	1	309.420	260.498	76.000	309.420	260.498	-76.000/
2392	1382	1	688.955	27.037	76.000	688.955	27.037	-76.000/
2393	1383	1	255.781	313.722	76.000	255.781	313.722	-76.000/
2394	1384	1	119.482	494.097	76.000	119.482	494.097	-76.000/
2395	1385	1	529.428	98.919	76.000	529.428	98.919	-76.000/
2396	1386	1	770.413	0.000	76.000	770.413	0.000	-76.000/
2397	1387	1	0.000	770.413	76.000	0.000	770.413	-76.000/
2398	1388	1	393.910	186.213	76.000	393.910	186.213	-76.000/
2399	1389	1	162.820	423.153	76.000	162.820	423.153	-76.000/
2400	1390	1	329.188	235.642	76.000	329.188	235.642	-76.000/
2401	1391	1	50.726	614.375	76.000	50.726	614.375	-76.000/
2402	1392	1	74.076	564.380	76.000	74.076	564.380	-76.000/
2403	1393	1	482.076	119.785	76.000	482.076	119.785	-76.000/
2404	1394	1	415.487	163.654	76.000	415.487	163.654	-76.000/
2405	1395	1	267.799	290.612	76.000	267.799	290.612	-76.000/
2406	1396	1	607.425	51.949	76.000	607.425	51.949	-76.000/
2407	1397	1	0.000	743.469	76.000	0.000	743.469	-76.000/
2408	1398	1	743.469	0.000	76.000	743.469	0.000	-76.000/
2409	1399	1	212.967	349.923	76.000	212.967	349.923	-76.000/
2410	1400	1	139.886	446.849	76.000	139.886	446.849	-76.000/
2411	1401	1	25.947	665.553	76.000	25.947	665.553	-76.000/
2412	1402	1	555.055	75.456	76.000	555.055	75.456	-76.000/
2413	1403	1	96.169	516.552	76.000	96.169	516.552	-76.000/
2414	1404	1	351.461	210.423	76.000	351.461	210.423	-76.000/
2415	1405	1	225.280	334.007	76.000	225.280	334.007	-76.000/
2416	1406	1	661.802	26.709	76.000	661.802	26.709	-76.000/
2417	1407	1	237.592	318.090	76.000	237.592	318.090	-76.000/
2418	1408	1	437.535	141.196	76.000	437.535	141.196	-76.000/
2419	1409	1	286.502	264.319	76.000	286.502	264.319	-76.000/



2420	1410	1	506.052	97.433	76.000	506.052	97.433	-76.000/
2421	1411	1	372.082	187.276	76.000	372.082	187.276	-76.000/
2422	1412	1	117.703	469.982	76.000	117.703	469.982	-76.000/
2423	1413	1	0.000	716.525	76.000	0.000	716.525	-76.000/
2424	1414	1	716.525	0.000	76.000	716.525	0.000	-76.000/
2425	1415	1	187.245	368.653	76.000	187.245	368.653	-76.000/
2426	1416	1	247.799	297.751	76.000	247.799	297.751	-76.000/
2427	1417	1	50.027	587.837	76.000	50.027	587.837	-76.000/
2428	1418	1	305.707	238.776	76.000	305.707	238.776	-76.000/
2429	1419	1	72.877	538.429	76.000	72.877	538.429	-76.000/
2430	1420	1	459.963	118.679	76.000	459.963	118.679	-76.000/
2431	1421	1	581.241	51.134	76.000	581.241	51.134	-76.000/
2432	1422	1	160.970	398.330	76.000	160.970	398.330	-76.000/
2433	1423	1	25.713	638.303	76.000	25.713	638.303	-76.000/
2434	1424	1	394.331	163.546	76.000	394.331	163.546	-76.000/
2435	1425	1	634.650	26.382	76.000	634.650	26.382	-76.000/
2436	1426	1	529.913	74.108	76.000	529.913	74.108	-76.000/
2437	1427	1	328.345	212.632	76.000	328.345	212.632	-76.000/
2438	1428	1	94.744	492.051	76.000	94.744	492.051	-76.000/
2439	1429	1	137.814	422.729	76.000	137.814	422.729	-76.000/
2440	1430	1	0.000	689.580	76.000	0.000	689.580	-76.000/
2441	1431	1	689.580	0.000	76.000	689.580	0.000	-76.000/
2442	1432	1	416.144	141.037	76.000	416.144	141.037	-76.000/
2443	1433	1	263.584	268.140	76.000	263.584	268.140	-76.000/
2444	1434	1	482.675	95.946	76.000	482.675	95.946	-76.000/
2445	1435	1	227.798	304.889	76.000	227.798	304.889	-76.000/
2446	1436	1	350.254	188.339	76.000	350.254	188.339	-76.000/
2447	1437	1	115.924	445.867	76.000	115.924	445.867	-76.000/
2448	1438	1	49.093	561.820	76.000	49.093	561.820	-76.000/
2449	1439	1	25.363	611.561	76.000	25.363	611.561	-76.000/
2450	1440	1	208.046	322.073	76.000	208.046	322.073	-76.000/
2451	1441	1	608.086	25.974	76.000	608.086	25.974	-76.000/
2452	1442	1	555.819	50.216	76.000	555.819	50.216	-76.000/
2453	1443	1	282.538	242.222	76.000	282.538	242.222	-76.000/
2454	1444	1	71.751	514.073	76.000	71.751	514.073	-76.000/
2455	1445	1	437.850	117.573	76.000	437.850	117.573	-76.000/
2456	1446	1	372.507	164.258	76.000	372.507	164.258	-76.000/
2457	1447	1	188.293	339.256	76.000	188.293	339.256	-76.000/
2458	1448	1	0.000	662.636	76.000	0.000	662.636	-76.000/
2459	1449	1	662.636	0.000	76.000	662.636	0.000	-76.000/
2460	1450	1	506.274	72.943	76.000	506.274	72.943	-76.000/
2461	1451	1	160.573	371.250	76.000	160.573	371.250	-76.000/
2462	1452	1	93.353	468.468	76.000	93.353	468.468	-76.000/
2463	1453	1	305.228	214.841	76.000	305.228	214.841	-76.000/
2464	1454	1	241.569	274.771	76.000	241.569	274.771	-76.000/
2465	1455	1	394.752	140.879	76.000	394.752	140.879	-76.000/
2466	1456	1	460.419	94.948	76.000	460.419	94.948	-76.000/
2467	1457	1	135.742	398.609	76.000	135.742	398.609	-76.000/
2468	1458	1	327.502	189.622	76.000	327.502	189.622	-76.000/
2469	1459	1	25.014	584.820	76.000	25.014	584.820	-76.000/
2470	1460	1	48.160	535.804	76.000	48.160	535.804	-76.000/
2471	1461	1	581.522	25.567	76.000	581.522	25.567	-76.000/
2472	1462	1	114.280	422.229	76.000	114.280	422.229	-76.000/
2473	1463	1	530.398	49.298	76.000	530.398	49.298	-76.000/
2474	1464	1	635.692	0.000	76.000	635.692	0.000	-76.000/
2475	1465	1	0.000	635.692	76.000	0.000	635.692	-76.000/
2476	1466	1	416.413	117.355	76.000	416.413	117.355	-76.000/
2477	1467	1	70.625	489.717	76.000	70.625	489.717	-76.000/
2478	1468	1	350.683	164.969	76.000	350.683	164.969	-76.000/
2479	1469	1	259.369	245.668	76.000	259.369	245.668	-76.000/
2480	1470	1	482.635	71.778	76.000	482.635	71.778	-76.000/
2481	1471	1	219.553	281.402	76.000	219.553	281.402	-76.000/
2482	1472	1	91.962	444.885	76.000	91.962	444.885	-76.000/
2483	1473	1	372.932	141.240	76.000	372.932	141.240	-76.000/
2484	1474	1	281.396	217.394	76.000	281.396	217.394	-76.000/
2485	1475	1	438.164	93.950	76.000	438.164	93.950	-76.000/

2486	1476	1	160.177	344.170	76.000	160.177	344.170	-76.000/
2487	1477	1	24.547	558.897	76.000	24.547	558.897	-76.000/
2488	1478	1	555.896	25.108	76.000	555.896	25.108	-76.000/
2489	1479	1	47.332	511.594	76.000	47.332	511.594	-76.000/
2490	1480	1	0.000	608.748	76.000	0.000	608.748	-76.000/
2491	1481	1	608.748	0.000	76.000	608.748	0.000	-76.000/
2492	1482	1	304.749	190.906	76.000	304.749	190.906	-76.000/
2493	1483	1	197.858	296.235	76.000	197.858	296.235	-76.000/
2494	1484	1	133.901	373.847	76.000	133.901	373.847	-76.000/
2495	1485	1	506.497	48.454	76.000	506.497	48.454	-76.000/
2496	1486	1	394.976	117.137	76.000	394.976	117.137	-76.000/
2497	1487	1	69.665	466.413	76.000	69.665	466.413	-76.000/
2498	1488	1	235.338	251.791	76.000	235.338	251.791	-76.000/
2499	1489	1	112.636	398.591	76.000	112.636	398.591	-76.000/
2500	1490	1	328.348	165.782	76.000	328.348	165.782	-76.000/
2501	1491	1	460.179	70.998	76.000	460.179	70.998	-76.000/
2502	1492	1	176.163	311.068	76.000	176.163	311.068	-76.000/
2503	1493	1	351.112	141.600	76.000	351.112	141.600	-76.000/
2504	1494	1	90.746	421.729	76.000	90.746	421.729	-76.000/
2505	1495	1	416.682	93.672	76.000	416.682	93.672	-76.000/
2506	1496	1	257.565	219.948	76.000	257.565	219.948	-76.000/
2507	1497	1	24.080	532.974	76.000	24.080	532.974	-76.000/
2508	1498	1	581.803	0.000	76.000	581.803	0.000	-76.000/
2509	1499	1	0.000	581.803	76.000	0.000	581.803	-76.000/
2510	1500	1	530.271	24.649	76.000	530.271	24.649	-76.000/
2511	1501	1	46.505	487.384	76.000	46.505	487.384	-76.000/
2512	1502	1	482.596	47.611	76.000	482.596	47.611	-76.000/
2513	1503	1	373.361	117.399	76.000	373.361	117.399	-76.000/
2514	1504	1	280.255	192.567	76.000	280.255	192.567	-76.000/
2515	1505	1	68.706	443.109	76.000	68.706	443.109	-76.000/
2516	1506	1	211.307	257.914	76.000	211.307	257.914	-76.000/
2517	1507	1	132.060	349.084	76.000	132.060	349.084	-76.000/
2518	1508	1	437.722	70.218	76.000	437.722	70.218	-76.000/
2519	1509	1	306.013	166.594	76.000	306.013	166.594	-76.000/
2520	1510	1	110.839	375.135	76.000	110.839	375.135	-76.000/
2521	1511	1	151.449	318.310	76.000	151.449	318.310	-76.000/
2522	1512	1	395.200	93.394	76.000	395.200	93.394	-76.000/
2523	1513	1	555.974	0.000	76.000	555.974	0.000	-76.000/
2524	1514	1	0.000	555.974	76.000	0.000	555.974	-76.000/
2525	1515	1	329.195	141.941	76.000	329.195	141.941	-76.000/
2526	1516	1	23.666	508.618	76.000	23.666	508.618	-76.000/
2527	1517	1	506.070	24.227	76.000	506.070	24.227	-76.000/
2528	1518	1	89.530	398.573	76.000	89.530	398.573	-76.000/
2529	1519	1	45.978	464.359	76.000	45.978	464.359	-76.000/
2530	1520	1	187.670	270.397	76.000	187.670	270.397	-76.000/
2531	1521	1	459.938	47.048	76.000	459.938	47.048	-76.000/
2532	1522	1	231.177	223.735	76.000	231.177	223.735	-76.000/
2533	1523	1	351.746	117.661	76.000	351.746	117.661	-76.000/
2534	1524	1	67.833	420.329	76.000	67.833	420.329	-76.000/
2535	1525	1	416.162	69.989	76.000	416.162	69.989	-76.000/
2536	1526	1	255.760	194.227	76.000	255.760	194.227	-76.000/
2537	1527	1	282.497	167.346	76.000	282.497	167.346	-76.000/
2538	1528	1	0.000	530.144	76.000	0.000	530.144	-76.000/
2539	1529	1	530.144	0.000	76.000	530.144	0.000	-76.000/
2540	1530	1	373.789	93.558	76.000	373.789	93.558	-76.000/
2541	1531	1	23.253	484.263	76.000	23.253	484.263	-76.000/
2542	1532	1	109.042	351.679	76.000	109.042	351.679	-76.000/
2543	1533	1	164.033	282.880	76.000	164.033	282.880	-76.000/
2544	1534	1	481.869	23.805	76.000	481.869	23.805	-76.000/
2545	1535	1	307.277	142.282	76.000	307.277	142.282	-76.000/
2546	1536	1	126.734	325.553	76.000	126.734	325.553	-76.000/
2547	1537	1	45.450	441.333	76.000	45.450	441.333	-76.000/
2548	1538	1	87.777	376.424	76.000	87.777	376.424	-76.000/
2549	1539	1	437.280	46.486	76.000	437.280	46.486	-76.000/
2550	1540	1	330.268	117.759	76.000	330.268	117.759	-76.000/
2551	1541	1	394.601	69.759	76.000	394.601	69.759	-76.000/

2552	1542	1	204.790	227.522	76.000	204.790	227.522	-76.000/
2553	1543	1	66.960	397.549	76.000	66.960	397.549	-76.000/
2554	1544	1	505.643	0.000	76.000	505.643	0.000	-76.000/
2555	1545	1	0.000	505.643	76.000	0.000	505.643	-76.000/
2556	1546	1	142.721	292.451	76.000	142.721	292.451	-76.000/
2557	1547	1	22.989	461.161	76.000	22.989	461.161	-76.000/
2558	1548	1	352.379	93.723	76.000	352.379	93.723	-76.000/
2559	1549	1	458.950	23.524	76.000	458.950	23.524	-76.000/
2560	1550	1	258.981	168.098	76.000	258.981	168.098	-76.000/
2561	1551	1	44.920	418.929	76.000	44.920	418.929	-76.000/
2562	1552	1	227.017	195.678	76.000	227.017	195.678	-76.000/
2563	1553	1	415.641	46.305	76.000	415.641	46.305	-76.000/
2564	1554	1	284.740	142.125	76.000	284.740	142.125	-76.000/
2565	1555	1	105.266	329.640	76.000	105.266	329.640	-76.000/
2566	1556	1	178.613	241.866	76.000	178.613	241.866	-76.000/
2567	1557	1	86.024	354.274	76.000	86.024	354.274	-76.000/
2568	1558	1	373.501	69.853	76.000	373.501	69.853	-76.000/
2569	1559	1	308.791	117.857	76.000	308.791	117.857	-76.000/
2570	1560	1	121.408	302.021	76.000	121.408	302.021	-76.000/
2571	1561	1	65.719	375.974	76.000	65.719	375.974	-76.000/
2572	1562	1	481.141	0.000	76.000	481.141	0.000	-76.000/
2573	1563	1	0.000	481.141	76.000	0.000	481.141	-76.000/
2574	1564	1	22.725	438.059	76.000	22.725	438.059	-76.000/
2575	1565	1	436.032	23.243	76.000	436.032	23.243	-76.000/
2576	1566	1	331.342	93.578	76.000	331.342	93.578	-76.000/
2577	1567	1	152.437	256.211	76.000	152.437	256.211	-76.000/
2578	1568	1	394.003	46.125	76.000	394.003	46.125	-76.000/
2579	1569	1	44.391	396.526	76.000	44.391	396.526	-76.000/
2580	1570	1	233.419	168.032	76.000	233.419	168.032	-76.000/
2581	1571	1	262.202	141.968	76.000	262.202	141.968	-76.000/
2582	1572	1	83.798	333.727	76.000	83.798	333.727	-76.000/
2583	1573	1	352.402	69.947	76.000	352.402	69.947	-76.000/
2584	1574	1	133.562	269.346	76.000	133.562	269.346	-76.000/
2585	1575	1	101.490	307.600	76.000	101.490	307.600	-76.000/
2586	1576	1	0.000	457.963	76.000	0.000	457.963	-76.000/
2587	1577	1	457.963	0.000	76.000	457.963	0.000	-76.000/
2588	1578	1	287.024	117.506	76.000	287.024	117.506	-76.000/
2589	1579	1	198.273	197.130	76.000	198.273	197.130	-76.000/
2590	1580	1	64.478	354.398	76.000	64.478	354.398	-76.000/
2591	1581	1	22.460	415.921	76.000	22.460	415.921	-76.000/
2592	1582	1	414.277	23.153	76.000	414.277	23.153	-76.000/
2593	1583	1	310.305	93.433	76.000	310.305	93.433	-76.000/
2594	1584	1	114.688	282.481	76.000	114.688	282.481	-76.000/
2595	1585	1	373.214	46.148	76.000	373.214	46.148	-76.000/
2596	1586	1	43.662	375.523	76.000	43.662	375.523	-76.000/
2597	1587	1	169.557	213.335	76.000	169.557	213.335	-76.000/
2598	1588	1	331.759	69.862	76.000	331.759	69.862	-76.000/
2599	1589	1	434.784	0.000	76.000	434.784	0.000	-76.000/
2600	1590	1	0.000	434.784	76.000	0.000	434.784	-76.000/
2601	1591	1	81.572	313.179	76.000	81.572	313.179	-76.000/
2602	1592	1	239.821	140.385	76.000	239.821	140.385	-76.000/
2603	1593	1	392.522	23.062	76.000	392.522	23.062	-76.000/
2604	1594	1	22.195	393.783	76.000	22.195	393.783	-76.000/
2605	1595	1	62.947	334.334	76.000	62.947	334.334	-76.000/
2606	1596	1	265.257	117.155	76.000	265.257	117.155	-76.000/
2607	1597	1	207.857	167.966	76.000	207.857	167.966	-76.000/
2608	1598	1	96.588	288.437	76.000	96.588	288.437	-76.000/
2609	1599	1	352.424	46.171	76.000	352.424	46.171	-76.000/
2610	1600	1	289.309	92.887	76.000	289.309	92.887	-76.000/
2611	1601	1	42.932	354.521	76.000	42.932	354.521	-76.000/
2612	1602	1	140.841	229.541	76.000	140.841	229.541	-76.000/
2613	1603	1	124.404	246.241	76.000	124.404	246.241	-76.000/
2614	1604	1	311.116	69.777	76.000	311.116	69.777	-76.000/
2615	1605	1	107.968	262.940	76.000	107.968	262.940	-76.000/
2616	1606	1	0.000	412.912	76.000	0.000	412.912	-76.000/
2617	1607	1	412.912	0.000	76.000	412.912	0.000	-76.000/

2618	1608	1	182.146	181.146	76.000	182.146	181.146	-76.000/
2619	1609	1	371.832	23.074	76.000	371.832	23.074	-76.000/
2620	1610	1	21.831	372.987	76.000	21.831	372.987	-76.000/
2621	1611	1	78.488	294.393	76.000	78.488	294.393	-76.000/
2622	1612	1	61.415	314.271	76.000	61.415	314.271	-76.000/
2623	1613	1	332.176	46.145	76.000	332.176	46.145	-76.000/
2624	1614	1	243.883	115.457	76.000	243.883	115.457	-76.000/
2625	1615	1	217.440	138.803	76.000	217.440	138.803	-76.000/
2626	1616	1	159.558	193.729	76.000	159.558	193.729	-76.000/
2627	1617	1	42.095	334.942	76.000	42.095	334.942	-76.000/
2628	1618	1	91.686	269.274	76.000	91.686	269.274	-76.000/
2629	1619	1	268.313	92.342	76.000	268.313	92.342	-76.000/
2630	1620	1	391.040	0.000	76.000	391.040	0.000	-76.000/
2631	1621	1	0.000	391.040	76.000	0.000	391.040	-76.000/
2632	1622	1	190.745	157.156	76.000	190.745	157.156	-76.000/
2633	1623	1	290.927	69.287	76.000	290.927	69.287	-76.000/
2634	1624	1	100.254	252.449	76.000	100.254	252.449	-76.000/
2635	1625	1	110.518	238.138	76.000	110.518	238.138	-76.000/
2636	1626	1	351.143	23.085	76.000	351.143	23.085	-76.000/
2637	1627	1	21.466	352.191	76.000	21.466	352.191	-76.000/
2638	1628	1	136.970	206.312	76.000	136.970	206.312	-76.000/
2639	1629	1	120.782	223.827	76.000	120.782	223.827	-76.000/
2640	1630	1	75.403	275.607	76.000	75.403	275.607	-76.000/
2641	1631	1	59.322	295.748	76.000	59.322	295.748	-76.000/
2642	1632	1	311.927	46.120	76.000	311.927	46.120	-76.000/
2643	1633	1	41.258	315.362	76.000	41.258	315.362	-76.000/
2644	1634	1	86.210	256.331	76.000	86.210	256.331	-76.000/
2645	1635	1	222.510	113.758	76.000	222.510	113.758	-76.000/
2646	1636	1	0.000	370.451	76.000	0.000	370.451	-76.000/
2647	1637	1	370.451	0.000	76.000	370.451	0.000	-76.000/
2648	1638	1	247.946	90.528	76.000	247.946	90.528	-76.000/
2649	1639	1	199.343	133.166	76.000	199.343	133.166	-76.000/
2650	1640	1	166.019	165.163	76.000	166.019	165.163	-76.000/
2651	1641	1	92.540	241.957	76.000	92.540	241.957	-76.000/
2652	1642	1	270.739	68.798	76.000	270.739	68.798	-76.000/
2653	1643	1	331.349	23.073	76.000	331.349	23.073	-76.000/
2654	1644	1	21.048	332.732	76.000	21.048	332.732	-76.000/
2655	1645	1	149.559	174.123	76.000	149.559	174.123	-76.000/
2656	1646	1	72.166	260.213	76.000	72.166	260.213	-76.000/
2657	1647	1	96.632	230.035	76.000	96.632	230.035	-76.000/
2658	1648	1	292.546	45.687	76.000	292.546	45.687	-76.000/
2659	1649	1	57.228	277.226	76.000	57.228	277.226	-76.000/
2660	1650	1	118.339	203.812	76.000	118.339	203.812	-76.000/
2661	1651	1	173.633	146.346	76.000	173.633	146.346	-76.000/
2662	1652	1	40.156	297.104	76.000	40.156	297.104	-76.000/
2663	1653	1	159.209	158.781	76.000	159.209	158.781	-76.000/
2664	1654	1	80.734	243.388	76.000	80.734	243.388	-76.000/
2665	1655	1	0.000	349.862	76.000	0.000	349.862	-76.000/
2666	1656	1	349.862	0.000	76.000	349.862	0.000	-76.000/
2667	1657	1	133.099	183.083	76.000	133.099	183.083	-76.000/
2668	1658	1	100.724	218.112	76.000	100.724	218.112	-76.000/
2669	1659	1	311.556	23.060	76.000	311.556	23.060	-76.000/
2670	1660	1	227.579	88.714	76.000	227.579	88.714	-76.000/
2671	1661	1	20.629	313.273	76.000	20.629	313.273	-76.000/
2672	1662	1	203.446	109.011	76.000	203.446	109.011	-76.000/
2673	1663	1	251.370	67.334	76.000	251.370	67.334	-76.000/
2674	1664	1	181.247	127.530	76.000	181.247	127.530	-76.000/
2675	1665	1	143.941	163.261	76.000	143.941	163.261	-76.000/
2676	1666	1	82.749	230.071	76.000	82.749	230.071	-76.000/
2677	1667	1	163.016	142.377	76.000	163.016	142.377	-76.000/
2678	1668	1	68.928	244.818	76.000	68.928	244.818	-76.000/
2679	1669	1	152.400	152.400	76.000	152.400	152.400	-76.000/
2680	1670	1	55.083	261.135	76.000	55.083	261.135	-76.000/
2681	1671	1	273.165	45.254	76.000	273.165	45.254	-76.000/
2682	1672	1	39.054	278.846	76.000	39.054	278.846	-76.000/
2683	1673	1	0.000	330.523	76.000	0.000	330.523	-76.000/

2684	1674	1	330.523	0.000	76.000	330.523	0.000	-76.000/
2685	1675	1	115.896	183.798	76.000	115.896	183.798	-76.000/
2686	1676	1	99.709	201.313	76.000	99.709	201.313	-76.000/
2687	1677	1	84.764	216.755	76.000	84.764	216.755	-76.000/
2688	1678	1	128.672	167.741	76.000	128.672	167.741	-76.000/
2689	1679	1	292.803	22.844	76.000	292.803	22.844	-76.000/
2690	1680	1	20.078	295.081	76.000	20.078	295.081	-76.000/
2691	1681	1	166.823	125.972	76.000	166.823	125.972	-76.000/
2692	1682	1	68.866	230.108	76.000	68.866	230.108	-76.000/
2693	1683	1	152.400	138.407	76.000	152.400	138.407	-76.000/
2694	1684	1	138.322	152.400	76.000	138.322	152.400	-76.000/
2695	1685	1	232.000	65.870	76.000	232.000	65.870	-76.000/
2696	1686	1	207.550	84.856	76.000	207.550	84.856	-76.000/
2697	1687	1	52.937	245.045	76.000	52.937	245.045	-76.000/
2698	1688	1	184.383	104.265	76.000	184.383	104.265	-76.000/
2699	1689	1	254.793	44.140	76.000	254.793	44.140	-76.000/
2700	1690	1	38.000	262.058	76.000	38.000	262.058	-76.000/
2701	1691	1	0.000	311.184	76.000	0.000	311.184	-76.000/
2702	1692	1	311.184	0.000	76.000	311.184	0.000	-76.000/
2703	1693	1	98.694	184.513	76.000	98.694	184.513	-76.000/
2704	1694	1	83.404	200.444	76.000	83.404	200.444	-76.000/
2705	1695	1	274.050	22.627	76.000	274.050	22.627	-76.000/
2706	1696	1	112.243	168.099	76.000	112.243	168.099	-76.000/
2707	1697	1	19.527	276.890	76.000	19.527	276.890	-76.000/
2708	1698	1	68.804	215.398	76.000	68.804	215.398	-76.000/
2709	1699	1	152.400	124.414	76.000	152.400	124.414	-76.000/
2710	1700	1	124.245	152.400	76.000	124.245	152.400	-76.000/
2711	1701	1	136.712	137.897	76.000	136.712	137.897	-76.000/
2712	1702	1	168.392	106.599	76.000	168.392	106.599	-76.000/
2713	1703	1	52.570	229.706	76.000	52.570	229.706	-76.000/
2714	1704	1	36.946	245.271	76.000	36.946	245.271	-76.000/
2715	1705	1	213.563	62.855	76.000	213.563	62.855	-76.000/
2716	1706	1	0.000	293.059	76.000	0.000	293.059	-76.000/
2717	1707	1	293.059	0.000	76.000	293.059	0.000	-76.000/
2718	1708	1	236.421	43.026	76.000	236.421	43.026	-76.000/
2719	1709	1	187.520	80.999	76.000	187.520	80.999	-76.000/
2720	1710	1	256.386	22.070	76.000	256.386	22.070	-76.000/
2721	1711	1	19.000	260.019	76.000	19.000	260.019	-76.000/
2722	1712	1	82.043	184.133	76.000	82.043	184.133	-76.000/
2723	1713	1	95.813	168.457	76.000	95.813	168.457	-76.000/
2724	1714	1	67.099	199.575	76.000	67.099	199.575	-76.000/
2725	1715	1	152.400	108.933	76.000	152.400	108.933	-76.000/
2726	1716	1	108.589	152.400	76.000	108.589	152.400	-76.000/
2727	1717	1	52.203	214.367	76.000	52.203	214.367	-76.000/
2728	1718	1	135.102	123.393	76.000	135.102	123.393	-76.000/
2729	1719	1	121.024	137.386	76.000	121.024	137.386	-76.000/
2730	1720	1	36.274	229.304	76.000	36.274	229.304	-76.000/
2731	1721	1	169.960	87.226	76.000	169.960	87.226	-76.000/
2732	1722	1	274.934	0.000	76.000	274.934	0.000	-76.000/
2733	1723	1	0.000	274.934	76.000	0.000	274.934	-76.000/
2734	1724	1	219.576	40.854	76.000	219.576	40.854	-76.000/
2735	1725	1	195.125	59.840	76.000	195.125	59.840	-76.000/
2736	1726	1	18.473	243.148	76.000	18.473	243.148	-76.000/
2737	1727	1	238.723	21.513	76.000	238.723	21.513	-76.000/
2738	1728	1	179.909	69.067	76.000	179.909	69.067	-76.000/
2739	1729	1	65.393	183.752	76.000	65.393	183.752	-76.000/
2740	1730	1	78.992	168.266	76.000	78.992	168.266	-76.000/
2741	1731	1	152.400	93.453	76.000	152.400	93.453	-76.000/
2742	1732	1	92.933	152.400	76.000	92.933	152.400	-76.000/
2743	1733	1	50.606	198.751	76.000	50.606	198.751	-76.000/
2744	1734	1	104.758	137.655	76.000	104.758	137.655	-76.000/
2745	1735	1	133.760	107.334	76.000	133.760	107.334	-76.000/
2746	1736	1	35.601	213.336	76.000	35.601	213.336	-76.000/
2747	1737	1	257.980	0.000	76.000	257.980	0.000	-76.000/
2748	1738	1	0.000	257.980	76.000	0.000	257.980	-76.000/
2749	1739	1	117.803	122.372	76.000	117.803	122.372	-76.000/

2750	1740	1	166.155	72.763	76.000	166.155	72.763	-76.000/
2751	1741	1	202.730	38.681	76.000	202.730	38.681	-76.000/
2752	1742	1	18.137	227.250	76.000	18.137	227.250	-76.000/
2753	1743	1	184.881	51.939	76.000	184.881	51.939	-76.000/
2754	1744	1	222.386	20.427	76.000	222.386	20.427	-76.000/
2755	1745	1	49.009	183.134	76.000	49.009	183.134	-76.000/
2756	1746	1	152.400	76.460	76.000	152.400	76.460	-76.000/
2757	1747	1	62.170	168.076	76.000	62.170	168.076	-76.000/
2758	1748	1	75.940	152.400	76.000	75.940	152.400	-76.000/
2759	1749	1	172.299	57.135	76.000	172.299	57.135	-76.000/
2760	1750	1	88.492	137.923	76.000	88.492	137.923	-76.000/
2761	1751	1	241.025	0.000	76.000	241.025	0.000	-76.000/
2762	1752	1	0.000	241.025	76.000	0.000	241.025	-76.000/
2763	1753	1	34.114	197.926	76.000	34.114	197.926	-76.000/
2764	1754	1	100.927	122.909	76.000	100.927	122.909	-76.000/
2765	1755	1	132.418	91.275	76.000	132.418	91.275	-76.000/
2766	1756	1	115.120	105.735	76.000	115.120	105.735	-76.000/
2767	1757	1	17.801	211.351	76.000	17.801	211.351	-76.000/
2768	1758	1	189.853	34.810	76.000	189.853	34.810	-76.000/
2769	1759	1	162.349	58.301	76.000	162.349	58.301	-76.000/
2770	1760	1	206.048	19.341	76.000	206.048	19.341	-76.000/
2771	1761	1	174.637	44.037	76.000	174.637	44.037	-76.000/
2772	1762	1	73.745	139.912	76.000	73.745	139.912	-76.000/
2773	1763	1	0.000	225.196	76.000	0.000	225.196	-76.000/
2774	1764	1	225.196	0.000	76.000	225.196	0.000	-76.000/
2775	1765	1	46.238	167.767	76.000	46.238	167.767	-76.000/
2776	1766	1	152.400	59.467	76.000	152.400	59.467	-76.000/
2777	1767	1	32.626	182.516	76.000	32.626	182.516	-76.000/
2778	1768	1	58.947	152.400	76.000	58.947	152.400	-76.000/
2779	1769	1	84.051	123.446	76.000	84.051	123.446	-76.000/
2780	1770	1	133.044	73.842	76.000	133.044	73.842	-76.000/
2781	1771	1	17.057	196.269	76.000	17.057	196.269	-76.000/
2782	1772	1	163.519	43.924	76.000	163.519	43.924	-76.000/
2783	1773	1	176.976	30.938	76.000	176.976	30.938	-76.000/
2784	1774	1	192.233	17.405	76.000	192.233	17.405	-76.000/
2785	1775	1	112.436	89.098	76.000	112.436	89.098	-76.000/
2786	1776	1	95.178	105.631	76.000	95.178	105.631	-76.000/
2787	1777	1	58.999	141.901	76.000	58.999	141.901	-76.000/
2788	1778	1	71.551	127.424	76.000	71.551	127.424	-76.000/
2789	1779	1	209.366	0.000	76.000	209.366	0.000	-76.000/
2790	1780	1	0.000	209.366	76.000	0.000	209.366	-76.000/
2791	1781	1	152.400	43.811	76.000	152.400	43.811	-76.000/
2792	1782	1	30.306	167.458	76.000	30.306	167.458	-76.000/
2793	1783	1	43.467	152.400	76.000	43.467	152.400	-76.000/
2794	1784	1	16.313	181.187	76.000	16.313	181.187	-76.000/
2795	1785	1	164.688	29.547	76.000	164.688	29.547	-76.000/
2796	1786	1	59.050	131.403	76.000	59.050	131.403	-76.000/
2797	1787	1	133.670	56.409	76.000	133.670	56.409	-76.000/
2798	1788	1	178.417	15.469	76.000	178.417	15.469	-76.000/
2799	1789	1	194.612	0.000	76.000	194.612	0.000	-76.000/
2800	1790	1	0.000	194.612	76.000	0.000	194.612	-76.000/
2801	1791	1	113.688	71.224	76.000	113.688	71.224	-76.000/
2802	1792	1	45.170	138.556	76.000	45.170	138.556	-76.000/
2803	1793	1	75.236	105.527	76.000	75.236	105.527	-76.000/
2804	1794	1	89.428	88.353	76.000	89.428	88.353	-76.000/
2805	1795	1	152.400	28.155	76.000	152.400	28.155	-76.000/
2806	1796	1	27.986	152.400	76.000	27.986	152.400	-76.000/
2807	1797	1	15.153	166.794	76.000	15.153	166.794	-76.000/
2808	1798	1	61.054	115.119	76.000	61.054	115.119	-76.000/
2809	1799	1	135.310	41.658	76.000	135.310	41.658	-76.000/
2810	1800	1	165.408	14.773	76.000	165.408	14.773	-76.000/
2811	1801	1	0.000	179.858	76.000	0.000	179.858	-76.000/
2812	1802	1	179.858	0.000	76.000	179.858	0.000	-76.000/
2813	1803	1	46.873	124.711	76.000	46.873	124.711	-76.000/
2814	1804	1	114.939	53.351	76.000	114.939	53.351	-76.000/
2815	1805	1	31.341	135.210	76.000	31.341	135.210	-76.000/

2816	1806	1	152.400	14.078	76.000	152.400	14.078	-76.000/
2817	1807	1	13.993	152.400	76.000	13.993	152.400	-76.000/
2818	1808	1	136.951	26.906	76.000	136.951	26.906	-76.000/
2819	1809	1	166.129	0.000	76.000	166.129	0.000	-76.000/
2820	1810	1	0.000	166.129	76.000	0.000	166.129	-76.000/
2821	1811	1	91.803	67.309	76.000	91.803	67.309	-76.000/
2822	1812	1	118.221	39.504	76.000	118.221	39.504	-76.000/
2823	1813	1	66.420	87.608	76.000	66.420	87.608	-76.000/
2824	1814	1	50.558	102.814	76.000	50.558	102.814	-76.000/
2825	1815	1	34.696	118.020	76.000	34.696	118.020	-76.000/
2826	1816	1	15.670	136.809	76.000	15.670	136.809	-76.000/
2827	1817	1	137.637	13.453	76.000	137.637	13.453	-76.000/
2828	1818	1	152.400	0.000	76.000	152.400	0.000	-76.000/
2829	1819	1	0.000	152.400	76.000	0.000	152.400	-76.000/
2830	1820	1	121.503	25.658	76.000	121.503	25.658	-76.000/
2831	1821	1	94.179	46.266	76.000	94.179	46.266	-76.000/
2832	1822	1	17.348	121.217	76.000	17.348	121.217	-76.000/
2833	1823	1	101.453	34.951	76.000	101.453	34.951	-76.000/
2834	1824	1	0.000	138.407	76.000	0.000	138.407	-76.000/
2835	1825	1	138.322	0.000	76.000	138.322	0.000	-76.000/
2836	1826	1	69.919	63.394	76.000	69.919	63.394	-76.000/
2837	1827	1	122.874	12.829	76.000	122.874	12.829	-76.000/
2838	1828	1	28.126	105.691	76.000	28.126	105.691	-76.000/
2839	1829	1	108.727	23.635	76.000	108.727	23.635	-76.000/
2840	1830	1	38.161	91.901	76.000	38.161	91.901	-76.000/
2841	1831	1	48.196	78.111	76.000	48.196	78.111	-76.000/
2842	1832	1	0.000	124.414	76.000	0.000	124.414	-76.000/
2843	1833	1	124.245	0.000	76.000	124.245	0.000	-76.000/
2844	1834	1	14.063	107.312	76.000	14.063	107.312	-76.000/
2845	1835	1	108.658	11.818	76.000	108.658	11.818	-76.000/
2846	1836	1	95.952	21.613	76.000	95.952	21.613	-76.000/
2847	1837	1	84.685	30.397	76.000	84.685	30.397	-76.000/
2848	1838	1	21.556	93.362	76.000	21.556	93.362	-76.000/
2849	1839	1	73.419	39.181	76.000	73.419	39.181	-76.000/
2850	1840	1	50.543	57.306	76.000	50.543	57.306	-76.000/
2851	1841	1	0.000	108.933	76.000	0.000	108.933	-76.000/
2852	1842	1	25.764	80.988	76.000	25.764	80.988	-76.000/
2853	1843	1	108.589	0.000	76.000	108.589	0.000	-76.000/
2854	1844	1	94.442	10.806	76.000	94.442	10.806	-76.000/
2855	1845	1	10.778	93.408	76.000	10.778	93.408	-76.000/
2856	1846	1	29.972	68.614	76.000	29.972	68.614	-76.000/
2857	1847	1	80.313	15.198	76.000	80.313	15.198	-76.000/
2858	1848	1	0.000	93.453	76.000	0.000	93.453	-76.000/
2859	1849	1	92.933	0.000	76.000	92.933	0.000	-76.000/
2860	1850	1	12.882	78.724	76.000	12.882	78.724	-76.000/
2861	1851	1	52.890	36.501	76.000	52.890	36.501	-76.000/
2862	1852	1	66.183	19.590	76.000	66.183	19.590	-76.000/
2863	1853	1	31.167	51.218	76.000	31.167	51.218	-76.000/
2864	1854	1	14.986	64.041	76.000	14.986	64.041	-76.000/
2865	1855	1	0.000	76.460	76.000	0.000	76.460	-76.000/
2866	1856	1	75.940	0.000	76.000	75.940	0.000	-76.000/
2867	1857	1	48.178	18.251	76.000	48.178	18.251	-76.000/
2868	1858	1	32.362	33.822	76.000	32.362	33.822	-76.000/
2869	1859	1	15.583	47.515	76.000	15.583	47.515	-76.000/
2870	1860	1	0.000	59.467	76.000	0.000	59.467	-76.000/
2871	1861	1	58.947	0.000	76.000	58.947	0.000	-76.000/
2872	1862	1	16.181	30.989	76.000	16.181	30.989	-76.000/
2873	1863	1	30.174	16.911	76.000	30.174	16.911	-76.000/
2874	1864	1	0.000	43.811	76.000	0.000	43.811	-76.000/
2875	1865	1	43.467	0.000	76.000	43.467	0.000	-76.000/
2876	1866	1	15.087	15.494	76.000	15.087	15.494	-76.000/
2877	1867	1	0.000	28.155	76.000	0.000	28.155	-76.000/
2878	1868	1	27.986	0.000	76.000	27.986	0.000	-76.000/
2879	1869	1	0.000	14.078	76.000	0.000	14.078	-76.000/
2880	1870	1	13.993	0.000	76.000	13.993	0.000	-76.000/
2881	1871	1	0.000	0.000	76.000	0.000	0.000	-76.000/

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2882 /
2883          NODAL RESTRAINTS AND PRESCRIBED D.O.F.
2884          -----
2885
2886 <<<<< FORMAT >>>>> (units = mm, degrees)(d(NODE)>0!!!) Node No. MUST be in ascending
order. Cannot repeat nodes.
2887 NODE   DX-R   DY-R   DZ-R   R1-R   R2-R   [#NODES d(NODE)] [#NODES d(NODE)] [#NODES
d(NODE)] /
2888     1279     0     1     0     0     1/
2889     1280     1     0     0     1     0/
2890     1282     1     0     0     1     0/
2891     1283     0     1     0     0     1/
2892     1286     1     0     0     1     0/
2893     1287     0     1     0     0     1/
2894     1293     1     0     0     1     0/
2895     1294     0     1     0     0     1/
2896     1300     1     0     0     1     0/
2897     1301     0     1     0     0     1/
2898     1308     1     0     0     1     0/
2899     1309     0     1     0     0     1/
2900     1316     1     0     0     1     0/
2901     1317     0     1     0     0     1/
2902     1330     0     1     0     0     1/
2903     1331     1     0     0     1     0/
2904     1339     1     0     0     1     0/
2905     1340     0     1     0     0     1/
2906     1356     0     1     0     0     1/
2907     1357     1     0     0     1     0/
2908     1368     0     1     0     0     1/
2909     1369     1     0     0     1     0/
2910     1386     0     1     0     0     1/
2911     1387     1     0     0     1     0/
2912     1397     1     0     0     1     0/
2913     1398     0     1     0     0     1/
2914     1413     1     0     0     1     0/
2915     1414     0     1     0     0     1/
2916     1430     1     0     0     1     0/
2917     1431     0     1     0     0     1/
2918     1448     1     0     0     1     0/
2919     1449     0     1     0     0     1/
2920     1464     0     1     0     0     1/
2921     1465     1     0     0     1     0/
2922     1480     1     0     0     1     0/
2923     1481     0     1     0     0     1/
2924     1498     0     1     0     0     1/
2925     1499     1     0     0     1     0/
2926     1513     0     1     0     0     1/
2927     1514     1     0     0     1     0/
2928     1528     1     0     0     1     0/
2929     1529     0     1     0     0     1/
2930     1544     0     1     0     0     1/
2931     1545     1     0     0     1     0/
2932     1562     0     1     0     0     1/
2933     1563     1     0     0     1     0/
2934     1576     1     0     0     1     0/
2935     1577     0     1     0     0     1/
2936     1589     0     1     0     0     1/
2937     1590     1     0     0     1     0/
2938     1606     1     0     0     1     0/
2939     1607     0     1     0     0     1/
2940     1620     0     1     0     0     1/
2941     1621     1     0     0     1     0/
2942     1636     1     0     0     1     0/
2943     1637     0     1     0     0     1/
2944     1655     1     0     0     1     0/
2945     1656     0     1     0     0     1/

```



2946	1669	0	0	1	0	0/
2947	1673	1	0	0	1	0/
2948	1674	0	1	0	0	1/
2949	1683	0	0	1	0	0/
2950	1684	0	0	1	0	0/
2951	1691	1	0	0	1	0/
2952	1692	0	1	0	0	1/
2953	1699	0	0	1	0	0/
2954	1700	0	0	1	0	0/
2955	1706	1	0	0	1	0/
2956	1707	0	1	0	0	1/
2957	1715	0	0	1	0	0/
2958	1716	0	0	1	0	0/
2959	1722	0	1	0	0	1/
2960	1723	1	0	0	1	0/
2961	1731	0	0	1	0	0/
2962	1732	0	0	1	0	0/
2963	1737	0	1	0	0	1/
2964	1738	1	0	0	1	0/
2965	1746	0	0	1	0	0/
2966	1748	0	0	1	0	0/
2967	1751	0	1	0	0	1/
2968	1752	1	0	0	1	0/
2969	1763	1	0	0	1	0/
2970	1764	0	1	0	0	1/
2971	1766	0	0	1	0	0/
2972	1768	0	0	1	0	0/
2973	1779	0	1	0	0	1/
2974	1780	1	0	0	1	0/
2975	1781	0	0	1	0	0/
2976	1783	0	0	1	0	0/
2977	1789	0	1	0	0	1/
2978	1790	1	0	0	1	0/
2979	1795	0	0	1	0	0/
2980	1796	0	0	1	0	0/
2981	1801	1	0	0	1	0/
2982	1802	0	1	0	0	1/
2983	1806	0	0	1	0	0/
2984	1807	0	0	1	0	0/
2985	1809	0	1	0	0	1/
2986	1810	1	0	0	1	0/
2987	1818	0	1	1	0	1/
2988	1819	1	0	1	1	0/
2989	1824	1	0	1	1	0/
2990	1825	0	1	1	0	1/
2991	1832	1	0	1	1	0/
2992	1833	0	1	1	0	1/
2993	1841	1	0	1	1	0/
2994	1843	0	1	1	0	1/
2995	1848	1	0	1	1	0/
2996	1849	0	1	1	0	1/
2997	1855	1	0	1	1	0/
2998	1856	0	1	1	0	1/
2999	1860	1	0	1	1	0/
3000	1861	0	1	1	0	1/
3001	1864	1	0	1	1	0/
3002	1865	0	1	1	0	1/
3003	1867	1	0	1	1	0/
3004	1868	0	1	1	0	1/
3005	1869	1	0	1	1	0/
3006	1870	0	1	1	0	1/
3007	1871	1	1	1	1	1/

3008 /  
3009  
3010  
3011

AUTO GENERATE NODAL RESTRAINTS

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3012 <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
3013 RTYP DX-R DY-R DZ-R R1-R R2-R X1 Y1 Z1 [ NX SX
NY SY NZ SZ] [X2 Y2 Z2]/
3014 /
3015 AUTO GENERATE RESULTS (DISP OR REACTIONS)
3016 -----
3017
3018 <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
3019 RTYP D(0-5) R(0-5) X1 Y1 Z1 [ NX SX NY SY NZ
SZ] [X2 Y2 Z2]/
3020 /
3021 LINKED NODES
3022 -----
3023
3024 <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
3025 RTYP D(0-5) X1 Y1 Z1 [ NX SX NY SY NZ SZ]
[X2 Y2 Z2]/
3026 /
3027
3028 <NOTES:>
3029 Smearred Reinforcement:
3030 d - Distance from the top of the element to the centroid of the
3031 reinforcement layer.
3032
3033 Truss Elements:
3034 OS - Element offset measured from nodal location (typically middle layer).
3035 Negative OS is toward element bottom surface.
3036
3037 REF - Reinforcement Types (smearred & truss):
3038 1 - Ductile Steel Reinforcement (tension+compression)
3039 2 - Prestressing Steel (tension+compression)
3040 3 - Ductile Steel Reinforcement (tension only)
3041 4 - Ductile Steel Reinforcement (compression only)
3042
3043 Element incidences:
3044 <INC9> - Only required when nine noded element is used.
3045
3046 Element types (MUST input in this order - Shell, solid, then truss):
3047 1 - Shell elements
3048 2 - Solid elements
3049 3 - Truss elements
3050
3051 Coordinates: (Cannot use a mix of type 1 and 2 coordinates)
3052 TYPE - 1 - Top and Bottom coordinates of the node are provided.
3053 2 - Centre Line coordinates of the node are provided.
3054 3 - Coordinates of the node for the solid element are provided.
3055
3056 Restrained D.O.F.:
3057 0 - Unrestrained degree of freedom
3058 1 - Restrained degree of freedom
3059
3060 Auto generate restrained D.O.F.:
3061 TYPE - 1 - Point restraints
3062 2 - Line restraints
3063 3 - Area restraints
3064
3065 (1) DO NOT INSERT OR DELETE ANY LINE.
3066 EXCEPTION: INSERTION OF LINES IN THE SPACE PROVIDED FOR INPUT OF
3067 DATA. IN THIS CASE, LEAVE LINE WITH SLASH AFTER LAST DATA LINE.
3068
3069 (2) BLANK SPACES SHOULD BE USED TO SEPARATE DATA WITHIN A DATA LINE.
3070
3071 (3) ELEMENT INCIDENCE NUMBER 9 (i.e. <INC9>) TO BE IGNORED WHEN 8 NODDED

```

3072 SERENDIPITY ELEMENT USED.  
3073  
3074 (4) DIMENSIONED FOR: 50 ELEMENTS, 200 NODES, 100 RESTRAINED NODES,  
3075 16 CONCRETE LAYERS, 6 REINFORCEMENT LAYERS, 30 MATERIALS, 20 LAYER  
3076 PATTERNS, MAXIMUM FRONTWIDTH OF 100.  
3077

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : SELF WEIGHT
12         Load case file name  (8 char. max.) : LOAD1
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 0
18         No. of nodes with imposed displacements : 0
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 445
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25          UNIFORMLY DISTRIBUTED LOADS
26          -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31          HYDROSTATIC LOADS
32          -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37          TEMPERATURE LOADS
38          -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41              TEMP.         TEMP.         TEMP.         TEMP.         TIME (hr.)
42         /
43
44          CONCENTRATED LOADS
45          -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48              (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51          PRESCRIBED NODE DISPLACEMENTS
52          -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55              (1-5) (mm|deg)
56         /
57
58          CONCRETE PRESTRAINS
59          -----
60         <NOTE:> UNITS: me
61         <<<<< FORMAT >>>>>
62         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
63         /
64
65          GRAVITATIONAL LOADS
66          -----

```

```

67 <<<< FORMAT >>>>
68 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
69      1      0.00000  0.00000  -1.00000  0.00000/
70      2      0.00000  0.00000  -1.00000  0.00000/
71      3      0.00000  0.00000  -1.00000  0.00000/
72      4      0.00000  0.00000  -1.00000  0.00000/
73      5      0.00000  0.00000  -1.00000  0.00000/
74      6      0.00000  0.00000  -1.00000  0.00000/
75      7      0.00000  0.00000  -1.00000  0.00000/
76      8      0.00000  0.00000  -1.00000  0.00000/
77      9      0.00000  0.00000  -1.00000  0.00000/
78     10      0.00000  0.00000  -1.00000  0.00000/
79     11      0.00000  0.00000  -1.00000  0.00000/
80     12      0.00000  0.00000  -1.00000  0.00000/
81     13      0.00000  0.00000  -1.00000  0.00000/
82     14      0.00000  0.00000  -1.00000  0.00000/
83     15      0.00000  0.00000  -1.00000  0.00000/
84     16      0.00000  0.00000  -1.00000  0.00000/
85     17      0.00000  0.00000  -1.00000  0.00000/
86     18      0.00000  0.00000  -1.00000  0.00000/
87     19      0.00000  0.00000  -1.00000  0.00000/
88     20      0.00000  0.00000  -1.00000  0.00000/
89     21      0.00000  0.00000  -1.00000  0.00000/
90     22      0.00000  0.00000  -1.00000  0.00000/
91     23      0.00000  0.00000  -1.00000  0.00000/
92     24      0.00000  0.00000  -1.00000  0.00000/
93     25      0.00000  0.00000  -1.00000  0.00000/
94     26      0.00000  0.00000  -1.00000  0.00000/
95     27      0.00000  0.00000  -1.00000  0.00000/
96     28      0.00000  0.00000  -1.00000  0.00000/
97     29      0.00000  0.00000  -1.00000  0.00000/
98     30      0.00000  0.00000  -1.00000  0.00000/
99     31      0.00000  0.00000  -1.00000  0.00000/
100    32      0.00000  0.00000  -1.00000  0.00000/
101    33      0.00000  0.00000  -1.00000  0.00000/
102    34      0.00000  0.00000  -1.00000  0.00000/
103    35      0.00000  0.00000  -1.00000  0.00000/
104    36      0.00000  0.00000  -1.00000  0.00000/
105    37      0.00000  0.00000  -1.00000  0.00000/
106    38      0.00000  0.00000  -1.00000  0.00000/
107    39      0.00000  0.00000  -1.00000  0.00000/
108    40      0.00000  0.00000  -1.00000  0.00000/
109    41      0.00000  0.00000  -1.00000  0.00000/
110    42      0.00000  0.00000  -1.00000  0.00000/
111    43      0.00000  0.00000  -1.00000  0.00000/
112    44      0.00000  0.00000  -1.00000  0.00000/
113    45      0.00000  0.00000  -1.00000  0.00000/
114    46      0.00000  0.00000  -1.00000  0.00000/
115    47      0.00000  0.00000  -1.00000  0.00000/
116    48      0.00000  0.00000  -1.00000  0.00000/
117    49      0.00000  0.00000  -1.00000  0.00000/
118    50      0.00000  0.00000  -1.00000  0.00000/
119    51      0.00000  0.00000  -1.00000  0.00000/
120    52      0.00000  0.00000  -1.00000  0.00000/
121    53      0.00000  0.00000  -1.00000  0.00000/
122    54      0.00000  0.00000  -1.00000  0.00000/
123    55      0.00000  0.00000  -1.00000  0.00000/
124    56      0.00000  0.00000  -1.00000  0.00000/
125    57      0.00000  0.00000  -1.00000  0.00000/
126    58      0.00000  0.00000  -1.00000  0.00000/
127    59      0.00000  0.00000  -1.00000  0.00000/
128    60      0.00000  0.00000  -1.00000  0.00000/
129    61      0.00000  0.00000  -1.00000  0.00000/
130    62      0.00000  0.00000  -1.00000  0.00000/
131    63      0.00000  0.00000  -1.00000  0.00000/
132    64      0.00000  0.00000  -1.00000  0.00000/

```

133	65	0.00000	0.00000	-1.00000	0.00000/
134	66	0.00000	0.00000	-1.00000	0.00000/
135	67	0.00000	0.00000	-1.00000	0.00000/
136	68	0.00000	0.00000	-1.00000	0.00000/
137	69	0.00000	0.00000	-1.00000	0.00000/
138	70	0.00000	0.00000	-1.00000	0.00000/
139	71	0.00000	0.00000	-1.00000	0.00000/
140	72	0.00000	0.00000	-1.00000	0.00000/
141	73	0.00000	0.00000	-1.00000	0.00000/
142	74	0.00000	0.00000	-1.00000	0.00000/
143	75	0.00000	0.00000	-1.00000	0.00000/
144	76	0.00000	0.00000	-1.00000	0.00000/
145	77	0.00000	0.00000	-1.00000	0.00000/
146	78	0.00000	0.00000	-1.00000	0.00000/
147	79	0.00000	0.00000	-1.00000	0.00000/
148	80	0.00000	0.00000	-1.00000	0.00000/
149	81	0.00000	0.00000	-1.00000	0.00000/
150	82	0.00000	0.00000	-1.00000	0.00000/
151	83	0.00000	0.00000	-1.00000	0.00000/
152	84	0.00000	0.00000	-1.00000	0.00000/
153	85	0.00000	0.00000	-1.00000	0.00000/
154	86	0.00000	0.00000	-1.00000	0.00000/
155	87	0.00000	0.00000	-1.00000	0.00000/
156	88	0.00000	0.00000	-1.00000	0.00000/
157	89	0.00000	0.00000	-1.00000	0.00000/
158	90	0.00000	0.00000	-1.00000	0.00000/
159	91	0.00000	0.00000	-1.00000	0.00000/
160	92	0.00000	0.00000	-1.00000	0.00000/
161	93	0.00000	0.00000	-1.00000	0.00000/
162	94	0.00000	0.00000	-1.00000	0.00000/
163	95	0.00000	0.00000	-1.00000	0.00000/
164	96	0.00000	0.00000	-1.00000	0.00000/
165	97	0.00000	0.00000	-1.00000	0.00000/
166	98	0.00000	0.00000	-1.00000	0.00000/
167	99	0.00000	0.00000	-1.00000	0.00000/
168	100	0.00000	0.00000	-1.00000	0.00000/
169	101	0.00000	0.00000	-1.00000	0.00000/
170	102	0.00000	0.00000	-1.00000	0.00000/
171	103	0.00000	0.00000	-1.00000	0.00000/
172	104	0.00000	0.00000	-1.00000	0.00000/
173	105	0.00000	0.00000	-1.00000	0.00000/
174	106	0.00000	0.00000	-1.00000	0.00000/
175	107	0.00000	0.00000	-1.00000	0.00000/
176	108	0.00000	0.00000	-1.00000	0.00000/
177	109	0.00000	0.00000	-1.00000	0.00000/
178	110	0.00000	0.00000	-1.00000	0.00000/
179	111	0.00000	0.00000	-1.00000	0.00000/
180	112	0.00000	0.00000	-1.00000	0.00000/
181	113	0.00000	0.00000	-1.00000	0.00000/
182	114	0.00000	0.00000	-1.00000	0.00000/
183	115	0.00000	0.00000	-1.00000	0.00000/
184	116	0.00000	0.00000	-1.00000	0.00000/
185	117	0.00000	0.00000	-1.00000	0.00000/
186	118	0.00000	0.00000	-1.00000	0.00000/
187	119	0.00000	0.00000	-1.00000	0.00000/
188	120	0.00000	0.00000	-1.00000	0.00000/
189	121	0.00000	0.00000	-1.00000	0.00000/
190	122	0.00000	0.00000	-1.00000	0.00000/
191	123	0.00000	0.00000	-1.00000	0.00000/
192	124	0.00000	0.00000	-1.00000	0.00000/
193	125	0.00000	0.00000	-1.00000	0.00000/
194	126	0.00000	0.00000	-1.00000	0.00000/
195	127	0.00000	0.00000	-1.00000	0.00000/
196	128	0.00000	0.00000	-1.00000	0.00000/
197	129	0.00000	0.00000	-1.00000	0.00000/
198	130	0.00000	0.00000	-1.00000	0.00000/











463	395	0.00000	0.00000	-1.00000	0.00000/
464	396	0.00000	0.00000	-1.00000	0.00000/
465	397	0.00000	0.00000	-1.00000	0.00000/
466	398	0.00000	0.00000	-1.00000	0.00000/
467	399	0.00000	0.00000	-1.00000	0.00000/
468	400	0.00000	0.00000	-1.00000	0.00000/
469	401	0.00000	0.00000	-1.00000	0.00000/
470	402	0.00000	0.00000	-1.00000	0.00000/
471	403	0.00000	0.00000	-1.00000	0.00000/
472	404	0.00000	0.00000	-1.00000	0.00000/
473	405	0.00000	0.00000	-1.00000	0.00000/
474	406	0.00000	0.00000	-1.00000	0.00000/
475	407	0.00000	0.00000	-1.00000	0.00000/
476	408	0.00000	0.00000	-1.00000	0.00000/
477	409	0.00000	0.00000	-1.00000	0.00000/
478	410	0.00000	0.00000	-1.00000	0.00000/
479	411	0.00000	0.00000	-1.00000	0.00000/
480	412	0.00000	0.00000	-1.00000	0.00000/
481	413	0.00000	0.00000	-1.00000	0.00000/
482	414	0.00000	0.00000	-1.00000	0.00000/
483	415	0.00000	0.00000	-1.00000	0.00000/
484	416	0.00000	0.00000	-1.00000	0.00000/
485	417	0.00000	0.00000	-1.00000	0.00000/
486	418	0.00000	0.00000	-1.00000	0.00000/
487	419	0.00000	0.00000	-1.00000	0.00000/
488	420	0.00000	0.00000	-1.00000	0.00000/
489	421	0.00000	0.00000	-1.00000	0.00000/
490	422	0.00000	0.00000	-1.00000	0.00000/
491	423	0.00000	0.00000	-1.00000	0.00000/
492	424	0.00000	0.00000	-1.00000	0.00000/
493	425	0.00000	0.00000	-1.00000	0.00000/
494	426	0.00000	0.00000	-1.00000	0.00000/
495	427	0.00000	0.00000	-1.00000	0.00000/
496	428	0.00000	0.00000	-1.00000	0.00000/
497	429	0.00000	0.00000	-1.00000	0.00000/
498	430	0.00000	0.00000	-1.00000	0.00000/
499	431	0.00000	0.00000	-1.00000	0.00000/
500	432	0.00000	0.00000	-1.00000	0.00000/
501	433	0.00000	0.00000	-1.00000	0.00000/
502	434	0.00000	0.00000	-1.00000	0.00000/
503	435	0.00000	0.00000	-1.00000	0.00000/
504	436	0.00000	0.00000	-1.00000	0.00000/
505	437	0.00000	0.00000	-1.00000	0.00000/
506	438	0.00000	0.00000	-1.00000	0.00000/
507	439	0.00000	0.00000	-1.00000	0.00000/
508	440	0.00000	0.00000	-1.00000	0.00000/
509	441	0.00000	0.00000	-1.00000	0.00000/
510	442	0.00000	0.00000	-1.00000	0.00000/
511	443	0.00000	0.00000	-1.00000	0.00000/
512	444	0.00000	0.00000	-1.00000	0.00000/
513	445	0.00000	0.00000	-1.00000	0.00000/

514 /

515

516 ADDITIONAL LUMPED MASSES

517

518 <NOTE:> UNITS: kg, m/s, m/s2

519 <<<<< FORMAT >>>>>

520 NODE DOF-X DOF-Y DOF-Z MASS Vo-X Vo-Y Vo-Z Acc-X Acc-Y Acc-Z [ #NODE  
d(NODE) ] /

521 /

522

523 IMPULSE, BLAST AND IMPACT FORCES

524

525 <NOTE:> UNITS: Sec, kN

526 <<<<< FORMAT >>>>>

527 NODE DOF T1 F1 T2 F2 T3 F3 T4 F4 [ #NODE d(NODE) ] /

```
528 /
529
530          GROUND ACCELERATION
531          -----
532 <NOTE:>  UNITS:  Sec, G
533 <<<<< FORMAT >>>>>
534 TIME  ACC-X  ACC-Y  ACC-Z /
535 /
536
```

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title     (30 char. max.) : Pl-MASTER
12         Load case file name  (8 char. max.) : LOAD2
13
14         No. of elements with a u.d.l.      : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads : 0
18         No. of nodes with imposed displacements : 1
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51         PRESCRIBED NODE DISPLACEMENTS
52         -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF     DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         62     3     -1/
57         /
58
59         CONCRETE PRESTRAINS
60         -----
61         <NOTE:> UNITS: me
62         <<<<< FORMAT >>>>>
63         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
64         /
65
66         GRAVITATIONAL LOADS

```

```

67
68 <<<<< FORMAT >>>>>
69 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
70 /
71
72                ADDITIONAL LUMPED MASSES
73                -----
74 <NOTE:> UNITS:  kg, m/s, m/s2
75 <<<<< FORMAT >>>>>
76 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
d(NODE) ] /
77 /
78
79                IMPULSE, BLAST AND IMPACT FORCES
80                -----
81 <NOTE:> UNITS:  Sec, kN
82 <<<<< FORMAT >>>>>
83 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
84 /
85
86                GROUND ACCELERATION
87                -----
88 <NOTE:> UNITS:  Sec, G
89 <<<<< FORMAT >>>>>
90 TIME  ACC-X  ACC-Y  ACC-Z /
91 /
92

```

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : P1-SLAVE
12         Load case file name   (8 char. max.) : LOAD5
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 0
18         No. of nodes with imposed displacements : 1
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25          UNIFORMLY DISTRIBUTED LOADS
26          -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31          HYDROSTATIC LOADS
32          -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37          TEMPERATURE LOADS
38          -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44          CONCENTRATED LOADS
45          -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51          PRESCRIBED NODE DISPLACEMENTS
52          -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF     DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         683    -3     62/
57         /
58
59          CONCRETE PRESTRAINS
60          -----
61         <NOTE:> UNITS: me
62         <<<<< FORMAT >>>>>
63         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
64         /
65
66          GRAVITATIONAL LOADS

```

```

67                                     -----
68 <<<<< FORMAT >>>>>
69 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
70 /
71
72                                     ADDITIONAL LUMPED MASSES
73                                     -----
74 <NOTE:> UNITS:  kg, m/s, m/s2
75 <<<<< FORMAT >>>>>
76 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
77 d(NODE) ] /
78 /
79                                     IMPULSE, BLAST AND IMPACT FORCES
80                                     -----
81 <NOTE:> UNITS:  Sec, kN
82 <<<<< FORMAT >>>>>
83 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
84 /
85
86                                     GROUND ACCELERATION
87                                     -----
88 <NOTE:> UNITS:  Sec, G
89 <<<<< FORMAT >>>>>
90 TIME  ACC-X  ACC-Y  ACC-Z /
91 /
92

```



```

1
2          - - - - -
3          -   V e c T o r 4   -
4          -   A u x i l i a r y   D a t a   -
5          - - - - -
6
7  Stiffness Matrix Solver          (1-2) : 2
8  Number of Parallel Threads      : 2
9
10 Shear Analysis Mode              (1-3) : 2
11
12 Concrete Aggregate Type          (1-2) : 1
13 Concrete Conductivity            : 2.19
14 Concrete Fracture Energy         (kN/m) : 0.00
15 Prestressing Friction Coefficient (/r) : 0.30
16 Prestressing Wobble Coefficient (/m) : 0.00250
17
18 Thermal Time Stepping Factor      : 0.6666667
19
20 Time Integration Method          (1-3) : 3
21
22 1st Mode to Assign Damping        : 1
23 2nd Mode to Assign Damping        : 2
24 Damping Ratio Assignment #1       : 0.00
25 Damping Ratio Assignment #2       : 2.00
26 Ground Acceleration in x-direction : 0.0
27 Ground Acceleration in y-direction : 0.0
28 Ground Acceleration in z-direction : 0.0
29 Mass Factor due to Self-Weight     : 1.0
30
31 Tension Softening Pt 1: Strain     (me) : 0.20
32 Tension Softening Pt 1: Stress     (MPa) : 3.00
33 Tension Softening Pt 2: Strain     (me) : 0.50
34 Tension Softening Pt 2: Stress     (MPa) : 2.00
35 Tension Softening Pt 3: Strain     (me) : 1.00
36 Tension Softening Pt 3: Stress     (MPa) : 1.00
37 Tension Softening Pt 4: Strain     (me) : 2.00
38 Tension Softening Pt 4: Stress     (MPa) : 0.10
39
40 Matrix Type                       : 1
41 Fibre Type                         : 1
42 Volumetric Fraction of Fibres      (%) : 0.0
43 Fibre Length                       (mm) : 50.0
44 Fibre Diameter                     (mm) : 0.60
45 Tensile Strength of Fibre          (MPa) : 1050.0
46 Mean fibre-Matrix Bond Stress      (MPa) : 0.00
47 SLS Equivalent Strength (Euro)     (MPa) : 1.00
48 ULS Equivalent Strength (Euro)     (MPa) : 0.50
49
50
51 NOTES:
52 Concrete Aggregate Type:
53     1. Carbonate
54     2. Silicious
55
56 Concrete Fracture Energy:
57     Input 0 for program generated default value.
58
59
60 Time Stepping Factor for Heat Flow Analysis:
61     0.500 : Crank-Nicolson Scheme (Accurate)
62     0.667 : Galerkin Scheme (Stable)
63
64 Shear Analysis Mode:
65     0. Out-of-Plane Shear Strains Neglected
66     1. Multi-Layer Analysis - Uniform Shear Strain

```

```
67           2. Multi-Layer Analysis - Parabolic Shear Strain
68
69
70 Dynamic Analysis Parameters
71 -----
72
73 Dynamic Analysis Mode:
74     1. Impact
75     2. Ground Acceleration
76     3. Impulse
77
78 Newmark Beta Factor:
79     0.25: Constant Acceleration
80     1/6: Linear Acceleration
81
82 Modal Factors   : Vibration modes to be considered for Rayleigh Damping
83
84 Damping Factors : Corresponding damping ratios for the above vibration modes
85
86 Ground Acceleration directions:
87     1: Acceleration applied in that direction
88     0: Acceleration not applied in that direction
89
90
91 Steel Fibre Reinforced Concrete
92 -----
93
94 Matrix type:
95     1. Concrete
96     2. Mortar
97
98 Fiber type:
99     1. Hooked
100    2. Straight
101
```

Input Files

**Slab L1C (Oliveira et al. 2004)**

```

1          - - - - -
2          -   V e c T o r   -
3          -   J O B   D A T A   -
4          - - - - -
5
6 Job Title          (30 char max) : VT4SLAB
7 Job File Name     (8 char max)  : VT4SLAB
8 Date              (30 char max) :
9
10 STRUCTURE DATA
11 -----
12 Structure Type    : 4
13 File Name        (8 char max)  : STRUCT
14
15 LOADING DATA
16 -----
17 No. of Load Stages      : 1000
18 Starting Load Stage No. : 1
19 Load Series ID         (5 char max) : I
20
21 Load File Name          Factors
22 Case (8 char max) | Initial   Final   Inc   Typ Rep C-Inc|
23 1      LOAD1          1.00000 1.00000 0.00000 1 1 1.00000
24 2      LOAD2          0.09800 200.00000 0.25000 1 1 1.00000
25 3      LOAD3          1.00000 1.00000 0.00000 1 1 1.00000
26 4      NULL           0.00000 200.00000 0.25000 1 1 1.00000
27 5      NULL           0.00000 0.00000 0.00000 1 1 0.00000
28
29 ANALYSIS PARAMETERS
30 -----
31 Analysis Mode              (1-2) : 1
32 Seed File Name            (8 char max) : NULL
33 Convergence Limit         (>1.0) : 1.000005
34 Averaging Factor          (<1.0) : 0.40
35 Maximum No. of Iterations : 80
36 Convergence Criteria      (1-3) : 2
37 Results File Type         (1-4) : 2
38 Result Output Format       (1-3) : 4
39
40 MATERIAL BEHAVIOUR MODELS
41 -----
42 Concrete Compression Base Curve (0-3) : 1
43 Concrete Compression Post-Peak (0-3) : 1
44 Concrete Compression Softening (0-8) : 1
45 Concrete Tension Stiffening (0-5) : 1
46 Concrete Tension Softening (0-8) : 1
47 Concrete Tension Splitting (1-2) : 1
48 Concrete Confined Strength (0-2) : 1
49 Concrete Dilatation (0-5) : 1
50 Concrete Cracking Criterion (0-4) : 1
51 Concrete Crack Slip Check (0-2) : 1
52 Concrete Crack Width Check (0-2) : 1
53 Concrete Bond or Adhesion (0-4) : 1
54 Concrete Creep and Relaxation (0-1) : 1
55 Concrete Hysteresis (0-3) : 2
56 Reinforcement Hysteresis (0-3) : 1
57 Reinforcement Dowel Action (0-1) : 1
58 Reinforcement Buckling (0-1) : 1
59 Element Strain Histories (0-1) : 1
60 Element Slip Distortions (0-4) : 1
61 Strain Rate Effects (0-1) : 1
62 Structural Damping (0-1) : 1
63 Geometric Nonlinearity (0-1) : 1
64 Crack Allocation Process (0-1) : 1
65
66

```

```

67
68 ANALYSIS PARAMETERS:
69 -----
70 1. INTEGRATION SCHEME:
71     1. Selective (Bending - 3 ; Shear - 2)
72     2. Full      (Bending - 3 ; Shear - 3)
73     3. Reduced  (Bending - 2 ; Shear - 2)
74
75 2. CONVERGENCE CRITERIA:
76     1. Displacements - Weighted Average
77     2. Displacements - Maximum Value
78     3. Secant Moduli - RMS
79
80 3. RESULTS FILE TYPE:
81     1. ASCII and Binary Files
82     2. ASCII Files Only
83     3. Binary Files Only
84     4. Last Load Stage Only
85
86 4. RESULTS OUTPUT FORMAT
87     Print concrete strains and stresses of:
88     1. All layers at all gauss points
89     2. Top and bottom layers at all gauss points
90     3. All layers for central gauss point only
91
92 MATERIAL BEHAVIOUR MODELS:
93 -----
94 1. OUT-OF-PLANE SHEAR:
95     0. Shear Not Considered
96     1. Considered - Uniform Shear Strain
97
98 2. GEOMETRIC NONLINEARITY:
99     0. Neglect Effect
100    1. Consider Effect
101
102 3. LOAD HISTORY:
103     0. Neglect Previous Loading Effects
104     1. Consider Previous Loading Effects
105
106 4. CONCRETE COMPRESSION BASE CURVE:
107     0. Linear Elastic
108     1. Normal (Parabolic)
109     2. High Strength
110
111 5. CONCRETE COMPRESSION SOFTENING:
112     0. Neglect Effect
113     1. Vecchio-Collins 1982 Model
114     2. Vecchio-Collins 1986 Model
115     3. Vecchio 1992-A Model
116     4. Vecchio 1992-B Model
117
118 6. CONCRETE TENSION STIFFENING:
119     0. Neglect Effect
120     1. Vecchio-Collins 1982 Model
121     2. Collins-Mitchell Model
122     3. Izumo, Maekawa et al Model
123
124 7. CONCRETE TENSION SOFTENING:
125     0. Neglect Effect
126     1. Linear Softening
127     2. Linear Softening + 10% Residual Stress
128     3. 10% Residual Stress Only
129     4. Yamamoto Model (Base Curve Only)
130     5. Yamamoto Model (Strain Hardening Considered)
131
132 8. CONCRETE STRENGTH ENHANCEMENT:

```

133           0. Biaxial Effects Neglected  
134           1. Biaxial Effects Considered  
135  
136    9. CONCRETE PLASTIC STRAINS:  
137           0. Neglect Effects  
138           1. Consider Effects  
139  
140   10. CONCRETE CRACK SLIP CHECK:  
141           0. Omit Check  
142           1. Perform Check  
143  
144   11. REINFORCEMENT STRESS RESPONSE:  
145           0. Linear Elastic  
146           1. Elastic-Plastic  
147           2. Strain Haredening Considered  
148           3. Bauschinger Effects Considered  
149  
150   12. SPLITTING FAILURE CRITERIA:  
151           0. Neglect Effects  
152           1. Consider Effects  
153  
154   NOTES:  
155   -----  
156   1. This program uses metric units only.  
157  
158   2. Do not insert or delete any line.  
159

```

1          - - - - -
2          -   S T R U C T U R E   -
3          -           D A T A     -
4          -           Version 1.0  -
5          - - - - -
6
7          STRUCTURAL PARAMETERS
8          -----
9
10         Structure title           (30 char. max.) : SLAB
11         Structure file name       (8 char. max.) : STRUCT
12         No. of reinforced concrete material types : 2
13         No. of truss element material types      : 0
14         No. of bond material types              : 0
15         No. of shell elements                 : 436
16         No. of solid elements                 : 0
17         No. of truss elements                 : 0
18         No. of link elements                 : 0
19         No. of nodal points                   : 1833
20         No. of nodes with prescribed d.o.f.    : 104
21
22
23         MATERIAL SPECIFICATIONS
24         -----
25
26         (A) GENERAL
27         <-----SHELL----->          SHELL SOLID <-----SHELL SHEAR REINFORCEMENT----->
28         MAT REF OOP   T   OS   CON REIN REIN DiaZ ROZ   Fyz   Fuz   Esz   eshz
29         euz Agg   clrT clrB Sx   Sy   Sz
30         TYP TYP SSM   (mm) (mm) LYR COMP COMP (mm) (%) (MPa) (MPa) (MPa) (mm/m)
31         (mm/m) (mm) (mm) (mm) (mm) (mm) (mm)
32         1 1 0 130 0 20 4 0 8 0 580 680 200000 2.5 54.3 16 0 0 0 0 130
33         2 1 0 130 0 20 4 0 8 10 580 680 200000 2.5 54.3 16 0 0 0 0 130
34         /
35         (B) CONCRETE
36         -----
37         MAT   f'c   f't   Ec   e'c   Mu   Cc   kc   Density
38         TYP (MPa) (MPa) (MPa) (mm/m) (/C) (mm^2/hr) (kg/m^3)
39         1 59 0 34400 3.430232558 0 0 0 2400
40         2 118 0 34400 6.8604651 0 0 0 2400
41         /
42         (C) SMEARED REINFORCEMENT FOR SHELLS (Total no of input lines must be the same as the
43         number listed under SHELL REIN COMP)
44         -----
45         MAT REF DIR   d   DIA   As   Fy   Fu   Es   esh   eu   Cs   Dep   b/t
46         TYP (1-6) (deg) (mm) (mm) (mm^2/m) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)
47         1 1.00 0.00 16.75 12.50 1203.12218 749.00 903.00 234000.00 3.21
48         66.00 0.00 0.00 0/
49         1 1.00 90.00 29.25 12.50 1048.88 749.00 903.00 234000.00 3.21 66.00
50         0.00 0.00 0/
51         1 1.00 90.00 110.05 6.30 148.44 641.00 799.00 217000.00 2.96 47.60
52         0.00 0.00 0/
53         1 1.00 0.00 116.35 6.30 148.44 641.00 799.00 217000.00 2.96 47.60
54         0.00 0.00 0/
55         2 1.00 0.00 16.75 12.50 1203.12218 749.00 903.00 234000.00 3.21
56         66.00 0.00 0.00 0/
57         2 1.00 90.00 29.25 12.50 1048.88 749.00 903.00 234000.00 3.21 66.00
58         0.00 0.00 0/
59         2 1.00 90.00 110.05 6.30 148.44 641.00 799.00 217000.00 2.96 47.60
60         0.00 0.00 0/
61         2 1.00 0.00 116.35 6.30 148.44 641.00 799.00 217000.00 2.96 47.60
62         0.00 0.00 0/
63         /
64         (D) SMEARED REINFORCEMENT FOR SOLIDS (Total no of input lines must be the same as the
65         number listed under SOLID REIN COMP)
66         -----

```

```

55 MAT SRF ORIENT. RHO Db Fy Fu [Es esh eu Cs Dep b/t]
56 TYP TYP k l m % mm MPa MPa MPa me me /C me
57 /
58 (E) STEEL FOR TRUSS ELEMENTS
59 -----
60 <NOTE:> TO BE USED FOR TRUSS ELEMENTS ONLY
61 MAT REF OS DIA As Fy Fu Es esh eu Cs Dep b/t
62 TYP (1-6) (mm) (mm) (mm2) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)
63 /
64 (F) BOND
65 -----
66 <NOTE:> TO BE USED FOR EXTERIOR/INTERIOR BONDED ELEMENTS
67 MAT REF { Ao U1 U2 U3 S1 S2 S3 }/{ CPF Cmin No. HOOK }
68 TYP TYP mm^2 MPa MPa MPa mm mm mm 0-1 mm LYR 0/1
69 /
70 ELEMENT INCIDENCES
71 -----
72
73 (A) HETEROSIS ELEMENTS
74 -----
75 <<<< FORMAT >>>> (counterclockwise direction)
76 ELMT INC1 INC2 INC3 INC4 INC5 INC6 INC7 INC8 <INC9> [#ELMT d(ELMT) d(INC1) d(INC4)] x2 /
77 1 1817 1823 1828 1825 1821 1814 1805 1812 1819/
78 2 1805 1814 1821 1815 1809 1800 1790 1798 1808/
79 3 1824 1818 1809 1815 1821 1826 1830 1827 1822/
80 4 1821 1825 1828 1831 1833 1832 1830 1826 1829/
81 5 1803 1810 1817 1812 1805 1796 1787 1794 1804/
82 6 1786 1795 1803 1794 1787 1774 1762 1773 1785/
83 7 1824 1820 1816 1807 1797 1802 1809 1818 1813/
84 8 1763 1775 1786 1773 1762 1747 1733 1748 1761/
85 9 1816 1811 1806 1793 1780 1789 1797 1807 1801/
86 10 1736 1751 1763 1748 1733 1713 1698 1715 1731/
87 11 1790 1800 1809 1802 1797 1783 1771 1781 1792/
88 12 1805 1798 1790 1779 1767 1777 1787 1796 1788/
89 13 1703 1719 1736 1715 1698 1681 1662 1683 1699/
90 14 1806 1799 1791 1778 1759 1770 1780 1793 1784/
91 15 1671 1687 1703 1683 1662 1644 1626 1650 1667/
92 16 1791 1782 1772 1757 1739 1750 1759 1778 1768/
93 17 1636 1653 1671 1650 1626 1603 1581 1608 1631/
94 18 1772 1764 1753 1732 1711 1726 1739 1757 1744/
95 19 1592 1615 1636 1608 1581 1554 1528 1561 1586/
96 20 1540 1565 1592 1561 1528 1497 1473 1504 1535/
97 21 1753 1741 1727 1709 1682 1696 1711 1732 1722/
98 22 1486 1513 1540 1504 1473 1445 1422 1450 1480/
99 23 1727 1716 1705 1680 1655 1670 1682 1709 1694/
100 24 1436 1460 1486 1450 1422 1399 1372 1403 1430/
101 25 1388 1409 1436 1403 1372 1350 1324 1355 1380/
102 26 1507 1506 1505 1457 1415 1416 1418 1462 1459/
103 27 950 951 953 897 840 838 836 890 891/
104 28 1515 1512 1507 1462 1418 1421 1426 1469 1463/
105 29 953 961 967 911 851 846 840 897 903/
106 30 1705 1692 1679 1652 1621 1638 1655 1680 1666/
107 31 1344 1367 1388 1355 1324 1302 1274 1312 1331/
108 32 967 974 979 926 871 863 851 911 917/
109 33 1294 1318 1344 1312 1274 1249 1224 1261 1284/
110 34 979 991 1001 944 892 881 871 926 936/
111 35 1242 1272 1294 1261 1224 1196 1174 1211 1234/
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512 436 895 853 804 758 716 770 827 865 809/
513 /
514 (B1) AUTO GENERATE SOLID ELEMENTS & COORDINATES FOR PRIMARY STRUCTURAL ELEMENT (BEAM OR
SLAB)
515 -----

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-----
516 <<<<< FORMAT >>>>> (Xi, Yi, & Zi must be in increasing order)(Total solid elements
generated = Sum of NElemX x Sum of NElemY x Sum of NElemZ)(Total solid nodes generated
= (Sum of NElemX +1) x (Sum of NElemY + 1) x (Sum of NElemZ + 1))
517     Xi     NElemX   Yi     NElemY   Zi     NElemZ/
518 /
519 (B2) AUTO GENERATE SOLID ELEMENTS, COORDINATES & MAT TYPES FOR EXTENSIONS TO BEAM OR
SLAB (EG: LOAD PLATES, COLUMN STUBS OR T-BEAM FLANGES, ETC)
520 -----
521 <<<<< FORMAT >>>>> (Existing coords -> X1,Y1,Z1,X2,Y2,Z2) (Length can be + or - for new
coords)
522     X1     Y1     Z1     X2     Y2     Z2     Length  NElem  Mat/
523 /
524 (B3) SOLID ELEMENTS
525 -----
526 <<<<< FORMAT >>>>> (Note that element no must follow the last shell element no)
527 ELMT INC1 INC2 INC3 INC4 INC5 INC6 INC7 INC8 [#ELMT d(ELMT) d(INC)-Xdir] [#ELMT d(ELMT)
d(INC)-Ydir] [#ELMT d(ELMT) d(INC)-Zdir]/
528 /
529 (C1) AUTO GENERATE TRUSS ELEMENTS & MATERIAL ASSIGNMENTS
530 -----
531 <<<<< FORMAT >>>>> <X2 > X1, or Y2 > Y1, etc>
532 Mat     X1     Y1     Z1     X2     Y2     Z2     NRBarX     SpacX     NRBarY
SpacY     NRBarZ     SpacZ/
533 /
534 (C2) TRUSS ELEMENTS
535 -----
536 <<<<< FORMAT >>>>>
537 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC)] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC)
]/
538 /
539 (C3) AUTO GENERATE SPRING SUPPORT ELEMENTS, MATERIAL ASSIGNMENTS, COORDINATES, &
RESTRAINTS
540 -----
--
541 <<<<< FORMAT >>>>>
542 Mat Length X1     Y1     Z1     X2     Y2     Z2 [ NX     SX     NY     SY
NZ     SZ] /
543 /
544 (D1) LINK ELEMENTS
545 -----
546 <<<<< FORMAT >>>>>
547 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC)] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC) ]/
548 /
549 MATERIAL AND ELEMENT TYPE ASSIGNMENT
550 -----
551
552 <<<<< FORMAT >>>>> (ETYPE=1 for shell, ETYPE=2 for solid, ETYPE=3 for frame or truss)
Elmt No. MUST be in ascending order
553 ELMT MAT ETYPE [#ELMT d(ELMT)]-Xdir [#ELMT d(ELMT)]-Ydir [#ELMT d(ELMT)]-Zdir/
554 1 1 1/
555 2 1 1/
556 3 1 1/
557 4 1 1/
558 5 1 1/
559 6 1 1/
560 7 1 1/
561 8 1 1/
562 9 1 1/
563 10 1 1/
564 11 1 1/
565 12 1 1/
566 13 1 1/
567 14 1 1/
568 15 1 1/

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569 16 1 1/  
570 17 1 1/  
571 18 1 1/  
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573 20 1 1/  
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575 22 1 1/  
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589 36 1 1/  
590 37 1 1/  
591 38 1 1/  
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627 74 1 1/  
628 75 1 1/  
629 76 1 1/  
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634 81 1 1/



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667 114 1 1/  
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670 117 1 1/  
671 118 1 1/  
672 119 1 1/  
673 120 1 1/  
674 121 1 1/  
675 122 2 1/  
676 123 2 1/  
677 124 1 1/  
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679 126 1 1/  
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696 143 1 1/  
697 144 1 1/  
698 145 1 1/  
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706 153 2 1/  
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 990 /

COORDINATES

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994 <<<<< FORMAT >>>>> (units = mm)  
 995 TOP or C/L <BOT>  
 996 NODE TYPE X Y Z <X Y Z> [#NODE d(NODE) d(X) d(Y) d(Z)]-Xdir [#NODE  
 d(NODE) d(X) d(Y) d(Z)]-Ydir [#NODE d(NODE) d(X) d(Y) d(Z)]-Zdir  
 997 1 1 840.000 1140.000 65.000 840.000 1140.000 -65.000/  
 998 2 1 815.294 1140.000 65.000 815.294 1140.000 -65.000/  
 999 3 1 840.000 1115.217 65.000 840.000 1115.217 -65.000/  
 1000 4 1 815.408 1115.504 65.000 815.408 1115.504 -65.000/  
 1001 5 1 790.588 1140.000 65.000 790.588 1140.000 -65.000/  
 1002 6 1 840.000 1090.435 65.000 840.000 1090.435 -65.000/  
 1003 7 1 815.521 1091.007 65.000 815.521 1091.007 -65.000/  
 1004 8 1 790.815 1115.790 65.000 790.815 1115.790 -65.000/  
 1005 9 1 791.042 1091.580 65.000 791.042 1091.580 -65.000/  
 1006 10 1 765.882 1140.000 65.000 765.882 1140.000 -65.000/  
 1007 11 1 840.000 1065.652 65.000 840.000 1065.652 -65.000/  
 1008 12 1 815.667 1066.399 65.000 815.667 1066.399 -65.000/  
 1009 13 1 766.176 1115.846 65.000 766.176 1115.846 -65.000/  
 1010 14 1 791.333 1067.145 65.000 791.333 1067.145 -65.000/  
 1011 15 1 766.469 1091.693 65.000 766.469 1091.693 -65.000/  
 1012 16 1 741.176 1140.000 65.000 741.176 1140.000 -65.000/  
 1013 17 1 840.000 1040.870 65.000 840.000 1040.870 -65.000/  
 1014 18 1 815.813 1041.790 65.000 815.813 1041.790 -65.000/  
 1015 19 1 741.537 1115.903 65.000 741.537 1115.903 -65.000/  
 1016 20 1 766.875 1067.409 65.000 766.875 1067.409 -65.000/  
 1017 21 1 791.625 1042.710 65.000 791.625 1042.710 -65.000/  
 1018 22 1 741.897 1091.805 65.000 741.897 1091.805 -65.000/  
 1019 23 1 767.281 1043.126 65.000 767.281 1043.126 -65.000/  
 1020 24 1 742.417 1067.673 65.000 742.417 1067.673 -65.000/  
 1021 25 1 716.471 1140.000 65.000 716.471 1140.000 -65.000/  
 1022 26 1 840.000 1016.087 65.000 840.000 1016.087 -65.000/  
 1023 27 1 815.975 1017.056 65.000 815.975 1017.056 -65.000/  
 1024 28 1 716.817 1115.977 65.000 716.817 1115.977 -65.000/  
 1025 29 1 791.951 1018.025 65.000 791.951 1018.025 -65.000/  
 1026 30 1 717.164 1091.953 65.000 717.164 1091.953 -65.000/  
 1027 31 1 742.937 1043.541 65.000 742.937 1043.541 -65.000/  
 1028 32 1 767.769 1018.577 65.000 767.769 1018.577 -65.000/  
 1029 33 1 717.716 1067.754 65.000 717.716 1067.754 -65.000/

1030	34	1	691.765	1140.000	65.000	691.765	1140.000	-65.000/
1031	35	1	840.000	991.304	65.000	840.000	991.304	-65.000/
1032	36	1	816.138	992.322	65.000	816.138	992.322	-65.000/
1033	37	1	692.098	1116.050	65.000	692.098	1116.050	-65.000/
1034	38	1	792.277	993.340	65.000	792.277	993.340	-65.000/
1035	39	1	743.586	1019.129	65.000	743.586	1019.129	-65.000/
1036	40	1	692.432	1092.101	65.000	692.432	1092.101	-65.000/
1037	41	1	718.269	1043.555	65.000	718.269	1043.555	-65.000/
1038	42	1	768.256	994.028	65.000	768.256	994.028	-65.000/
1039	43	1	693.016	1067.835	65.000	693.016	1067.835	-65.000/
1040	44	1	718.960	1019.145	65.000	718.960	1019.145	-65.000/
1041	45	1	667.059	1140.000	65.000	667.059	1140.000	-65.000/
1042	46	1	840.000	966.522	65.000	840.000	966.522	-65.000/
1043	47	1	744.235	994.716	65.000	744.235	994.716	-65.000/
1044	48	1	816.304	967.577	65.000	816.304	967.577	-65.000/
1045	49	1	667.236	1116.016	65.000	667.236	1116.016	-65.000/
1046	50	1	693.600	1043.569	65.000	693.600	1043.569	-65.000/
1047	51	1	792.608	968.631	65.000	792.608	968.631	-65.000/
1048	52	1	667.413	1092.031	65.000	667.413	1092.031	-65.000/
1049	53	1	768.676	969.262	65.000	768.676	969.262	-65.000/
1050	54	1	667.923	1067.575	65.000	667.923	1067.575	-65.000/
1051	55	1	719.650	994.735	65.000	719.650	994.735	-65.000/
1052	56	1	694.333	1019.161	65.000	694.333	1019.161	-65.000/
1053	57	1	744.745	969.892	65.000	744.745	969.892	-65.000/
1054	58	1	668.432	1043.119	65.000	668.432	1043.119	-65.000/
1055	59	1	642.353	1140.000	65.000	642.353	1140.000	-65.000/
1056	60	1	840.000	941.739	65.000	840.000	941.739	-65.000/
1057	61	1	816.469	942.831	65.000	816.469	942.831	-65.000/
1058	62	1	642.374	1115.981	65.000	642.374	1115.981	-65.000/
1059	63	1	792.939	943.922	65.000	792.939	943.922	-65.000/
1060	64	1	642.394	1091.961	65.000	642.394	1091.961	-65.000/
1061	65	1	695.066	994.753	65.000	695.066	994.753	-65.000/
1062	66	1	769.097	944.495	65.000	769.097	944.495	-65.000/
1063	67	1	720.187	969.995	65.000	720.187	969.995	-65.000/
1064	68	1	669.098	1018.685	65.000	669.098	1018.685	-65.000/
1065	69	1	642.829	1067.316	65.000	642.829	1067.316	-65.000/
1066	70	1	745.255	945.068	65.000	745.255	945.068	-65.000/
1067	71	1	643.264	1042.670	65.000	643.264	1042.670	-65.000/
1068	72	1	617.647	1140.000	65.000	617.647	1140.000	-65.000/
1069	73	1	695.628	970.099	65.000	695.628	970.099	-65.000/
1070	74	1	840.000	916.957	65.000	840.000	916.957	-65.000/
1071	75	1	816.609	917.845	65.000	816.609	917.845	-65.000/
1072	76	1	617.324	1115.829	65.000	617.324	1115.829	-65.000/
1073	77	1	669.765	994.251	65.000	669.765	994.251	-65.000/
1074	78	1	793.219	918.733	65.000	793.219	918.733	-65.000/
1075	79	1	617.002	1091.658	65.000	617.002	1091.658	-65.000/
1076	80	1	720.723	945.256	65.000	720.723	945.256	-65.000/
1077	81	1	643.864	1018.209	65.000	643.864	1018.209	-65.000/
1078	82	1	769.500	919.223	65.000	769.500	919.223	-65.000/
1079	83	1	617.078	1067.163	65.000	617.078	1067.163	-65.000/
1080	84	1	745.782	919.712	65.000	745.782	919.712	-65.000/
1081	85	1	670.243	969.633	65.000	670.243	969.633	-65.000/
1082	86	1	696.191	945.444	65.000	696.191	945.444	-65.000/
1083	87	1	617.153	1042.668	65.000	617.153	1042.668	-65.000/
1084	88	1	644.464	993.748	65.000	644.464	993.748	-65.000/
1085	89	1	592.941	1140.000	65.000	592.941	1140.000	-65.000/
1086	90	1	840.000	892.174	65.000	840.000	892.174	-65.000/
1087	91	1	816.749	892.859	65.000	816.749	892.859	-65.000/
1088	92	1	592.275	1115.677	65.000	592.275	1115.677	-65.000/
1089	93	1	721.390	920.121	65.000	721.390	920.121	-65.000/
1090	94	1	793.498	893.544	65.000	793.498	893.544	-65.000/
1091	95	1	591.609	1091.354	65.000	591.609	1091.354	-65.000/
1092	96	1	617.659	1018.124	65.000	617.659	1018.124	-65.000/
1093	97	1	769.904	893.950	65.000	769.904	893.950	-65.000/
1094	98	1	670.721	945.016	65.000	670.721	945.016	-65.000/
1095	99	1	591.326	1067.010	65.000	591.326	1067.010	-65.000/

1096	100	1	644.857	969.167	65.000	644.857	969.167	-65.000/
1097	101	1	696.997	920.529	65.000	696.997	920.529	-65.000/
1098	102	1	746.309	894.357	65.000	746.309	894.357	-65.000/
1099	103	1	618.164	993.580	65.000	618.164	993.580	-65.000/
1100	104	1	591.042	1042.666	65.000	591.042	1042.666	-65.000/
1101	105	1	568.235	1140.000	65.000	568.235	1140.000	-65.000/
1102	106	1	722.057	894.985	65.000	722.057	894.985	-65.000/
1103	107	1	840.000	867.391	65.000	840.000	867.391	-65.000/
1104	108	1	816.899	867.664	65.000	816.899	867.664	-65.000/
1105	109	1	567.038	1115.815	65.000	567.038	1115.815	-65.000/
1106	110	1	645.251	944.587	65.000	645.251	944.587	-65.000/
1107	111	1	793.798	867.936	65.000	793.798	867.936	-65.000/
1108	112	1	591.454	1018.039	65.000	591.454	1018.039	-65.000/
1109	113	1	671.615	920.183	65.000	671.615	920.183	-65.000/
1110	114	1	565.840	1091.629	65.000	565.840	1091.629	-65.000/
1111	115	1	618.679	968.953	65.000	618.679	968.953	-65.000/
1112	116	1	770.332	867.641	65.000	770.332	867.641	-65.000/
1113	117	1	697.804	895.614	65.000	697.804	895.614	-65.000/
1114	118	1	565.019	1067.622	65.000	565.019	1067.622	-65.000/
1115	119	1	746.866	867.347	65.000	746.866	867.347	-65.000/
1116	120	1	591.865	993.413	65.000	591.865	993.413	-65.000/
1117	121	1	564.197	1043.615	65.000	564.197	1043.615	-65.000/
1118	122	1	646.232	919.838	65.000	646.232	919.838	-65.000/
1119	123	1	619.193	944.326	65.000	619.193	944.326	-65.000/
1120	124	1	722.704	868.742	65.000	722.704	868.742	-65.000/
1121	125	1	543.529	1140.000	65.000	543.529	1140.000	-65.000/
1122	126	1	672.509	895.351	65.000	672.509	895.351	-65.000/
1123	127	1	840.000	842.609	65.000	840.000	842.609	-65.000/
1124	128	1	817.049	842.468	65.000	817.049	842.468	-65.000/
1125	129	1	541.801	1115.952	65.000	541.801	1115.952	-65.000/
1126	130	1	564.690	1018.775	65.000	564.690	1018.775	-65.000/
1127	131	1	592.500	968.739	65.000	592.500	968.739	-65.000/
1128	132	1	794.098	842.328	65.000	794.098	842.328	-65.000/
1129	133	1	540.072	1091.905	65.000	540.072	1091.905	-65.000/
1130	134	1	698.543	870.138	65.000	698.543	870.138	-65.000/
1131	135	1	770.760	841.332	65.000	770.760	841.332	-65.000/
1132	136	1	538.712	1068.235	65.000	538.712	1068.235	-65.000/
1133	137	1	565.182	993.935	65.000	565.182	993.935	-65.000/
1134	138	1	620.158	919.533	65.000	620.158	919.533	-65.000/
1135	139	1	647.214	895.089	65.000	647.214	895.089	-65.000/
1136	140	1	747.422	840.337	65.000	747.422	840.337	-65.000/
1137	141	1	593.135	944.065	65.000	593.135	944.065	-65.000/
1138	142	1	673.356	870.272	65.000	673.356	870.272	-65.000/
1139	143	1	537.352	1044.565	65.000	537.352	1044.565	-65.000/
1140	144	1	723.352	842.499	65.000	723.352	842.499	-65.000/
1141	145	1	518.824	1140.000	65.000	518.824	1140.000	-65.000/
1142	146	1	840.000	817.826	65.000	840.000	817.826	-65.000/
1143	147	1	565.829	969.099	65.000	565.829	969.099	-65.000/
1144	148	1	817.189	816.917	65.000	817.189	816.917	-65.000/
1145	149	1	516.617	1116.422	65.000	516.617	1116.422	-65.000/
1146	150	1	537.925	1019.511	65.000	537.925	1019.511	-65.000/
1147	151	1	699.282	844.662	65.000	699.282	844.662	-65.000/
1148	152	1	794.379	816.007	65.000	794.379	816.007	-65.000/
1149	153	1	621.123	894.740	65.000	621.123	894.740	-65.000/
1150	154	1	514.410	1092.843	65.000	514.410	1092.843	-65.000/
1151	155	1	594.084	919.228	65.000	594.084	919.228	-65.000/
1152	156	1	648.170	870.407	65.000	648.170	870.407	-65.000/
1153	157	1	771.545	813.088	65.000	771.545	813.088	-65.000/
1154	158	1	538.499	994.458	65.000	538.499	994.458	-65.000/
1155	159	1	511.543	1070.063	65.000	511.543	1070.063	-65.000/
1156	160	1	566.476	944.263	65.000	566.476	944.263	-65.000/
1157	161	1	674.204	845.193	65.000	674.204	845.193	-65.000/
1158	162	1	748.711	810.168	65.000	748.711	810.168	-65.000/
1159	163	1	508.676	1047.282	65.000	508.676	1047.282	-65.000/
1160	164	1	724.248	814.339	65.000	724.248	814.339	-65.000/
1161	165	1	539.158	969.460	65.000	539.158	969.460	-65.000/



1162	166	1	494.118	1140.000	65.000	494.118	1140.000	-65.000/
1163	167	1	595.033	894.391	65.000	595.033	894.391	-65.000/
1164	168	1	840.000	793.043	65.000	840.000	793.043	-65.000/
1165	169	1	621.921	870.092	65.000	621.921	870.092	-65.000/
1166	170	1	491.433	1116.891	65.000	491.433	1116.891	-65.000/
1167	171	1	817.329	791.365	65.000	817.329	791.365	-65.000/
1168	172	1	510.210	1021.292	65.000	510.210	1021.292	-65.000/
1169	173	1	699.785	818.509	65.000	699.785	818.509	-65.000/
1170	174	1	649.125	845.725	65.000	649.125	845.725	-65.000/
1171	175	1	567.324	919.316	65.000	567.324	919.316	-65.000/
1172	176	1	794.659	789.686	65.000	794.659	789.686	-65.000/
1173	177	1	488.749	1093.781	65.000	488.749	1093.781	-65.000/
1174	178	1	539.818	944.462	65.000	539.818	944.462	-65.000/
1175	179	1	511.744	995.301	65.000	511.744	995.301	-65.000/
1176	180	1	674.679	819.593	65.000	674.679	819.593	-65.000/
1177	181	1	772.329	784.843	65.000	772.329	784.843	-65.000/
1178	182	1	484.375	1071.891	65.000	484.375	1071.891	-65.000/
1179	183	1	595.672	869.777	65.000	595.672	869.777	-65.000/
1180	184	1	622.719	845.445	65.000	622.719	845.445	-65.000/
1181	185	1	568.171	894.368	65.000	568.171	894.368	-65.000/
1182	186	1	512.409	970.010	65.000	512.409	970.010	-65.000/
1183	187	1	469.412	1140.000	65.000	469.412	1140.000	-65.000/
1184	188	1	750.000	780.000	65.000	750.000	780.000	-65.000/
1185	189	1	480.000	1050.000	65.000	480.000	1050.000	-65.000/
1186	190	1	840.000	768.261	65.000	840.000	768.261	-65.000/
1187	191	1	649.574	820.677	65.000	649.574	820.677	-65.000/
1188	192	1	540.564	919.403	65.000	540.564	919.403	-65.000/
1189	193	1	725.144	786.178	65.000	725.144	786.178	-65.000/
1190	194	1	817.299	767.396	65.000	817.299	767.396	-65.000/
1191	195	1	467.414	1116.940	65.000	467.414	1116.940	-65.000/
1192	196	1	700.288	792.357	65.000	700.288	792.357	-65.000/
1193	197	1	482.495	1023.072	65.000	482.495	1023.072	-65.000/
1194	198	1	794.598	766.531	65.000	794.598	766.531	-65.000/
1195	199	1	465.415	1093.880	65.000	465.415	1093.880	-65.000/
1196	200	1	513.074	944.720	65.000	513.074	944.720	-65.000/
1197	201	1	771.963	763.836	65.000	771.963	763.836	-65.000/
1198	202	1	596.312	845.164	65.000	596.312	845.164	-65.000/
1199	203	1	568.942	869.684	65.000	568.942	869.684	-65.000/
1200	204	1	484.990	996.144	65.000	484.990	996.144	-65.000/
1201	205	1	675.155	793.993	65.000	675.155	793.993	-65.000/
1202	206	1	462.599	1071.366	65.000	462.599	1071.366	-65.000/
1203	207	1	623.359	820.556	65.000	623.359	820.556	-65.000/
1204	208	1	541.310	894.345	65.000	541.310	894.345	-65.000/
1205	209	1	749.329	761.142	65.000	749.329	761.142	-65.000/
1206	210	1	459.783	1048.852	65.000	459.783	1048.852	-65.000/
1207	211	1	724.760	765.101	65.000	724.760	765.101	-65.000/
1208	212	1	485.660	970.561	65.000	485.660	970.561	-65.000/
1209	213	1	650.022	795.629	65.000	650.022	795.629	-65.000/
1210	214	1	513.792	919.794	65.000	513.792	919.794	-65.000/
1211	215	1	444.706	1140.000	65.000	444.706	1140.000	-65.000/
1212	216	1	700.191	769.060	65.000	700.191	769.060	-65.000/
1213	217	1	840.000	743.478	65.000	840.000	743.478	-65.000/
1214	218	1	460.473	1022.772	65.000	460.473	1022.772	-65.000/
1215	219	1	817.268	743.426	65.000	817.268	743.426	-65.000/
1216	220	1	443.394	1116.990	65.000	443.394	1116.990	-65.000/
1217	221	1	794.536	743.375	65.000	794.536	743.375	-65.000/
1218	222	1	569.712	845.000	65.000	569.712	845.000	-65.000/
1219	223	1	442.082	1093.979	65.000	442.082	1093.979	-65.000/
1220	224	1	597.144	820.434	65.000	597.144	820.434	-65.000/
1221	225	1	542.211	869.590	65.000	542.211	869.590	-65.000/
1222	226	1	771.597	742.830	65.000	771.597	742.830	-65.000/
1223	227	1	486.330	944.978	65.000	486.330	944.978	-65.000/
1224	228	1	675.150	770.174	65.000	675.150	770.174	-65.000/
1225	229	1	461.163	996.693	65.000	461.163	996.693	-65.000/
1226	230	1	440.824	1070.841	65.000	440.824	1070.841	-65.000/
1227	231	1	623.999	795.667	65.000	623.999	795.667	-65.000/

1228	232	1	514.510	894.868	65.000	514.510	894.868	-65.000/
1229	233	1	748.658	742.285	65.000	748.658	742.285	-65.000/
1230	234	1	439.567	1047.704	65.000	439.567	1047.704	-65.000/
1231	235	1	724.376	744.024	65.000	724.376	744.024	-65.000/
1232	236	1	650.110	771.288	65.000	650.110	771.288	-65.000/
1233	237	1	460.878	971.178	65.000	460.878	971.178	-65.000/
1234	238	1	487.020	920.185	65.000	487.020	920.185	-65.000/
1235	239	1	570.445	820.330	65.000	570.445	820.330	-65.000/
1236	240	1	700.094	745.764	65.000	700.094	745.764	-65.000/
1237	241	1	438.451	1022.472	65.000	438.451	1022.472	-65.000/
1238	242	1	543.113	844.836	65.000	543.113	844.836	-65.000/
1239	243	1	420.000	1140.000	65.000	420.000	1140.000	-65.000/
1240	244	1	597.976	795.704	65.000	597.976	795.704	-65.000/
1241	245	1	419.490	1117.136	65.000	419.490	1117.136	-65.000/
1242	246	1	840.000	718.696	65.000	840.000	718.696	-65.000/
1243	247	1	817.317	719.204	65.000	817.317	719.204	-65.000/
1244	248	1	515.209	870.101	65.000	515.209	870.101	-65.000/
1245	249	1	794.634	719.713	65.000	794.634	719.713	-65.000/
1246	250	1	418.980	1094.272	65.000	418.980	1094.272	-65.000/
1247	251	1	771.981	720.428	65.000	771.981	720.428	-65.000/
1248	252	1	419.382	1071.562	65.000	419.382	1071.562	-65.000/
1249	253	1	460.593	945.663	65.000	460.593	945.663	-65.000/
1250	254	1	675.146	746.355	65.000	675.146	746.355	-65.000/
1251	255	1	437.336	997.241	65.000	437.336	997.241	-65.000/
1252	256	1	624.191	771.269	65.000	624.191	771.269	-65.000/
1253	257	1	749.329	721.142	65.000	749.329	721.142	-65.000/
1254	258	1	487.710	895.391	65.000	487.710	895.391	-65.000/
1255	259	1	419.783	1048.852	65.000	419.783	1048.852	-65.000/
1256	260	1	724.650	721.597	65.000	724.650	721.597	-65.000/
1257	261	1	543.746	820.226	65.000	543.746	820.226	-65.000/
1258	262	1	650.199	746.946	65.000	650.199	746.946	-65.000/
1259	263	1	571.177	795.660	65.000	571.177	795.660	-65.000/
1260	264	1	436.096	971.794	65.000	436.096	971.794	-65.000/
1261	265	1	460.848	920.782	65.000	460.848	920.782	-65.000/
1262	266	1	515.909	845.334	65.000	515.909	845.334	-65.000/
1263	267	1	416.709	1023.429	65.000	416.709	1023.429	-65.000/
1264	268	1	699.970	722.051	65.000	699.970	722.051	-65.000/
1265	269	1	598.272	771.249	65.000	598.272	771.249	-65.000/
1266	270	1	488.208	870.611	65.000	488.208	870.611	-65.000/
1267	271	1	395.294	1140.000	65.000	395.294	1140.000	-65.000/
1268	272	1	395.586	1117.282	65.000	395.586	1117.282	-65.000/
1269	273	1	817.365	694.982	65.000	817.365	694.982	-65.000/
1270	274	1	840.000	693.913	65.000	840.000	693.913	-65.000/
1271	275	1	794.731	696.052	65.000	794.731	696.052	-65.000/
1272	276	1	395.878	1094.564	65.000	395.878	1094.564	-65.000/
1273	277	1	772.365	698.026	65.000	772.365	698.026	-65.000/
1274	278	1	397.939	1072.282	65.000	397.939	1072.282	-65.000/
1275	279	1	624.384	746.871	65.000	624.384	746.871	-65.000/
1276	280	1	434.856	946.347	65.000	434.856	946.347	-65.000/
1277	281	1	675.011	722.343	65.000	675.011	722.343	-65.000/
1278	282	1	400.000	1050.000	65.000	400.000	1050.000	-65.000/
1279	283	1	750.000	700.000	65.000	750.000	700.000	-65.000/
1280	284	1	413.634	998.006	65.000	413.634	998.006	-65.000/
1281	285	1	461.102	895.901	65.000	461.102	895.901	-65.000/
1282	286	1	544.378	795.616	65.000	544.378	795.616	-65.000/
1283	287	1	516.483	820.765	65.000	516.483	820.765	-65.000/
1284	288	1	724.923	699.169	65.000	724.923	699.169	-65.000/
1285	289	1	571.507	771.235	65.000	571.507	771.235	-65.000/
1286	290	1	488.705	845.831	65.000	488.705	845.831	-65.000/
1287	291	1	650.051	722.635	65.000	650.051	722.635	-65.000/
1288	292	1	411.904	972.716	65.000	411.904	972.716	-65.000/
1289	293	1	394.966	1024.385	65.000	394.966	1024.385	-65.000/
1290	294	1	434.675	921.379	65.000	434.675	921.379	-65.000/
1291	295	1	598.569	746.795	65.000	598.569	746.795	-65.000/
1292	296	1	699.847	698.338	65.000	699.847	698.338	-65.000/
1293	297	1	461.394	871.226	65.000	461.394	871.226	-65.000/

1294	298	1	370.588	1140.000	65.000	370.588	1140.000	-65.000/
1295	299	1	371.123	1117.342	65.000	371.123	1117.342	-65.000/
1296	300	1	624.227	722.484	65.000	624.227	722.484	-65.000/
1297	301	1	817.279	670.308	65.000	817.279	670.308	-65.000/
1298	302	1	371.659	1094.685	65.000	371.659	1094.685	-65.000/
1299	303	1	794.559	671.485	65.000	794.559	671.485	-65.000/
1300	304	1	840.000	669.130	65.000	840.000	669.130	-65.000/
1301	305	1	410.174	947.426	65.000	410.174	947.426	-65.000/
1302	306	1	674.875	698.331	65.000	674.875	698.331	-65.000/
1303	307	1	373.329	1072.342	65.000	373.329	1072.342	-65.000/
1304	308	1	517.057	796.196	65.000	517.057	796.196	-65.000/
1305	309	1	389.932	998.770	65.000	389.932	998.770	-65.000/
1306	310	1	771.871	673.083	65.000	771.871	673.083	-65.000/
1307	311	1	544.741	771.222	65.000	544.741	771.222	-65.000/
1308	312	1	434.494	896.411	65.000	434.494	896.411	-65.000/
1309	313	1	375.000	1050.000	65.000	375.000	1050.000	-65.000/
1310	314	1	489.221	821.304	65.000	489.221	821.304	-65.000/
1311	315	1	749.182	674.682	65.000	749.182	674.682	-65.000/
1312	316	1	571.836	746.811	65.000	571.836	746.811	-65.000/
1313	317	1	461.687	846.550	65.000	461.687	846.550	-65.000/
1314	318	1	724.400	674.241	65.000	724.400	674.241	-65.000/
1315	319	1	649.903	698.324	65.000	649.903	698.324	-65.000/
1316	320	1	387.712	973.637	65.000	387.712	973.637	-65.000/
1317	321	1	598.403	722.334	65.000	598.403	722.334	-65.000/
1318	322	1	409.187	922.482	65.000	409.187	922.482	-65.000/
1319	323	1	370.307	1024.675	65.000	370.307	1024.675	-65.000/
1320	324	1	434.581	871.840	65.000	434.581	871.840	-65.000/
1321	325	1	699.618	673.800	65.000	699.618	673.800	-65.000/
1322	326	1	517.296	771.921	65.000	517.296	771.921	-65.000/
1323	327	1	489.736	796.776	65.000	489.736	796.776	-65.000/
1324	328	1	545.103	746.827	65.000	545.103	746.827	-65.000/
1325	329	1	624.070	698.098	65.000	624.070	698.098	-65.000/
1326	330	1	385.492	948.505	65.000	385.492	948.505	-65.000/
1327	331	1	462.086	822.212	65.000	462.086	822.212	-65.000/
1328	332	1	346.661	1117.403	65.000	346.661	1117.403	-65.000/
1329	333	1	345.882	1140.000	65.000	345.882	1140.000	-65.000/
1330	334	1	347.439	1094.805	65.000	347.439	1094.805	-65.000/
1331	335	1	365.613	999.349	65.000	365.613	999.349	-65.000/
1332	336	1	674.578	673.639	65.000	674.578	673.639	-65.000/
1333	337	1	817.194	645.633	65.000	817.194	645.633	-65.000/
1334	338	1	794.387	646.919	65.000	794.387	646.919	-65.000/
1335	339	1	408.199	897.538	65.000	408.199	897.538	-65.000/
1336	340	1	840.000	644.348	65.000	840.000	644.348	-65.000/
1337	341	1	348.720	1072.403	65.000	348.720	1072.403	-65.000/
1338	342	1	571.576	722.412	65.000	571.576	722.412	-65.000/
1339	343	1	771.376	648.141	65.000	771.376	648.141	-65.000/
1340	344	1	350.000	1050.000	65.000	350.000	1050.000	-65.000/
1341	345	1	748.364	649.363	65.000	748.364	649.363	-65.000/
1342	346	1	434.668	847.269	65.000	434.668	847.269	-65.000/
1343	347	1	649.538	673.478	65.000	649.538	673.478	-65.000/
1344	348	1	598.237	697.872	65.000	598.237	697.872	-65.000/
1345	349	1	723.877	649.313	65.000	723.877	649.313	-65.000/
1346	350	1	362.999	974.360	65.000	362.999	974.360	-65.000/
1347	351	1	383.698	923.585	65.000	383.698	923.585	-65.000/
1348	352	1	489.852	772.620	65.000	489.852	772.620	-65.000/
1349	353	1	345.647	1024.964	65.000	345.647	1024.964	-65.000/
1350	354	1	517.536	747.645	65.000	517.536	747.645	-65.000/
1351	355	1	407.876	873.037	65.000	407.876	873.037	-65.000/
1352	356	1	462.486	797.874	65.000	462.486	797.874	-65.000/
1353	357	1	699.390	649.263	65.000	699.390	649.263	-65.000/
1354	358	1	544.749	722.490	65.000	544.749	722.490	-65.000/
1355	359	1	434.952	823.120	65.000	434.952	823.120	-65.000/
1356	360	1	623.688	673.269	65.000	623.688	673.269	-65.000/
1357	361	1	360.385	949.370	65.000	360.385	949.370	-65.000/
1358	362	1	571.316	698.012	65.000	571.316	698.012	-65.000/
1359	363	1	381.905	898.665	65.000	381.905	898.665	-65.000/

1360	364	1	341.294	999.928	65.000	341.294	999.928	-65.000/
1361	365	1	674.282	648.947	65.000	674.282	648.947	-65.000/
1362	366	1	322.048	1117.428	65.000	322.048	1117.428	-65.000/
1363	367	1	321.176	1140.000	65.000	321.176	1140.000	-65.000/
1364	368	1	322.920	1094.855	65.000	322.920	1094.855	-65.000/
1365	369	1	817.227	620.874	65.000	817.227	620.874	-65.000/
1366	370	1	794.453	622.182	65.000	794.453	622.182	-65.000/
1367	371	1	840.000	619.565	65.000	840.000	619.565	-65.000/
1368	372	1	323.960	1072.428	65.000	323.960	1072.428	-65.000/
1369	373	1	771.818	623.432	65.000	771.818	623.432	-65.000/
1370	374	1	407.552	848.536	65.000	407.552	848.536	-65.000/
1371	375	1	325.000	1050.000	65.000	325.000	1050.000	-65.000/
1372	376	1	749.182	624.682	65.000	749.182	624.682	-65.000/
1373	377	1	489.969	748.463	65.000	489.969	748.463	-65.000/
1374	378	1	462.508	773.740	65.000	462.508	773.740	-65.000/
1375	379	1	597.838	673.060	65.000	597.838	673.060	-65.000/
1376	380	1	517.353	723.236	65.000	517.353	723.236	-65.000/
1377	381	1	649.173	648.632	65.000	649.173	648.632	-65.000/
1378	382	1	358.237	924.672	65.000	358.237	924.672	-65.000/
1379	383	1	338.286	975.082	65.000	338.286	975.082	-65.000/
1380	384	1	724.238	624.508	65.000	724.238	624.508	-65.000/
1381	385	1	435.236	798.971	65.000	435.236	798.971	-65.000/
1382	386	1	381.170	874.234	65.000	381.170	874.234	-65.000/
1383	387	1	544.395	698.153	65.000	544.395	698.153	-65.000/
1384	388	1	320.815	1025.138	65.000	320.815	1025.138	-65.000/
1385	389	1	699.294	624.335	65.000	699.294	624.335	-65.000/
1386	390	1	407.816	824.534	65.000	407.816	824.534	-65.000/
1387	391	1	623.306	648.439	65.000	623.306	648.439	-65.000/
1388	392	1	571.091	673.171	65.000	571.091	673.171	-65.000/
1389	393	1	335.277	950.235	65.000	335.277	950.235	-65.000/
1390	394	1	356.089	899.973	65.000	356.089	899.973	-65.000/
1391	395	1	316.631	1000.276	65.000	316.631	1000.276	-65.000/
1392	396	1	674.145	623.992	65.000	674.145	623.992	-65.000/
1393	397	1	297.435	1117.453	65.000	297.435	1117.453	-65.000/
1394	398	1	462.530	749.606	65.000	462.530	749.606	-65.000/
1395	399	1	298.400	1094.905	65.000	298.400	1094.905	-65.000/
1396	400	1	380.436	849.802	65.000	380.436	849.802	-65.000/
1397	401	1	296.471	1140.000	65.000	296.471	1140.000	-65.000/
1398	402	1	489.957	723.982	65.000	489.957	723.982	-65.000/
1399	403	1	817.260	596.114	65.000	817.260	596.114	-65.000/
1400	404	1	794.520	597.445	65.000	794.520	597.445	-65.000/
1401	405	1	299.200	1072.453	65.000	299.200	1072.453	-65.000/
1402	406	1	435.164	774.860	65.000	435.164	774.860	-65.000/
1403	407	1	840.000	594.783	65.000	840.000	594.783	-65.000/
1404	408	1	772.260	598.722	65.000	772.260	598.722	-65.000/
1405	409	1	517.170	698.827	65.000	517.170	698.827	-65.000/
1406	410	1	750.000	600.000	65.000	750.000	600.000	-65.000/
1407	411	1	300.000	1050.000	65.000	300.000	1050.000	-65.000/
1408	412	1	597.440	648.247	65.000	597.440	648.247	-65.000/
1409	413	1	408.079	800.533	65.000	408.079	800.533	-65.000/
1410	414	1	648.996	623.648	65.000	648.996	623.648	-65.000/
1411	415	1	332.775	925.758	65.000	332.775	925.758	-65.000/
1412	416	1	313.593	975.579	65.000	313.593	975.579	-65.000/
1413	417	1	355.210	875.718	65.000	355.210	875.718	-65.000/
1414	418	1	544.344	673.282	65.000	544.344	673.282	-65.000/
1415	419	1	724.599	599.703	65.000	724.599	599.703	-65.000/
1416	420	1	295.983	1025.312	65.000	295.983	1025.312	-65.000/
1417	421	1	380.679	825.949	65.000	380.679	825.949	-65.000/
1418	422	1	699.198	599.407	65.000	699.198	599.407	-65.000/
1419	423	1	623.077	623.355	65.000	623.077	623.355	-65.000/
1420	424	1	570.867	648.329	65.000	570.867	648.329	-65.000/
1421	425	1	462.341	725.324	65.000	462.341	725.324	-65.000/
1422	426	1	435.092	750.748	65.000	435.092	750.748	-65.000/
1423	427	1	310.556	950.882	65.000	310.556	950.882	-65.000/
1424	428	1	489.945	699.501	65.000	489.945	699.501	-65.000/
1425	429	1	330.273	901.282	65.000	330.273	901.282	-65.000/

1426	430	1	407.955	776.612	65.000	407.955	776.612	-65.000/
1427	431	1	354.332	851.463	65.000	354.332	851.463	-65.000/
1428	432	1	291.967	1000.624	65.000	291.967	1000.624	-65.000/
1429	433	1	674.009	599.036	65.000	674.009	599.036	-65.000/
1430	434	1	516.703	674.041	65.000	516.703	674.041	-65.000/
1431	435	1	272.905	1117.431	65.000	272.905	1117.431	-65.000/
1432	436	1	274.045	1094.861	65.000	274.045	1094.861	-65.000/
1433	437	1	271.765	1140.000	65.000	271.765	1140.000	-65.000/
1434	438	1	275.773	1072.431	65.000	275.773	1072.431	-65.000/
1435	439	1	817.115	571.242	65.000	817.115	571.242	-65.000/
1436	440	1	794.230	572.485	65.000	794.230	572.485	-65.000/
1437	441	1	277.500	1050.000	65.000	277.500	1050.000	-65.000/
1438	442	1	840.000	570.000	65.000	840.000	570.000	-65.000/
1439	443	1	380.922	802.095	65.000	380.922	802.095	-65.000/
1440	444	1	771.608	573.506	65.000	771.608	573.506	-65.000/
1441	445	1	597.157	623.063	65.000	597.157	623.063	-65.000/
1442	446	1	748.986	574.526	65.000	748.986	574.526	-65.000/
1443	447	1	308.189	926.566	65.000	308.189	926.566	-65.000/
1444	448	1	544.294	648.412	65.000	544.294	648.412	-65.000/
1445	449	1	648.819	598.664	65.000	648.819	598.664	-65.000/
1446	450	1	329.251	877.202	65.000	329.251	877.202	-65.000/
1447	451	1	288.901	976.076	65.000	288.901	976.076	-65.000/
1448	452	1	354.335	827.727	65.000	354.335	827.727	-65.000/
1449	453	1	723.899	574.327	65.000	723.899	574.327	-65.000/
1450	454	1	272.768	1025.352	65.000	272.768	1025.352	-65.000/
1451	455	1	434.726	726.666	65.000	434.726	726.666	-65.000/
1452	456	1	462.153	701.042	65.000	462.153	701.042	-65.000/
1453	457	1	407.832	752.690	65.000	407.832	752.690	-65.000/
1454	458	1	489.061	674.800	65.000	489.061	674.800	-65.000/
1455	459	1	570.574	623.052	65.000	570.574	623.052	-65.000/
1456	460	1	698.813	574.127	65.000	698.813	574.127	-65.000/
1457	461	1	622.847	598.271	65.000	622.847	598.271	-65.000/
1458	462	1	380.747	778.364	65.000	380.747	778.364	-65.000/
1459	463	1	305.822	902.251	65.000	305.822	902.251	-65.000/
1460	464	1	285.835	951.528	65.000	285.835	951.528	-65.000/
1461	465	1	328.228	853.123	65.000	328.228	853.123	-65.000/
1462	466	1	516.236	649.256	65.000	516.236	649.256	-65.000/
1463	467	1	268.036	1000.704	65.000	268.036	1000.704	-65.000/
1464	468	1	673.635	573.802	65.000	673.635	573.802	-65.000/
1465	469	1	354.338	803.991	65.000	354.338	803.991	-65.000/
1466	470	1	252.345	1072.408	65.000	252.345	1072.408	-65.000/
1467	471	1	255.000	1050.000	65.000	255.000	1050.000	-65.000/
1468	472	1	249.690	1094.817	65.000	249.690	1094.817	-65.000/
1469	473	1	248.375	1117.408	65.000	248.375	1117.408	-65.000/
1470	474	1	247.059	1140.000	65.000	247.059	1140.000	-65.000/
1471	475	1	816.970	546.371	65.000	816.970	546.371	-65.000/
1472	476	1	596.874	597.878	65.000	596.874	597.878	-65.000/
1473	477	1	793.941	547.524	65.000	793.941	547.524	-65.000/
1474	478	1	840.000	545.217	65.000	840.000	545.217	-65.000/
1475	479	1	283.603	927.374	65.000	283.603	927.374	-65.000/
1476	480	1	543.991	623.041	65.000	543.991	623.041	-65.000/
1477	481	1	770.956	548.289	65.000	770.956	548.289	-65.000/
1478	482	1	304.553	878.380	65.000	304.553	878.380	-65.000/
1479	483	1	434.360	702.584	65.000	434.360	702.584	-65.000/
1480	484	1	407.616	728.893	65.000	407.616	728.893	-65.000/
1481	485	1	648.457	573.476	65.000	648.457	573.476	-65.000/
1482	486	1	747.971	549.053	65.000	747.971	549.053	-65.000/
1483	487	1	264.658	976.222	65.000	264.658	976.222	-65.000/
1484	488	1	461.199	676.489	65.000	461.199	676.489	-65.000/
1485	489	1	327.990	829.505	65.000	327.990	829.505	-65.000/
1486	490	1	380.572	754.632	65.000	380.572	754.632	-65.000/
1487	491	1	249.552	1025.392	65.000	249.552	1025.392	-65.000/
1488	492	1	723.199	548.950	65.000	723.199	548.950	-65.000/
1489	493	1	488.177	650.099	65.000	488.177	650.099	-65.000/
1490	494	1	354.362	780.404	65.000	354.362	780.404	-65.000/
1491	495	1	570.281	597.774	65.000	570.281	597.774	-65.000/

1492	496	1	281.371	903.220	65.000	281.371	903.220	-65.000/
1493	497	1	622.550	572.933	65.000	622.550	572.933	-65.000/
1494	498	1	698.428	548.848	65.000	698.428	548.848	-65.000/
1495	499	1	303.283	854.509	65.000	303.283	854.509	-65.000/
1496	500	1	261.280	951.740	65.000	261.280	951.740	-65.000/
1497	501	1	515.579	623.724	65.000	515.579	623.724	-65.000/
1498	502	1	327.753	805.887	65.000	327.753	805.887	-65.000/
1499	503	1	244.105	1000.784	65.000	244.105	1000.784	-65.000/
1500	504	1	407.399	705.095	65.000	407.399	705.095	-65.000/
1501	505	1	673.261	548.568	65.000	673.261	548.568	-65.000/
1502	506	1	380.505	731.119	65.000	380.505	731.119	-65.000/
1503	507	1	433.337	678.177	65.000	433.337	678.177	-65.000/
1504	508	1	223.371	1117.433	65.000	223.371	1117.433	-65.000/
1505	509	1	224.390	1094.865	65.000	224.390	1094.865	-65.000/
1506	510	1	596.643	572.390	65.000	596.643	572.390	-65.000/
1507	511	1	222.353	1140.000	65.000	222.353	1140.000	-65.000/
1508	512	1	279.855	879.557	65.000	279.855	879.557	-65.000/
1509	513	1	225.945	1072.433	65.000	225.945	1072.433	-65.000/
1510	514	1	543.687	597.671	65.000	543.687	597.671	-65.000/
1511	515	1	259.220	927.683	65.000	259.220	927.683	-65.000/
1512	516	1	460.246	651.935	65.000	460.246	651.935	-65.000/
1513	517	1	354.387	756.816	65.000	354.387	756.816	-65.000/
1514	518	1	817.096	521.521	65.000	817.096	521.521	-65.000/
1515	519	1	227.500	1050.000	65.000	227.500	1050.000	-65.000/
1516	520	1	794.192	522.608	65.000	794.192	522.608	-65.000/
1517	521	1	303.047	830.981	65.000	303.047	830.981	-65.000/
1518	522	1	840.000	520.435	65.000	840.000	520.435	-65.000/
1519	523	1	771.589	523.567	65.000	771.589	523.567	-65.000/
1520	524	1	240.414	976.368	65.000	240.414	976.368	-65.000/
1521	525	1	648.094	548.288	65.000	648.094	548.288	-65.000/
1522	526	1	748.986	524.526	65.000	748.986	524.526	-65.000/
1523	527	1	327.978	782.444	65.000	327.978	782.444	-65.000/
1524	528	1	487.168	624.407	65.000	487.168	624.407	-65.000/
1525	529	1	723.712	524.136	65.000	723.712	524.136	-65.000/
1526	530	1	223.307	1025.323	65.000	223.307	1025.323	-65.000/
1527	531	1	569.951	572.049	65.000	569.951	572.049	-65.000/
1528	532	1	257.160	903.626	65.000	257.160	903.626	-65.000/
1529	533	1	278.339	855.894	65.000	278.339	855.894	-65.000/
1530	534	1	380.438	707.606	65.000	380.438	707.606	-65.000/
1531	535	1	622.253	547.595	65.000	622.253	547.595	-65.000/
1532	536	1	406.399	681.157	65.000	406.399	681.157	-65.000/
1533	537	1	302.812	807.453	65.000	302.812	807.453	-65.000/
1534	538	1	514.923	598.192	65.000	514.923	598.192	-65.000/
1535	539	1	236.724	951.951	65.000	236.724	951.951	-65.000/
1536	540	1	698.438	523.746	65.000	698.438	523.746	-65.000/
1537	541	1	354.387	733.444	65.000	354.387	733.444	-65.000/
1538	542	1	432.314	653.771	65.000	432.314	653.771	-65.000/
1539	543	1	219.113	1000.645	65.000	219.113	1000.645	-65.000/
1540	544	1	328.203	759.001	65.000	328.203	759.001	-65.000/
1541	545	1	673.191	523.321	65.000	673.191	523.321	-65.000/
1542	546	1	255.761	880.052	65.000	255.761	880.052	-65.000/
1543	547	1	458.520	626.276	65.000	458.520	626.276	-65.000/
1544	548	1	278.104	832.457	65.000	278.104	832.457	-65.000/
1545	549	1	543.260	571.707	65.000	543.260	571.707	-65.000/
1546	550	1	596.411	546.903	65.000	596.411	546.903	-65.000/
1547	551	1	234.836	927.992	65.000	234.836	927.992	-65.000/
1548	552	1	198.368	1117.457	65.000	198.368	1117.457	-65.000/
1549	553	1	197.647	1140.000	65.000	197.647	1140.000	-65.000/
1550	554	1	199.089	1094.914	65.000	199.089	1094.914	-65.000/
1551	555	1	817.222	496.672	65.000	817.222	496.672	-65.000/
1552	556	1	794.444	497.692	65.000	794.444	497.692	-65.000/
1553	557	1	199.545	1072.457	65.000	199.545	1072.457	-65.000/
1554	558	1	303.046	784.043	65.000	303.046	784.043	-65.000/
1555	559	1	840.000	495.652	65.000	840.000	495.652	-65.000/
1556	560	1	772.222	498.846	65.000	772.222	498.846	-65.000/
1557	561	1	215.864	976.172	65.000	215.864	976.172	-65.000/

1558	562	1	200.000	1050.000	65.000	200.000	1050.000	-65.000/
1559	563	1	750.000	500.000	65.000	750.000	500.000	-65.000/
1560	564	1	647.945	522.897	65.000	647.945	522.897	-65.000/
1561	565	1	486.158	598.714	65.000	486.158	598.714	-65.000/
1562	566	1	379.462	684.138	65.000	379.462	684.138	-65.000/
1563	567	1	354.387	710.072	65.000	354.387	710.072	-65.000/
1564	568	1	405.399	657.220	65.000	405.399	657.220	-65.000/
1565	569	1	254.361	856.477	65.000	254.361	856.477	-65.000/
1566	570	1	724.224	499.322	65.000	724.224	499.322	-65.000/
1567	571	1	232.949	904.033	65.000	232.949	904.033	-65.000/
1568	572	1	328.269	735.769	65.000	328.269	735.769	-65.000/
1569	573	1	277.870	809.019	65.000	277.870	809.019	-65.000/
1570	574	1	569.621	546.324	65.000	569.621	546.324	-65.000/
1571	575	1	197.061	1025.253	65.000	197.061	1025.253	-65.000/
1572	576	1	212.614	951.698	65.000	212.614	951.698	-65.000/
1573	577	1	514.210	571.719	65.000	514.210	571.719	-65.000/
1574	578	1	622.224	522.089	65.000	622.224	522.089	-65.000/
1575	579	1	429.871	628.146	65.000	429.871	628.146	-65.000/
1576	580	1	698.448	498.644	65.000	698.448	498.644	-65.000/
1577	581	1	303.279	760.632	65.000	303.279	760.632	-65.000/
1578	582	1	194.121	1000.507	65.000	194.121	1000.507	-65.000/
1579	583	1	254.253	833.011	65.000	254.253	833.011	-65.000/
1580	584	1	231.666	880.546	65.000	231.666	880.546	-65.000/
1581	585	1	456.794	600.618	65.000	456.794	600.618	-65.000/
1582	586	1	673.122	498.074	65.000	673.122	498.074	-65.000/
1583	587	1	210.811	927.757	65.000	210.811	927.757	-65.000/
1584	588	1	278.113	785.642	65.000	278.113	785.642	-65.000/
1585	589	1	542.832	545.744	65.000	542.832	545.744	-65.000/
1586	590	1	353.673	686.786	65.000	353.673	686.786	-65.000/
1587	591	1	596.504	521.281	65.000	596.504	521.281	-65.000/
1588	592	1	378.485	660.669	65.000	378.485	660.669	-65.000/
1589	593	1	328.336	712.538	65.000	328.336	712.538	-65.000/
1590	594	1	173.498	1117.438	65.000	173.498	1117.438	-65.000/
1591	595	1	172.941	1140.000	65.000	172.941	1140.000	-65.000/
1592	596	1	174.054	1094.876	65.000	174.054	1094.876	-65.000/
1593	597	1	817.070	471.755	65.000	817.070	471.755	-65.000/
1594	598	1	174.527	1072.438	65.000	174.527	1072.438	-65.000/
1595	599	1	794.139	472.641	65.000	794.139	472.641	-65.000/
1596	600	1	191.313	975.976	65.000	191.313	975.976	-65.000/
1597	601	1	840.000	470.870	65.000	840.000	470.870	-65.000/
1598	602	1	403.129	632.745	65.000	403.129	632.745	-65.000/
1599	603	1	485.161	571.730	65.000	485.161	571.730	-65.000/
1600	604	1	771.486	473.540	65.000	771.486	473.540	-65.000/
1601	605	1	647.796	497.505	65.000	647.796	497.505	-65.000/
1602	606	1	303.473	737.370	65.000	303.473	737.370	-65.000/
1603	607	1	175.000	1050.000	65.000	175.000	1050.000	-65.000/
1604	608	1	748.832	474.438	65.000	748.832	474.438	-65.000/
1605	609	1	230.383	857.060	65.000	230.383	857.060	-65.000/
1606	610	1	254.145	809.545	65.000	254.145	809.545	-65.000/
1607	611	1	209.007	903.817	65.000	209.007	903.817	-65.000/
1608	612	1	570.004	520.451	65.000	570.004	520.451	-65.000/
1609	613	1	723.541	473.976	65.000	723.541	473.976	-65.000/
1610	614	1	278.356	762.264	65.000	278.356	762.264	-65.000/
1611	615	1	172.295	1025.146	65.000	172.295	1025.146	-65.000/
1612	616	1	427.429	602.521	65.000	427.429	602.521	-65.000/
1613	617	1	188.504	951.444	65.000	188.504	951.444	-65.000/
1614	618	1	513.498	545.245	65.000	513.498	545.245	-65.000/
1615	619	1	622.196	496.582	65.000	622.196	496.582	-65.000/
1616	620	1	352.958	663.500	65.000	352.958	663.500	-65.000/
1617	621	1	698.250	473.514	65.000	698.250	473.514	-65.000/
1618	622	1	327.884	689.434	65.000	327.884	689.434	-65.000/
1619	623	1	230.402	833.565	65.000	230.402	833.565	-65.000/
1620	624	1	207.919	880.357	65.000	207.919	880.357	-65.000/
1621	625	1	376.386	637.344	65.000	376.386	637.344	-65.000/
1622	626	1	254.401	786.193	65.000	254.401	786.193	-65.000/
1623	627	1	169.591	1000.292	65.000	169.591	1000.292	-65.000/

1624	628	1	303.667	714.108	65.000	303.667	714.108	-65.000/
1625	629	1	186.785	927.522	65.000	186.785	927.522	-65.000/
1626	630	1	453.062	572.287	65.000	453.062	572.287	-65.000/
1627	631	1	543.504	519.620	65.000	543.504	519.620	-65.000/
1628	632	1	673.101	472.885	65.000	673.101	472.885	-65.000/
1629	633	1	596.596	495.660	65.000	596.596	495.660	-65.000/
1630	634	1	400.858	608.270	65.000	400.858	608.270	-65.000/
1631	635	1	278.677	738.971	65.000	278.677	738.971	-65.000/
1632	636	1	148.627	1117.419	65.000	148.627	1117.419	-65.000/
1633	637	1	148.235	1140.000	65.000	148.235	1140.000	-65.000/
1634	638	1	149.020	1094.838	65.000	149.020	1094.838	-65.000/
1635	639	1	167.083	975.663	65.000	167.083	975.663	-65.000/
1636	640	1	230.421	810.070	65.000	230.421	810.070	-65.000/
1637	641	1	484.164	544.746	65.000	484.164	544.746	-65.000/
1638	642	1	816.917	446.839	65.000	816.917	446.839	-65.000/
1639	643	1	206.830	856.897	65.000	206.830	856.897	-65.000/
1640	644	1	149.510	1072.419	65.000	149.510	1072.419	-65.000/
1641	645	1	840.000	446.087	65.000	840.000	446.087	-65.000/
1642	646	1	793.835	447.590	65.000	793.835	447.590	-65.000/
1643	647	1	647.952	472.257	65.000	647.952	472.257	-65.000/
1644	648	1	770.749	448.233	65.000	770.749	448.233	-65.000/
1645	649	1	150.000	1050.000	65.000	150.000	1050.000	-65.000/
1646	650	1	185.066	903.601	65.000	185.066	903.601	-65.000/
1647	651	1	254.656	762.842	65.000	254.656	762.842	-65.000/
1648	652	1	747.664	448.877	65.000	747.664	448.877	-65.000/
1649	653	1	327.431	666.330	65.000	327.431	666.330	-65.000/
1650	654	1	351.230	640.689	65.000	351.230	640.689	-65.000/
1651	655	1	570.387	494.578	65.000	570.387	494.578	-65.000/
1652	656	1	303.238	691.230	65.000	303.238	691.230	-65.000/
1653	657	1	722.858	448.630	65.000	722.858	448.630	-65.000/
1654	658	1	164.575	951.035	65.000	164.575	951.035	-65.000/
1655	659	1	514.707	518.424	65.000	514.707	518.424	-65.000/
1656	660	1	147.530	1025.039	65.000	147.530	1025.039	-65.000/
1657	661	1	374.286	614.018	65.000	374.286	614.018	-65.000/
1658	662	1	622.368	471.190	65.000	622.368	471.190	-65.000/
1659	663	1	278.999	715.678	65.000	278.999	715.678	-65.000/
1660	664	1	206.796	833.505	65.000	206.796	833.505	-65.000/
1661	665	1	230.689	786.745	65.000	230.689	786.745	-65.000/
1662	666	1	420.963	572.844	65.000	420.963	572.844	-65.000/
1663	667	1	184.171	880.167	65.000	184.171	880.167	-65.000/
1664	668	1	698.052	448.383	65.000	698.052	448.383	-65.000/
1665	669	1	145.060	1000.077	65.000	145.060	1000.077	-65.000/
1666	670	1	254.857	739.725	65.000	254.857	739.725	-65.000/
1667	671	1	163.100	927.158	65.000	163.100	927.158	-65.000/
1668	672	1	544.177	493.496	65.000	544.177	493.496	-65.000/
1669	673	1	673.080	447.696	65.000	673.080	447.696	-65.000/
1670	674	1	596.784	470.123	65.000	596.784	470.123	-65.000/
1671	675	1	449.330	543.957	65.000	449.330	543.957	-65.000/
1672	676	1	395.420	582.465	65.000	395.420	582.465	-65.000/
1673	677	1	206.762	810.113	65.000	206.762	810.113	-65.000/
1674	678	1	326.075	644.035	65.000	326.075	644.035	-65.000/
1675	679	1	302.809	668.351	65.000	302.809	668.351	-65.000/
1676	680	1	183.277	856.734	65.000	183.277	856.734	-65.000/
1677	681	1	230.957	763.420	65.000	230.957	763.420	-65.000/
1678	682	1	142.853	975.351	65.000	142.853	975.351	-65.000/
1679	683	1	349.502	617.879	65.000	349.502	617.879	-65.000/
1680	684	1	485.910	517.228	65.000	485.910	517.228	-65.000/
1681	685	1	123.529	1140.000	65.000	123.529	1140.000	-65.000/
1682	686	1	123.804	1117.395	65.000	123.804	1117.395	-65.000/
1683	687	1	124.079	1094.790	65.000	124.079	1094.790	-65.000/
1684	688	1	278.593	693.025	65.000	278.593	693.025	-65.000/
1685	689	1	817.098	422.164	65.000	817.098	422.164	-65.000/
1686	690	1	794.196	423.023	65.000	794.196	423.023	-65.000/
1687	691	1	161.624	903.281	65.000	161.624	903.281	-65.000/
1688	692	1	124.539	1072.395	65.000	124.539	1072.395	-65.000/
1689	693	1	840.000	421.304	65.000	840.000	421.304	-65.000/



1690	694	1	648.109	447.009	65.000	648.109	447.009	-65.000/
1691	695	1	771.514	423.731	65.000	771.514	423.731	-65.000/
1692	696	1	125.000	1050.000	65.000	125.000	1050.000	-65.000/
1693	697	1	748.832	424.438	65.000	748.832	424.438	-65.000/
1694	698	1	369.876	592.086	65.000	369.876	592.086	-65.000/
1695	699	1	255.057	716.608	65.000	255.057	716.608	-65.000/
1696	700	1	570.640	468.715	65.000	570.640	468.715	-65.000/
1697	701	1	140.646	950.625	65.000	140.646	950.625	-65.000/
1698	702	1	207.104	786.864	65.000	207.104	786.864	-65.000/
1699	703	1	183.190	833.445	65.000	183.190	833.445	-65.000/
1700	704	1	515.917	491.603	65.000	515.917	491.603	-65.000/
1701	705	1	723.642	424.183	65.000	723.642	424.183	-65.000/
1702	706	1	122.852	1024.977	65.000	122.852	1024.977	-65.000/
1703	707	1	160.811	879.779	65.000	160.811	879.779	-65.000/
1704	708	1	622.540	445.797	65.000	622.540	445.797	-65.000/
1705	709	1	231.036	740.479	65.000	231.036	740.479	-65.000/
1706	710	1	698.453	423.927	65.000	698.453	423.927	-65.000/
1707	711	1	301.689	646.079	65.000	301.689	646.079	-65.000/
1708	712	1	324.718	621.740	65.000	324.718	621.740	-65.000/
1709	713	1	278.187	670.372	65.000	278.187	670.372	-65.000/
1710	714	1	139.414	926.793	65.000	139.414	926.793	-65.000/
1711	715	1	120.704	999.953	65.000	120.704	999.953	-65.000/
1712	716	1	414.496	543.168	65.000	414.496	543.168	-65.000/
1713	717	1	453.804	515.219	65.000	453.804	515.219	-65.000/
1714	718	1	346.088	596.220	65.000	346.088	596.220	-65.000/
1715	719	1	544.496	467.307	65.000	544.496	467.307	-65.000/
1716	720	1	183.102	810.157	65.000	183.102	810.157	-65.000/
1717	721	1	254.768	693.769	65.000	254.768	693.769	-65.000/
1718	722	1	207.445	763.614	65.000	207.445	763.614	-65.000/
1719	723	1	673.297	423.030	65.000	673.297	423.030	-65.000/
1720	724	1	596.972	444.585	65.000	596.972	444.585	-65.000/
1721	725	1	389.981	556.660	65.000	389.981	556.660	-65.000/
1722	726	1	159.998	856.276	65.000	159.998	856.276	-65.000/
1723	727	1	487.657	489.710	65.000	487.657	489.710	-65.000/
1724	728	1	118.887	975.311	65.000	118.887	975.311	-65.000/
1725	729	1	138.182	902.961	65.000	138.182	902.961	-65.000/
1726	730	1	231.116	717.537	65.000	231.116	717.537	-65.000/
1727	731	1	98.824	1140.000	65.000	98.824	1140.000	-65.000/
1728	732	1	98.981	1117.371	65.000	98.981	1117.371	-65.000/
1729	733	1	365.466	570.153	65.000	365.466	570.153	-65.000/
1730	734	1	99.138	1094.741	65.000	99.138	1094.741	-65.000/
1731	735	1	817.279	397.489	65.000	817.279	397.489	-65.000/
1732	736	1	794.557	398.456	65.000	794.557	398.456	-65.000/
1733	737	1	648.140	422.132	65.000	648.140	422.132	-65.000/
1734	738	1	840.000	396.522	65.000	840.000	396.522	-65.000/
1735	739	1	99.569	1072.371	65.000	99.569	1072.371	-65.000/
1736	740	1	772.279	399.228	65.000	772.279	399.228	-65.000/
1737	741	1	183.518	786.983	65.000	183.518	786.983	-65.000/
1738	742	1	750.000	400.000	65.000	750.000	400.000	-65.000/
1739	743	1	100.000	1050.000	65.000	100.000	1050.000	-65.000/
1740	744	1	160.107	833.065	65.000	160.107	833.065	-65.000/
1741	745	1	300.570	623.807	65.000	300.570	623.807	-65.000/
1742	746	1	570.894	442.852	65.000	570.894	442.852	-65.000/
1743	747	1	117.070	950.669	65.000	117.070	950.669	-65.000/
1744	748	1	277.304	648.123	65.000	277.304	648.123	-65.000/
1745	749	1	322.300	600.354	65.000	322.300	600.354	-65.000/
1746	750	1	207.714	740.567	65.000	207.714	740.567	-65.000/
1747	751	1	516.817	465.117	65.000	516.817	465.117	-65.000/
1748	752	1	724.427	399.736	65.000	724.427	399.736	-65.000/
1749	753	1	137.451	879.390	65.000	137.451	879.390	-65.000/
1750	754	1	254.479	670.931	65.000	254.479	670.931	-65.000/
1751	755	1	98.174	1024.915	65.000	98.174	1024.915	-65.000/
1752	756	1	622.545	420.739	65.000	622.545	420.739	-65.000/
1753	757	1	342.674	574.561	65.000	342.674	574.561	-65.000/
1754	758	1	421.697	513.209	65.000	421.697	513.209	-65.000/
1755	759	1	698.853	399.471	65.000	698.853	399.471	-65.000/

1756	760	1	230.944	694.513	65.000	230.944	694.513	-65.000/
1757	761	1	116.084	926.850	65.000	116.084	926.850	-65.000/
1758	762	1	160.216	809.854	65.000	160.216	809.854	-65.000/
1759	763	1	183.934	763.809	65.000	183.934	763.809	-65.000/
1760	764	1	96.348	999.830	65.000	96.348	999.830	-65.000/
1761	765	1	458.277	486.480	65.000	458.277	486.480	-65.000/
1762	766	1	357.776	556.372	65.000	357.776	556.372	-65.000/
1763	767	1	373.782	542.653	65.000	373.782	542.653	-65.000/
1764	768	1	136.720	855.819	65.000	136.720	855.819	-65.000/
1765	769	1	544.816	441.119	65.000	544.816	441.119	-65.000/
1766	770	1	389.787	528.935	65.000	389.787	528.935	-65.000/
1767	771	1	673.513	398.363	65.000	673.513	398.363	-65.000/
1768	772	1	207.983	717.521	65.000	207.983	717.521	-65.000/
1769	773	1	596.949	419.347	65.000	596.949	419.347	-65.000/
1770	774	1	489.138	462.926	65.000	489.138	462.926	-65.000/
1771	775	1	115.098	903.030	65.000	115.098	903.030	-65.000/
1772	776	1	276.422	625.873	65.000	276.422	625.873	-65.000/
1773	777	1	298.650	602.298	65.000	298.650	602.298	-65.000/
1774	778	1	94.921	975.271	65.000	94.921	975.271	-65.000/
1775	779	1	253.684	648.623	65.000	253.684	648.623	-65.000/
1776	780	1	319.882	578.968	65.000	319.882	578.968	-65.000/
1777	781	1	160.644	786.707	65.000	160.644	786.707	-65.000/
1778	782	1	74.118	1140.000	65.000	74.118	1140.000	-65.000/
1779	783	1	74.190	1117.363	65.000	74.190	1117.363	-65.000/
1780	784	1	74.263	1094.727	65.000	74.263	1094.727	-65.000/
1781	785	1	648.172	397.255	65.000	648.172	397.255	-65.000/
1782	786	1	772.238	375.792	65.000	772.238	375.792	-65.000/
1783	787	1	137.025	832.685	65.000	137.025	832.685	-65.000/
1784	788	1	794.476	374.085	65.000	794.476	374.085	-65.000/
1785	789	1	817.238	372.912	65.000	817.238	372.912	-65.000/
1786	790	1	184.392	740.656	65.000	184.392	740.656	-65.000/
1787	791	1	750.000	377.500	65.000	750.000	377.500	-65.000/
1788	792	1	840.000	371.739	65.000	840.000	371.739	-65.000/
1789	793	1	74.632	1072.363	65.000	74.632	1072.363	-65.000/
1790	794	1	337.799	558.271	65.000	337.799	558.271	-65.000/
1791	795	1	230.772	671.490	65.000	230.772	671.490	-65.000/
1792	796	1	93.495	950.712	65.000	93.495	950.712	-65.000/
1793	797	1	75.000	1050.000	65.000	75.000	1050.000	-65.000/
1794	798	1	570.994	417.425	65.000	570.994	417.425	-65.000/
1795	799	1	114.382	879.266	65.000	114.382	879.266	-65.000/
1796	800	1	517.717	438.631	65.000	517.717	438.631	-65.000/
1797	801	1	724.385	376.425	65.000	724.385	376.425	-65.000/
1798	802	1	350.085	542.591	65.000	350.085	542.591	-65.000/
1799	803	1	207.793	694.456	65.000	207.793	694.456	-65.000/
1800	804	1	428.898	483.250	65.000	428.898	483.250	-65.000/
1801	805	1	73.611	1025.093	65.000	73.611	1025.093	-65.000/
1802	806	1	622.550	395.682	65.000	622.550	395.682	-65.000/
1803	807	1	161.073	763.560	65.000	161.073	763.560	-65.000/
1804	808	1	137.330	809.552	65.000	137.330	809.552	-65.000/
1805	809	1	395.834	502.629	65.000	395.834	502.629	-65.000/
1806	810	1	92.754	926.906	65.000	92.754	926.906	-65.000/
1807	811	1	698.770	375.349	65.000	698.770	375.349	-65.000/
1808	812	1	275.000	604.241	65.000	275.000	604.241	-65.000/
1809	813	1	357.582	528.647	65.000	357.582	528.647	-65.000/
1810	814	1	460.411	459.524	65.000	460.411	459.524	-65.000/
1811	815	1	184.851	717.504	65.000	184.851	717.504	-65.000/
1812	816	1	296.730	580.788	65.000	296.730	580.788	-65.000/
1813	817	1	113.666	855.503	65.000	113.666	855.503	-65.000/
1814	818	1	252.889	626.314	65.000	252.889	626.314	-65.000/
1815	819	1	317.823	560.171	65.000	317.823	560.171	-65.000/
1816	820	1	72.222	1000.186	65.000	72.222	1000.186	-65.000/
1817	821	1	545.038	415.503	65.000	545.038	415.503	-65.000/
1818	822	1	230.064	649.122	65.000	230.064	649.122	-65.000/
1819	823	1	673.470	374.040	65.000	673.470	374.040	-65.000/
1820	824	1	332.925	541.982	65.000	332.925	541.982	-65.000/
1821	825	1	596.927	394.108	65.000	596.927	394.108	-65.000/

1822	826	1	92.013	903.100	65.000	92.013	903.100	-65.000/
1823	827	1	365.078	514.702	65.000	365.078	514.702	-65.000/
1824	828	1	490.619	436.143	65.000	490.619	436.143	-65.000/
1825	829	1	137.771	786.432	65.000	137.771	786.432	-65.000/
1826	830	1	71.103	975.637	65.000	71.103	975.637	-65.000/
1827	831	1	207.602	671.392	65.000	207.602	671.392	-65.000/
1828	832	1	161.673	740.478	65.000	161.673	740.478	-65.000/
1829	833	1	113.988	832.369	65.000	113.988	832.369	-65.000/
1830	834	1	750.000	355.000	65.000	750.000	355.000	-65.000/
1831	835	1	772.198	352.357	65.000	772.198	352.357	-65.000/
1832	836	1	49.412	1140.000	65.000	49.412	1140.000	-65.000/
1833	837	1	648.171	372.731	65.000	648.171	372.731	-65.000/
1834	838	1	49.400	1117.356	65.000	49.400	1117.356	-65.000/
1835	839	1	794.395	349.713	65.000	794.395	349.713	-65.000/
1836	840	1	49.388	1094.713	65.000	49.388	1094.713	-65.000/
1837	841	1	817.198	348.335	65.000	817.198	348.335	-65.000/
1838	842	1	184.641	694.399	65.000	184.641	694.399	-65.000/
1839	843	1	91.313	879.143	65.000	91.313	879.143	-65.000/
1840	844	1	69.985	951.089	65.000	69.985	951.089	-65.000/
1841	845	1	840.000	346.957	65.000	840.000	346.957	-65.000/
1842	846	1	49.694	1072.356	65.000	49.694	1072.356	-65.000/
1843	847	1	337.479	525.386	65.000	337.479	525.386	-65.000/
1844	848	1	273.578	582.608	65.000	273.578	582.608	-65.000/
1845	849	1	571.094	391.997	65.000	571.094	391.997	-65.000/
1846	850	1	295.191	560.886	65.000	295.191	560.886	-65.000/
1847	851	1	50.000	1050.000	65.000	50.000	1050.000	-65.000/
1848	852	1	518.209	412.783	65.000	518.209	412.783	-65.000/
1849	853	1	401.881	476.322	65.000	401.881	476.322	-65.000/
1850	854	1	724.343	353.114	65.000	724.343	353.114	-65.000/
1851	855	1	251.656	604.516	65.000	251.656	604.516	-65.000/
1852	856	1	315.764	541.373	65.000	315.764	541.373	-65.000/
1853	857	1	138.211	763.311	65.000	138.211	763.311	-65.000/
1854	858	1	431.684	456.122	65.000	431.684	456.122	-65.000/
1855	859	1	114.309	809.236	65.000	114.309	809.236	-65.000/
1856	860	1	229.355	626.755	65.000	229.355	626.755	-65.000/
1857	861	1	162.273	717.396	65.000	162.273	717.396	-65.000/
1858	862	1	622.643	371.068	65.000	622.643	371.068	-65.000/
1859	863	1	49.048	1025.271	65.000	49.048	1025.271	-65.000/
1860	864	1	69.436	927.204	65.000	69.436	927.204	-65.000/
1861	865	1	369.971	492.049	65.000	369.971	492.049	-65.000/
1862	866	1	206.852	648.910	65.000	206.852	648.910	-65.000/
1863	867	1	698.686	351.228	65.000	698.686	351.228	-65.000/
1864	868	1	90.613	855.186	65.000	90.613	855.186	-65.000/
1865	869	1	462.545	432.569	65.000	462.545	432.569	-65.000/
1866	870	1	342.034	508.790	65.000	342.034	508.790	-65.000/
1867	871	1	48.097	1000.541	65.000	48.097	1000.541	-65.000/
1868	872	1	184.431	671.294	65.000	184.431	671.294	-65.000/
1869	873	1	545.261	389.887	65.000	545.261	389.887	-65.000/
1870	874	1	115.086	786.293	65.000	115.086	786.293	-65.000/
1871	875	1	68.888	903.320	65.000	68.888	903.320	-65.000/
1872	876	1	138.953	740.299	65.000	138.953	740.299	-65.000/
1873	877	1	673.428	349.717	65.000	673.428	349.717	-65.000/
1874	878	1	597.116	369.405	65.000	597.116	369.405	-65.000/
1875	879	1	491.379	410.062	65.000	491.379	410.062	-65.000/
1876	880	1	317.377	522.125	65.000	317.377	522.125	-65.000/
1877	881	1	47.285	976.003	65.000	47.285	976.003	-65.000/
1878	882	1	90.950	832.053	65.000	90.950	832.053	-65.000/
1879	883	1	272.560	561.602	65.000	272.560	561.602	-65.000/
1880	884	1	293.653	540.985	65.000	293.653	540.985	-65.000/
1881	885	1	250.424	582.718	65.000	250.424	582.718	-65.000/
1882	886	1	161.971	694.166	65.000	161.971	694.166	-65.000/
1883	887	1	228.312	604.791	65.000	228.312	604.791	-65.000/
1884	888	1	68.400	879.331	65.000	68.400	879.331	-65.000/
1885	889	1	648.169	348.207	65.000	648.169	348.207	-65.000/
1886	890	1	24.706	1140.000	65.000	24.706	1140.000	-65.000/
1887	891	1	24.700	1117.428	65.000	24.700	1117.428	-65.000/

1888	892	1	46.474	951.465	65.000	46.474	951.465	-65.000/
1889	893	1	404.409	450.257	65.000	404.409	450.257	-65.000/
1890	894	1	206.103	626.428	65.000	206.103	626.428	-65.000/
1891	895	1	374.865	469.395	65.000	374.865	469.395	-65.000/
1892	896	1	115.864	763.349	65.000	115.864	763.349	-65.000/
1893	897	1	24.694	1094.856	65.000	24.694	1094.856	-65.000/
1894	898	1	794.311	324.538	65.000	794.311	324.538	-65.000/
1895	899	1	772.156	326.019	65.000	772.156	326.019	-65.000/
1896	900	1	817.156	323.356	65.000	817.156	323.356	-65.000/
1897	901	1	750.000	327.500	65.000	750.000	327.500	-65.000/
1898	902	1	840.000	322.174	65.000	840.000	322.174	-65.000/
1899	903	1	24.847	1072.428	65.000	24.847	1072.428	-65.000/
1900	904	1	139.696	717.288	65.000	139.696	717.288	-65.000/
1901	905	1	571.506	367.203	65.000	571.506	367.203	-65.000/
1902	906	1	434.471	428.995	65.000	434.471	428.995	-65.000/
1903	907	1	91.288	808.920	65.000	91.288	808.920	-65.000/
1904	908	1	518.700	386.934	65.000	518.700	386.934	-65.000/
1905	909	1	345.446	486.571	65.000	345.446	486.571	-65.000/
1906	910	1	183.641	648.697	65.000	183.641	648.697	-65.000/
1907	911	1	25.000	1050.000	65.000	25.000	1050.000	-65.000/
1908	912	1	724.243	326.558	65.000	724.243	326.558	-65.000/
1909	913	1	46.119	927.503	65.000	46.119	927.503	-65.000/
1910	914	1	622.737	346.455	65.000	622.737	346.455	-65.000/
1911	915	1	67.911	855.342	65.000	67.911	855.342	-65.000/
1912	916	1	318.989	502.877	65.000	318.989	502.877	-65.000/
1913	917	1	24.524	1025.556	65.000	24.524	1025.556	-65.000/
1914	918	1	463.711	406.476	65.000	463.711	406.476	-65.000/
1915	919	1	161.669	670.936	65.000	161.669	670.936	-65.000/
1916	920	1	294.492	520.872	65.000	294.492	520.872	-65.000/
1917	921	1	117.046	740.616	65.000	117.046	740.616	-65.000/
1918	922	1	271.541	540.596	65.000	271.541	540.596	-65.000/
1919	923	1	698.487	325.616	65.000	698.487	325.616	-65.000/
1920	924	1	249.385	561.449	65.000	249.385	561.449	-65.000/
1921	925	1	92.402	786.154	65.000	92.402	786.154	-65.000/
1922	926	1	24.048	1001.112	65.000	24.048	1001.112	-65.000/
1923	927	1	227.269	582.828	65.000	227.269	582.828	-65.000/
1924	928	1	45.764	903.540	65.000	45.764	903.540	-65.000/
1925	929	1	545.897	365.000	65.000	545.897	365.000	-65.000/
1926	930	1	139.301	693.933	65.000	139.301	693.933	-65.000/
1927	931	1	205.074	604.346	65.000	205.074	604.346	-65.000/
1928	932	1	68.315	832.133	65.000	68.315	832.133	-65.000/
1929	933	1	597.304	344.703	65.000	597.304	344.703	-65.000/
1930	934	1	492.139	383.982	65.000	492.139	383.982	-65.000/
1931	935	1	673.161	324.408	65.000	673.161	324.408	-65.000/
1932	936	1	23.643	976.763	65.000	23.643	976.763	-65.000/
1933	937	1	182.851	626.101	65.000	182.851	626.101	-65.000/
1934	938	1	348.858	464.353	65.000	348.858	464.353	-65.000/
1935	939	1	377.133	444.391	65.000	377.133	444.391	-65.000/
1936	940	1	93.516	763.387	65.000	93.516	763.387	-65.000/
1937	941	1	45.486	879.519	65.000	45.486	879.519	-65.000/
1938	942	1	118.228	717.883	65.000	118.228	717.883	-65.000/
1939	943	1	406.937	424.191	65.000	406.937	424.191	-65.000/
1940	944	1	23.237	952.414	65.000	23.237	952.414	-65.000/
1941	945	1	160.836	648.028	65.000	160.836	648.028	-65.000/
1942	946	1	320.920	481.094	65.000	320.920	481.094	-65.000/
1943	947	1	647.835	323.200	65.000	647.835	323.200	-65.000/
1944	948	1	68.720	808.924	65.000	68.720	808.924	-65.000/
1945	949	1	295.331	500.759	65.000	295.331	500.759	-65.000/
1946	950	1	0.000	1140.000	65.000	0.000	1140.000	-65.000/
1947	951	1	0.000	1117.500	65.000	0.000	1117.500	-65.000/
1948	952	1	436.043	402.891	65.000	436.043	402.891	-65.000/
1949	953	1	0.000	1095.000	65.000	0.000	1095.000	-65.000/
1950	954	1	271.607	519.618	65.000	271.607	519.618	-65.000/
1951	955	1	519.772	361.906	65.000	519.772	361.906	-65.000/
1952	956	1	571.918	342.408	65.000	571.918	342.408	-65.000/
1953	957	1	794.228	299.363	65.000	794.228	299.363	-65.000/

1954	958	1	817.114	298.377	65.000	817.114	298.377	-65.000/
1955	959	1	248.346	540.181	65.000	248.346	540.181	-65.000/
1956	960	1	840.000	297.391	65.000	840.000	297.391	-65.000/
1957	961	1	0.000	1072.500	65.000	0.000	1072.500	-65.000/
1958	962	1	772.114	299.681	65.000	772.114	299.681	-65.000/
1959	963	1	226.210	561.296	65.000	226.210	561.296	-65.000/
1960	964	1	138.906	670.578	65.000	138.906	670.578	-65.000/
1961	965	1	23.059	928.353	65.000	23.059	928.353	-65.000/
1962	966	1	45.209	855.498	65.000	45.209	855.498	-65.000/
1963	967	1	0.000	1050.000	65.000	0.000	1050.000	-65.000/
1964	968	1	750.000	300.000	65.000	750.000	300.000	-65.000/
1965	969	1	95.139	740.933	65.000	95.139	740.933	-65.000/
1966	970	1	204.044	582.265	65.000	204.044	582.265	-65.000/
1967	971	1	622.518	321.664	65.000	622.518	321.664	-65.000/
1968	972	1	70.218	786.397	65.000	70.218	786.397	-65.000/
1969	973	1	464.877	380.384	65.000	464.877	380.384	-65.000/
1970	974	1	0.000	1025.841	65.000	0.000	1025.841	-65.000/
1971	975	1	724.144	300.002	65.000	724.144	300.002	-65.000/
1972	976	1	181.835	603.901	65.000	181.835	603.901	-65.000/
1973	977	1	117.426	693.984	65.000	117.426	693.984	-65.000/
1974	978	1	22.882	904.293	65.000	22.882	904.293	-65.000/
1975	979	1	0.000	1001.682	65.000	0.000	1001.682	-65.000/
1976	980	1	698.288	300.004	65.000	698.288	300.004	-65.000/
1977	981	1	45.681	832.213	65.000	45.681	832.213	-65.000/
1978	982	1	546.533	340.113	65.000	546.533	340.113	-65.000/
1979	983	1	160.003	625.119	65.000	160.003	625.119	-65.000/
1980	984	1	350.707	440.047	65.000	350.707	440.047	-65.000/
1981	985	1	96.761	718.478	65.000	96.761	718.478	-65.000/
1982	986	1	493.647	358.812	65.000	493.647	358.812	-65.000/
1983	987	1	322.851	459.311	65.000	322.851	459.311	-65.000/
1984	988	1	597.201	320.128	65.000	597.201	320.128	-65.000/
1985	989	1	379.402	419.387	65.000	379.402	419.387	-65.000/
1986	990	1	71.717	763.869	65.000	71.717	763.869	-65.000/
1987	991	1	0.000	977.522	65.000	0.000	977.522	-65.000/
1988	992	1	296.403	478.723	65.000	296.403	478.723	-65.000/
1989	993	1	271.672	498.640	65.000	271.672	498.640	-65.000/
1990	994	1	672.894	299.099	65.000	672.894	299.099	-65.000/
1991	995	1	22.743	880.202	65.000	22.743	880.202	-65.000/
1992	996	1	138.031	647.358	65.000	138.031	647.358	-65.000/
1993	997	1	408.577	398.355	65.000	408.577	398.355	-65.000/
1994	998	1	248.081	518.855	65.000	248.081	518.855	-65.000/
1995	999	1	225.151	539.765	65.000	225.151	539.765	-65.000/
1996	1000	1	46.152	808.929	65.000	46.152	808.929	-65.000/
1997	1001	1	0.000	953.363	65.000	0.000	953.363	-65.000/
1998	1002	1	203.087	560.451	65.000	203.087	560.451	-65.000/
1999	1003	1	75.049	742.804	65.000	75.049	742.804	-65.000/
2000	1004	1	116.624	670.084	65.000	116.624	670.084	-65.000/
2001	1005	1	437.616	376.786	65.000	437.616	376.786	-65.000/
2002	1006	1	647.500	298.193	65.000	647.500	298.193	-65.000/
2003	1007	1	180.819	581.702	65.000	180.819	581.702	-65.000/
2004	1008	1	520.844	336.877	65.000	520.844	336.877	-65.000/
2005	1009	1	572.068	317.996	65.000	572.068	317.996	-65.000/
2006	1010	1	22.605	856.112	65.000	22.605	856.112	-65.000/
2007	1011	1	0.000	929.204	65.000	0.000	929.204	-65.000/
2008	1012	1	816.915	273.491	65.000	816.915	273.491	-65.000/
2009	1013	1	793.830	274.373	65.000	793.830	274.373	-65.000/
2010	1014	1	48.034	786.640	65.000	48.034	786.640	-65.000/
2011	1015	1	840.000	272.609	65.000	840.000	272.609	-65.000/
2012	1016	1	158.929	602.684	65.000	158.929	602.684	-65.000/
2013	1017	1	95.551	694.035	65.000	95.551	694.035	-65.000/
2014	1018	1	771.276	274.680	65.000	771.276	274.680	-65.000/
2015	1019	1	78.380	721.739	65.000	78.380	721.739	-65.000/
2016	1020	1	466.789	355.060	65.000	466.789	355.060	-65.000/
2017	1021	1	748.722	274.987	65.000	748.722	274.987	-65.000/
2018	1022	1	622.299	296.873	65.000	622.299	296.873	-65.000/
2019	1023	1	137.156	624.138	65.000	137.156	624.138	-65.000/

2020	1024	1	0.000	905.045	65.000	0.000	905.045	-65.000/
2021	1025	1	297.475	456.687	65.000	297.475	456.687	-65.000/
2022	1026	1	723.225	274.971	65.000	723.225	274.971	-65.000/
2023	1027	1	324.281	435.702	65.000	324.281	435.702	-65.000/
2024	1028	1	352.557	415.740	65.000	352.557	415.740	-65.000/
2025	1029	1	22.840	832.390	65.000	22.840	832.390	-65.000/
2026	1030	1	271.885	476.351	65.000	271.885	476.351	-65.000/
2027	1031	1	247.816	497.528	65.000	247.816	497.528	-65.000/
2028	1032	1	546.935	315.863	65.000	546.935	315.863	-65.000/
2029	1033	1	49.917	764.351	65.000	49.917	764.351	-65.000/
2030	1034	1	224.556	518.091	65.000	224.556	518.091	-65.000/
2031	1035	1	381.112	393.819	65.000	381.112	393.819	-65.000/
2032	1036	1	115.581	646.527	65.000	115.581	646.527	-65.000/
2033	1037	1	202.130	538.637	65.000	202.130	538.637	-65.000/
2034	1038	1	697.728	274.954	65.000	697.728	274.954	-65.000/
2035	1039	1	495.155	333.641	65.000	495.155	333.641	-65.000/
2036	1040	1	597.099	295.553	65.000	597.099	295.553	-65.000/
2037	1041	1	179.964	559.606	65.000	179.964	559.606	-65.000/
2038	1042	1	54.959	744.676	65.000	54.959	744.676	-65.000/
2039	1043	1	0.000	880.886	65.000	0.000	880.886	-65.000/
2040	1044	1	410.218	372.518	65.000	410.218	372.518	-65.000/
2041	1045	1	23.076	808.668	65.000	23.076	808.668	-65.000/
2042	1046	1	94.341	669.591	65.000	94.341	669.591	-65.000/
2043	1047	1	672.350	274.278	65.000	672.350	274.278	-65.000/
2044	1048	1	157.855	580.249	65.000	157.855	580.249	-65.000/
2045	1049	1	60.000	725.000	65.000	60.000	725.000	-65.000/
2046	1050	1	439.931	351.309	65.000	439.931	351.309	-65.000/
2047	1051	1	75.301	695.527	65.000	75.301	695.527	-65.000/
2048	1052	1	136.024	601.466	65.000	136.024	601.466	-65.000/
2049	1053	1	0.000	856.726	65.000	0.000	856.726	-65.000/
2050	1054	1	521.738	312.518	65.000	521.738	312.518	-65.000/
2051	1055	1	646.972	273.601	65.000	646.972	273.601	-65.000/
2052	1056	1	572.218	293.583	65.000	572.218	293.583	-65.000/
2053	1057	1	24.017	785.444	65.000	24.017	785.444	-65.000/
2054	1058	1	247.675	475.360	65.000	247.675	475.360	-65.000/
2055	1059	1	298.332	433.314	65.000	298.332	433.314	-65.000/
2056	1060	1	272.098	454.063	65.000	272.098	454.063	-65.000/
2057	1061	1	114.538	622.969	65.000	114.538	622.969	-65.000/
2058	1062	1	223.961	496.417	65.000	223.961	496.417	-65.000/
2059	1063	1	325.711	412.093	65.000	325.711	412.093	-65.000/
2060	1064	1	468.700	329.737	65.000	468.700	329.737	-65.000/
2061	1065	1	816.716	248.605	65.000	816.716	248.605	-65.000/
2062	1066	1	793.431	249.383	65.000	793.431	249.383	-65.000/
2063	1067	1	840.000	247.826	65.000	840.000	247.826	-65.000/
2064	1068	1	201.363	516.962	65.000	201.363	516.962	-65.000/
2065	1069	1	770.438	249.678	65.000	770.438	249.678	-65.000/
2066	1070	1	353.964	390.404	65.000	353.964	390.404	-65.000/
2067	1071	1	179.109	537.510	65.000	179.109	537.510	-65.000/
2068	1072	1	0.000	832.567	65.000	0.000	832.567	-65.000/
2069	1073	1	621.875	272.441	65.000	621.875	272.441	-65.000/
2070	1074	1	747.444	249.974	65.000	747.444	249.974	-65.000/
2071	1075	1	93.131	645.695	65.000	93.131	645.695	-65.000/
2072	1076	1	382.821	368.250	65.000	382.821	368.250	-65.000/
2073	1077	1	157.014	558.106	65.000	157.014	558.106	-65.000/
2074	1078	1	547.337	291.613	65.000	547.337	291.613	-65.000/
2075	1079	1	722.306	249.939	65.000	722.306	249.939	-65.000/
2076	1080	1	24.959	762.221	65.000	24.959	762.221	-65.000/
2077	1081	1	496.541	309.174	65.000	496.541	309.174	-65.000/
2078	1082	1	72.221	669.314	65.000	72.221	669.314	-65.000/
2079	1083	1	412.707	346.916	65.000	412.707	346.916	-65.000/
2080	1084	1	134.891	578.795	65.000	134.891	578.795	-65.000/
2081	1085	1	55.050	697.019	65.000	55.050	697.019	-65.000/
2082	1086	1	697.167	249.905	65.000	697.167	249.905	-65.000/
2083	1087	1	596.777	271.282	65.000	596.777	271.282	-65.000/
2084	1088	1	0.000	808.408	65.000	0.000	808.408	-65.000/
2085	1089	1	113.451	600.000	65.000	113.451	600.000	-65.000/

2086	1090	1	27.479	740.303	65.000	27.479	740.303	-65.000/
2087	1091	1	442.246	325.832	65.000	442.246	325.832	-65.000/
2088	1092	1	671.806	249.456	65.000	671.806	249.456	-65.000/
2089	1093	1	247.534	453.192	65.000	247.534	453.192	-65.000/
2090	1094	1	223.465	474.369	65.000	223.465	474.369	-65.000/
2091	1095	1	200.595	495.286	65.000	200.595	495.286	-65.000/
2092	1096	1	272.384	430.926	65.000	272.384	430.926	-65.000/
2093	1097	1	299.190	409.942	65.000	299.190	409.942	-65.000/
2094	1098	1	522.632	288.160	65.000	522.632	288.160	-65.000/
2095	1099	1	178.169	515.832	65.000	178.169	515.832	-65.000/
2096	1100	1	91.921	621.799	65.000	91.921	621.799	-65.000/
2097	1101	1	572.089	269.470	65.000	572.089	269.470	-65.000/
2098	1102	1	326.817	386.989	65.000	326.817	386.989	-65.000/
2099	1103	1	646.445	249.008	65.000	646.445	249.008	-65.000/
2100	1104	1	0.000	784.249	65.000	0.000	784.249	-65.000/
2101	1105	1	156.173	535.964	65.000	156.173	535.964	-65.000/
2102	1106	1	470.934	305.216	65.000	470.934	305.216	-65.000/
2103	1107	1	30.000	718.386	65.000	30.000	718.386	-65.000/
2104	1108	1	355.372	365.068	65.000	355.372	365.068	-65.000/
2105	1109	1	70.693	644.825	65.000	70.693	644.825	-65.000/
2106	1110	1	134.064	556.606	65.000	134.064	556.606	-65.000/
2107	1111	1	816.910	223.680	65.000	816.910	223.680	-65.000/
2108	1112	1	793.820	224.317	65.000	793.820	224.317	-65.000/
2109	1113	1	840.000	223.043	65.000	840.000	223.043	-65.000/
2110	1114	1	385.483	342.522	65.000	385.483	342.522	-65.000/
2111	1115	1	771.271	224.652	65.000	771.271	224.652	-65.000/
2112	1116	1	621.451	248.010	65.000	621.451	248.010	-65.000/
2113	1117	1	748.722	224.987	65.000	748.722	224.987	-65.000/
2114	1118	1	50.100	669.038	65.000	50.100	669.038	-65.000/
2115	1119	1	112.363	577.031	65.000	112.363	577.031	-65.000/
2116	1120	1	547.401	267.657	65.000	547.401	267.657	-65.000/
2117	1121	1	497.928	284.706	65.000	497.928	284.706	-65.000/
2118	1122	1	0.000	760.090	65.000	0.000	760.090	-65.000/
2119	1123	1	415.196	321.313	65.000	415.196	321.313	-65.000/
2120	1124	1	722.844	225.013	65.000	722.844	225.013	-65.000/
2121	1125	1	222.970	452.322	65.000	222.970	452.322	-65.000/
2122	1126	1	199.951	473.234	65.000	199.951	473.234	-65.000/
2123	1127	1	90.878	598.534	65.000	90.878	598.534	-65.000/
2124	1128	1	247.387	430.099	65.000	247.387	430.099	-65.000/
2125	1129	1	177.230	494.155	65.000	177.230	494.155	-65.000/
2126	1130	1	596.456	247.012	65.000	596.456	247.012	-65.000/
2127	1131	1	696.966	225.039	65.000	696.966	225.039	-65.000/
2128	1132	1	272.669	407.790	65.000	272.669	407.790	-65.000/
2129	1133	1	445.326	301.258	65.000	445.326	301.258	-65.000/
2130	1134	1	155.249	514.182	65.000	155.249	514.182	-65.000/
2131	1135	1	27.525	692.316	65.000	27.525	692.316	-65.000/
2132	1136	1	299.930	385.027	65.000	299.930	385.027	-65.000/
2133	1137	1	69.164	620.336	65.000	69.164	620.336	-65.000/
2134	1138	1	671.514	224.678	65.000	671.514	224.678	-65.000/
2135	1139	1	133.236	534.417	65.000	133.236	534.417	-65.000/
2136	1140	1	523.257	264.659	65.000	523.257	264.659	-65.000/
2137	1141	1	327.923	361.885	65.000	327.923	361.885	-65.000/
2138	1142	1	0.000	735.931	65.000	0.000	735.931	-65.000/
2139	1143	1	571.961	245.357	65.000	571.961	245.357	-65.000/
2140	1144	1	48.254	643.955	65.000	48.254	643.955	-65.000/
2141	1145	1	473.167	280.695	65.000	473.167	280.695	-65.000/
2142	1146	1	111.502	554.622	65.000	111.502	554.622	-65.000/
2143	1147	1	357.761	338.965	65.000	357.761	338.965	-65.000/
2144	1148	1	646.062	224.317	65.000	646.062	224.317	-65.000/
2145	1149	1	89.835	575.268	65.000	89.835	575.268	-65.000/
2146	1150	1	388.146	316.794	65.000	388.146	316.794	-65.000/
2147	1151	1	199.307	451.182	65.000	199.307	451.182	-65.000/
2148	1152	1	176.437	472.098	65.000	176.437	472.098	-65.000/
2149	1153	1	817.104	198.756	65.000	817.104	198.756	-65.000/
2150	1154	1	222.390	429.272	65.000	222.390	429.272	-65.000/
2151	1155	1	840.000	198.261	65.000	840.000	198.261	-65.000/

2152	1156	1	794.209	199.252	65.000	794.209	199.252	-65.000/
2153	1157	1	499.113	261.661	65.000	499.113	261.661	-65.000/
2154	1158	1	621.132	223.491	65.000	621.132	223.491	-65.000/
2155	1159	1	25.050	666.245	65.000	25.050	666.245	-65.000/
2156	1160	1	247.240	407.006	65.000	247.240	407.006	-65.000/
2157	1161	1	772.104	199.626	65.000	772.104	199.626	-65.000/
2158	1162	1	547.466	243.702	65.000	547.466	243.702	-65.000/
2159	1163	1	0.000	711.771	65.000	0.000	711.771	-65.000/
2160	1164	1	418.997	296.082	65.000	418.997	296.082	-65.000/
2161	1165	1	154.324	492.400	65.000	154.324	492.400	-65.000/
2162	1166	1	68.255	596.804	65.000	68.255	596.804	-65.000/
2163	1167	1	750.000	200.000	65.000	750.000	200.000	-65.000/
2164	1168	1	273.043	383.065	65.000	273.043	383.065	-65.000/
2165	1169	1	132.328	512.532	65.000	132.328	512.532	-65.000/
2166	1170	1	723.383	200.087	65.000	723.383	200.087	-65.000/
2167	1171	1	448.406	276.684	65.000	448.406	276.684	-65.000/
2168	1172	1	300.670	360.112	65.000	300.670	360.112	-65.000/
2169	1173	1	596.201	222.666	65.000	596.201	222.666	-65.000/
2170	1174	1	46.408	618.872	65.000	46.408	618.872	-65.000/
2171	1175	1	110.641	532.212	65.000	110.641	532.212	-65.000/
2172	1176	1	696.765	200.173	65.000	696.765	200.173	-65.000/
2173	1177	1	330.038	335.408	65.000	330.038	335.408	-65.000/
2174	1178	1	523.883	241.159	65.000	523.883	241.159	-65.000/
2175	1179	1	88.941	552.638	65.000	88.941	552.638	-65.000/
2176	1180	1	0.000	687.612	65.000	0.000	687.612	-65.000/
2177	1181	1	475.724	257.796	65.000	475.724	257.796	-65.000/
2178	1182	1	671.222	199.899	65.000	671.222	199.899	-65.000/
2179	1183	1	24.127	641.624	65.000	24.127	641.624	-65.000/
2180	1184	1	360.149	312.862	65.000	360.149	312.862	-65.000/
2181	1185	1	571.786	221.471	65.000	571.786	221.471	-65.000/
2182	1186	1	175.644	450.041	65.000	175.644	450.041	-65.000/
2183	1187	1	198.596	428.532	65.000	198.596	428.532	-65.000/
2184	1188	1	67.346	573.273	65.000	67.346	573.273	-65.000/
2185	1189	1	153.543	470.502	65.000	153.543	470.502	-65.000/
2186	1190	1	221.811	406.221	65.000	221.811	406.221	-65.000/
2187	1191	1	392.667	290.907	65.000	392.667	290.907	-65.000/
2188	1192	1	645.680	199.626	65.000	645.680	199.626	-65.000/
2189	1193	1	131.419	490.646	65.000	131.419	490.646	-65.000/
2190	1194	1	247.334	382.878	65.000	247.334	382.878	-65.000/
2191	1195	1	500.299	238.616	65.000	500.299	238.616	-65.000/
2192	1196	1	45.633	595.075	65.000	45.633	595.075	-65.000/
2193	1197	1	422.798	270.852	65.000	422.798	270.852	-65.000/
2194	1198	1	109.772	510.266	65.000	109.772	510.266	-65.000/
2195	1199	1	547.371	220.276	65.000	547.371	220.276	-65.000/
2196	1200	1	273.417	358.339	65.000	273.417	358.339	-65.000/
2197	1201	1	0.000	663.453	65.000	0.000	663.453	-65.000/
2198	1202	1	620.813	198.973	65.000	620.813	198.973	-65.000/
2199	1203	1	817.035	173.886	65.000	817.035	173.886	-65.000/
2200	1204	1	840.000	173.478	65.000	840.000	173.478	-65.000/
2201	1205	1	794.071	174.294	65.000	794.071	174.294	-65.000/
2202	1206	1	452.335	253.930	65.000	452.335	253.930	-65.000/
2203	1207	1	771.321	174.613	65.000	771.321	174.613	-65.000/
2204	1208	1	88.046	530.008	65.000	88.046	530.008	-65.000/
2205	1209	1	302.220	333.558	65.000	302.220	333.558	-65.000/
2206	1210	1	748.571	174.931	65.000	748.571	174.931	-65.000/
2207	1211	1	23.204	617.003	65.000	23.204	617.003	-65.000/
2208	1212	1	722.509	175.007	65.000	722.509	175.007	-65.000/
2209	1213	1	66.604	550.321	65.000	66.604	550.321	-65.000/
2210	1214	1	595.946	198.320	65.000	595.946	198.320	-65.000/
2211	1215	1	524.096	218.743	65.000	524.096	218.743	-65.000/
2212	1216	1	332.153	308.931	65.000	332.153	308.931	-65.000/
2213	1217	1	174.801	427.792	65.000	174.801	427.792	-65.000/
2214	1218	1	478.281	234.896	65.000	478.281	234.896	-65.000/
2215	1219	1	152.761	448.603	65.000	152.761	448.603	-65.000/
2216	1220	1	197.884	405.882	65.000	197.884	405.882	-65.000/
2217	1221	1	696.448	175.083	65.000	696.448	175.083	-65.000/



2218	1222	1	130.649	468.905	65.000	130.649	468.905	-65.000/
2219	1223	1	364.489	286.005	65.000	364.489	286.005	-65.000/
2220	1224	1	44.857	571.278	65.000	44.857	571.278	-65.000/
2221	1225	1	221.626	382.692	65.000	221.626	382.692	-65.000/
2222	1226	1	0.000	639.294	65.000	0.000	639.294	-65.000/
2223	1227	1	108.903	488.319	65.000	108.903	488.319	-65.000/
2224	1228	1	670.974	174.883	65.000	670.974	174.883	-65.000/
2225	1229	1	571.611	197.586	65.000	571.611	197.586	-65.000/
2226	1230	1	247.429	358.751	65.000	247.429	358.751	-65.000/
2227	1231	1	397.189	265.020	65.000	397.189	265.020	-65.000/
2228	1232	1	87.216	508.000	65.000	87.216	508.000	-65.000/
2229	1233	1	500.821	217.209	65.000	500.821	217.209	-65.000/
2230	1234	1	22.816	593.025	65.000	22.816	593.025	-65.000/
2231	1235	1	428.483	246.695	65.000	428.483	246.695	-65.000/
2232	1236	1	645.500	174.682	65.000	645.500	174.682	-65.000/
2233	1237	1	456.264	231.177	65.000	456.264	231.177	-65.000/
2234	1238	1	274.402	331.708	65.000	274.402	331.708	-65.000/
2235	1239	1	65.861	527.370	65.000	65.861	527.370	-65.000/
2236	1240	1	547.275	196.851	65.000	547.275	196.851	-65.000/
2237	1241	1	620.531	174.209	65.000	620.531	174.209	-65.000/
2238	1242	1	0.000	615.135	65.000	0.000	615.135	-65.000/
2239	1243	1	303.770	307.003	65.000	303.770	307.003	-65.000/
2240	1244	1	151.903	426.703	65.000	151.903	426.703	-65.000/
2241	1245	1	816.966	149.016	65.000	816.966	149.016	-65.000/
2242	1246	1	840.000	148.696	65.000	840.000	148.696	-65.000/
2243	1247	1	173.958	405.544	65.000	173.958	405.544	-65.000/
2244	1248	1	793.932	149.337	65.000	793.932	149.337	-65.000/
2245	1249	1	44.267	548.005	65.000	44.267	548.005	-65.000/
2246	1250	1	480.630	215.419	65.000	480.630	215.419	-65.000/
2247	1251	1	129.879	447.165	65.000	129.879	447.165	-65.000/
2248	1252	1	770.537	149.599	65.000	770.537	149.599	-65.000/
2249	1253	1	197.618	382.970	65.000	197.618	382.970	-65.000/
2250	1254	1	108.286	466.628	65.000	108.286	466.628	-65.000/
2251	1255	1	747.141	149.861	65.000	747.141	149.861	-65.000/
2252	1256	1	524.309	196.327	65.000	524.309	196.327	-65.000/
2253	1257	1	336.311	281.104	65.000	336.311	281.104	-65.000/
2254	1258	1	221.441	359.162	65.000	221.441	359.162	-65.000/
2255	1259	1	595.562	173.736	65.000	595.562	173.736	-65.000/
2256	1260	1	721.636	149.927	65.000	721.636	149.927	-65.000/
2257	1261	1	22.429	569.047	65.000	22.429	569.047	-65.000/
2258	1262	1	86.387	485.992	65.000	86.387	485.992	-65.000/
2259	1263	1	368.830	259.149	65.000	368.830	259.149	-65.000/
2260	1264	1	404.632	239.461	65.000	404.632	239.461	-65.000/
2261	1265	1	696.130	149.993	65.000	696.130	149.993	-65.000/
2262	1266	1	247.811	333.431	65.000	247.811	333.431	-65.000/
2263	1267	1	460.439	213.629	65.000	460.439	213.629	-65.000/
2264	1268	1	65.219	505.161	65.000	65.219	505.161	-65.000/
2265	1269	1	501.342	195.803	65.000	501.342	195.803	-65.000/
2266	1270	1	434.169	222.539	65.000	434.169	222.539	-65.000/
2267	1271	1	570.878	173.375	65.000	570.878	173.375	-65.000/
2268	1272	1	0.000	590.975	65.000	0.000	590.975	-65.000/
2269	1273	1	670.725	149.866	65.000	670.725	149.866	-65.000/
2270	1274	1	43.676	524.732	65.000	43.676	524.732	-65.000/
2271	1275	1	151.045	404.804	65.000	151.045	404.804	-65.000/
2272	1276	1	129.006	425.614	65.000	129.006	425.614	-65.000/
2273	1277	1	275.388	305.076	65.000	275.388	305.076	-65.000/
2274	1278	1	173.610	383.248	65.000	173.610	383.248	-65.000/
2275	1279	1	645.320	149.738	65.000	645.320	149.738	-65.000/
2276	1280	1	482.979	195.942	65.000	482.979	195.942	-65.000/
2277	1281	1	107.668	444.938	65.000	107.668	444.938	-65.000/
2278	1282	1	197.351	360.057	65.000	197.351	360.057	-65.000/
2279	1283	1	546.194	173.014	65.000	546.194	173.014	-65.000/
2280	1284	1	22.133	545.331	65.000	22.133	545.331	-65.000/
2281	1285	1	85.922	464.351	65.000	85.922	464.351	-65.000/
2282	1286	1	620.248	149.445	65.000	620.248	149.445	-65.000/
2283	1287	1	305.957	277.232	65.000	305.957	277.232	-65.000/

2284	1288	1	221.220	335.155	65.000	221.220	335.155	-65.000/
2285	1289	1	464.615	196.081	65.000	464.615	196.081	-65.000/
2286	1290	1	817.078	124.176	65.000	817.078	124.176	-65.000/
2287	1291	1	840.000	123.913	65.000	840.000	123.913	-65.000/
2288	1292	1	64.576	482.952	65.000	64.576	482.952	-65.000/
2289	1293	1	794.156	124.439	65.000	794.156	124.439	-65.000/
2290	1294	1	0.000	566.816	65.000	0.000	566.816	-65.000/
2291	1295	1	771.363	124.685	65.000	771.363	124.685	-65.000/
2292	1296	1	521.902	173.355	65.000	521.902	173.355	-65.000/
2293	1297	1	340.470	253.277	65.000	340.470	253.277	-65.000/
2294	1298	1	377.154	232.934	65.000	377.154	232.934	-65.000/
2295	1299	1	748.571	124.931	65.000	748.571	124.931	-65.000/
2296	1300	1	442.605	200.874	65.000	442.605	200.874	-65.000/
2297	1301	1	412.074	213.901	65.000	412.074	213.901	-65.000/
2298	1302	1	43.221	502.322	65.000	43.221	502.322	-65.000/
2299	1303	1	595.177	149.151	65.000	595.177	149.151	-65.000/
2300	1304	1	248.194	308.112	65.000	248.194	308.112	-65.000/
2301	1305	1	722.591	124.887	65.000	722.591	124.887	-65.000/
2302	1306	1	128.132	404.064	65.000	128.132	404.064	-65.000/
2303	1307	1	150.480	383.057	65.000	150.480	383.057	-65.000/
2304	1308	1	106.985	423.490	65.000	106.985	423.490	-65.000/
2305	1309	1	497.611	173.696	65.000	497.611	173.696	-65.000/
2306	1310	1	696.611	124.843	65.000	696.611	124.843	-65.000/
2307	1311	1	173.261	360.952	65.000	173.261	360.952	-65.000/
2308	1312	1	21.838	521.615	65.000	21.838	521.615	-65.000/
2309	1313	1	570.145	149.164	65.000	570.145	149.164	-65.000/
2310	1314	1	85.458	442.711	65.000	85.458	442.711	-65.000/
2311	1315	1	196.695	337.174	65.000	196.695	337.174	-65.000/
2312	1316	1	671.151	124.721	65.000	671.151	124.721	-65.000/
2313	1317	1	474.326	176.452	65.000	474.326	176.452	-65.000/
2314	1318	1	0.000	542.657	65.000	0.000	542.657	-65.000/
2315	1319	1	64.240	461.202	65.000	64.240	461.202	-65.000/
2316	1320	1	545.113	149.177	65.000	545.113	149.177	-65.000/
2317	1321	1	645.692	124.599	65.000	645.692	124.599	-65.000/
2318	1322	1	275.602	273.360	65.000	275.602	273.360	-65.000/
2319	1323	1	221.000	311.149	65.000	221.000	311.149	-65.000/
2320	1324	1	42.766	479.913	65.000	42.766	479.913	-65.000/
2321	1325	1	451.041	179.209	65.000	451.041	179.209	-65.000/
2322	1326	1	349.676	226.407	65.000	349.676	226.407	-65.000/
2323	1327	1	385.478	206.719	65.000	385.478	206.719	-65.000/
2324	1328	1	424.771	188.119	65.000	424.771	188.119	-65.000/
2325	1329	1	308.144	247.461	65.000	308.144	247.461	-65.000/
2326	1330	1	620.549	124.349	65.000	620.549	124.349	-65.000/
2327	1331	1	21.611	498.776	65.000	21.611	498.776	-65.000/
2328	1332	1	127.351	382.867	65.000	127.351	382.867	-65.000/
2329	1333	1	519.496	150.383	65.000	519.496	150.383	-65.000/
2330	1334	1	149.916	361.311	65.000	149.916	361.311	-65.000/
2331	1335	1	106.301	402.041	65.000	106.301	402.041	-65.000/
2332	1336	1	840.000	99.130	65.000	840.000	99.130	-65.000/
2333	1337	1	817.190	99.335	65.000	817.190	99.335	-65.000/
2334	1338	1	794.379	99.540	65.000	794.379	99.540	-65.000/
2335	1339	1	84.963	421.365	65.000	84.963	421.365	-65.000/
2336	1340	1	772.190	99.770	65.000	772.190	99.770	-65.000/
2337	1341	1	172.169	339.193	65.000	172.169	339.193	-65.000/
2338	1342	1	750.000	100.000	65.000	750.000	100.000	-65.000/
2339	1343	1	247.075	280.198	65.000	247.075	280.198	-65.000/
2340	1344	1	0.000	518.498	65.000	0.000	518.498	-65.000/
2341	1345	1	595.406	124.098	65.000	595.406	124.098	-65.000/
2342	1346	1	63.904	439.451	65.000	63.904	439.451	-65.000/
2343	1347	1	723.546	99.847	65.000	723.546	99.847	-65.000/
2344	1348	1	196.039	314.292	65.000	196.039	314.292	-65.000/
2345	1349	1	493.879	151.589	65.000	493.879	151.589	-65.000/
2346	1350	1	42.558	458.052	65.000	42.558	458.052	-65.000/
2347	1351	1	697.092	99.694	65.000	697.092	99.694	-65.000/
2348	1352	1	570.186	124.103	65.000	570.186	124.103	-65.000/
2349	1353	1	465.673	156.962	65.000	465.673	156.962	-65.000/

2350	1354	1	671.578	99.577	65.000	671.578	99.577	-65.000/
2351	1355	1	21.383	475.937	65.000	21.383	475.937	-65.000/
2352	1356	1	218.548	287.036	65.000	218.548	287.036	-65.000/
2353	1357	1	126.570	361.670	65.000	126.570	361.670	-65.000/
2354	1358	1	105.451	381.261	65.000	105.451	381.261	-65.000/
2355	1359	1	358.883	199.537	65.000	358.883	199.537	-65.000/
2356	1360	1	320.532	220.051	65.000	320.532	220.051	-65.000/
2357	1361	1	396.432	181.138	65.000	396.432	181.138	-65.000/
2358	1362	1	148.896	340.250	65.000	148.896	340.250	-65.000/
2359	1363	1	437.467	162.336	65.000	437.467	162.336	-65.000/
2360	1364	1	84.469	400.019	65.000	84.469	400.019	-65.000/
2361	1365	1	544.967	124.109	65.000	544.967	124.109	-65.000/
2362	1366	1	646.063	99.460	65.000	646.063	99.460	-65.000/
2363	1367	1	0.000	495.230	65.000	0.000	495.230	-65.000/
2364	1368	1	63.483	418.232	65.000	63.483	418.232	-65.000/
2365	1369	1	171.077	317.435	65.000	171.077	317.435	-65.000/
2366	1370	1	275.817	241.645	65.000	275.817	241.645	-65.000/
2367	1371	1	620.849	99.252	65.000	620.849	99.252	-65.000/
2368	1372	1	42.351	436.192	65.000	42.351	436.192	-65.000/
2369	1373	1	519.255	125.024	65.000	519.255	125.024	-65.000/
2370	1374	1	840.000	74.348	65.000	840.000	74.348	-65.000/
2371	1375	1	817.123	74.476	65.000	817.123	74.476	-65.000/
2372	1376	1	794.246	74.603	65.000	794.246	74.603	-65.000/
2373	1377	1	193.883	291.493	65.000	193.883	291.493	-65.000/
2374	1378	1	771.544	74.704	65.000	771.544	74.704	-65.000/
2375	1379	1	245.956	252.284	65.000	245.956	252.284	-65.000/
2376	1380	1	21.279	453.864	65.000	21.279	453.864	-65.000/
2377	1381	1	748.842	74.804	65.000	748.842	74.804	-65.000/
2378	1382	1	595.635	99.044	65.000	595.635	99.044	-65.000/
2379	1383	1	125.623	341.307	65.000	125.623	341.307	-65.000/
2380	1384	1	493.543	125.940	65.000	493.543	125.940	-65.000/
2381	1385	1	104.601	360.481	65.000	104.601	360.481	-65.000/
2382	1386	1	723.074	74.729	65.000	723.074	74.729	-65.000/
2383	1387	1	83.550	379.656	65.000	83.550	379.656	-65.000/
2384	1388	1	0.000	471.961	65.000	0.000	471.961	-65.000/
2385	1389	1	147.876	319.189	65.000	147.876	319.189	-65.000/
2386	1390	1	332.920	192.641	65.000	332.920	192.641	-65.000/
2387	1391	1	697.305	74.653	65.000	697.305	74.653	-65.000/
2388	1392	1	368.093	174.158	65.000	368.093	174.158	-65.000/
2389	1393	1	63.062	397.013	65.000	63.062	397.013	-65.000/
2390	1394	1	407.385	155.557	65.000	407.385	155.557	-65.000/
2391	1395	1	570.227	99.042	65.000	570.227	99.042	-65.000/
2392	1396	1	216.096	262.923	65.000	216.096	262.923	-65.000/
2393	1397	1	291.388	213.695	65.000	291.388	213.695	-65.000/
2394	1398	1	466.137	129.057	65.000	466.137	129.057	-65.000/
2395	1399	1	42.003	415.099	65.000	42.003	415.099	-65.000/
2396	1400	1	169.218	295.949	65.000	169.218	295.949	-65.000/
2397	1401	1	671.929	74.504	65.000	671.929	74.504	-65.000/
2398	1402	1	544.820	99.041	65.000	544.820	99.041	-65.000/
2399	1403	1	21.176	431.792	65.000	21.176	431.792	-65.000/
2400	1404	1	646.553	74.354	65.000	646.553	74.354	-65.000/
2401	1405	1	438.732	132.174	65.000	438.732	132.174	-65.000/
2402	1406	1	191.727	268.694	65.000	191.727	268.694	-65.000/
2403	1407	1	103.712	340.450	65.000	103.712	340.450	-65.000/
2404	1408	1	257.849	221.882	65.000	257.849	221.882	-65.000/
2405	1409	1	0.000	449.677	65.000	0.000	449.677	-65.000/
2406	1410	1	124.676	320.944	65.000	124.676	320.944	-65.000/
2407	1411	1	82.632	359.293	65.000	82.632	359.293	-65.000/
2408	1412	1	621.383	74.243	65.000	621.383	74.243	-65.000/
2409	1413	1	519.014	99.665	65.000	519.014	99.665	-65.000/
2410	1414	1	62.353	376.713	65.000	62.353	376.713	-65.000/
2411	1415	1	840.000	49.565	65.000	840.000	49.565	-65.000/
2412	1416	1	817.057	49.616	65.000	817.057	49.616	-65.000/
2413	1417	1	146.404	298.325	65.000	146.404	298.325	-65.000/
2414	1418	1	794.114	49.667	65.000	794.114	49.667	-65.000/
2415	1419	1	233.082	232.465	65.000	233.082	232.465	-65.000/

2416	1420	1	342.420	167.826	65.000	342.420	167.826	-65.000/
2417	1421	1	770.899	49.638	65.000	770.899	49.638	-65.000/
2418	1422	1	41.654	394.007	65.000	41.654	394.007	-65.000/
2419	1423	1	306.958	185.746	65.000	306.958	185.746	-65.000/
2420	1424	1	596.212	74.131	65.000	596.212	74.131	-65.000/
2421	1425	1	377.303	148.779	65.000	377.303	148.779	-65.000/
2422	1426	1	747.684	49.609	65.000	747.684	49.609	-65.000/
2423	1427	1	493.207	100.290	65.000	493.207	100.290	-65.000/
2424	1428	1	167.358	274.464	65.000	167.358	274.464	-65.000/
2425	1429	1	722.601	49.611	65.000	722.601	49.611	-65.000/
2426	1430	1	21.001	410.594	65.000	21.001	410.594	-65.000/
2427	1431	1	208.316	243.048	65.000	208.316	243.048	-65.000/
2428	1432	1	272.301	198.826	65.000	272.301	198.826	-65.000/
2429	1433	1	570.735	74.198	65.000	570.735	74.198	-65.000/
2430	1434	1	697.518	49.613	65.000	697.518	49.613	-65.000/
2431	1435	1	410.366	127.484	65.000	410.366	127.484	-65.000/
2432	1436	1	0.000	427.392	65.000	0.000	427.392	-65.000/
2433	1437	1	102.823	320.419	65.000	102.823	320.419	-65.000/
2434	1438	1	81.801	339.594	65.000	81.801	339.594	-65.000/
2435	1439	1	672.280	49.430	65.000	672.280	49.430	-65.000/
2436	1440	1	123.590	300.700	65.000	123.590	300.700	-65.000/
2437	1441	1	466.601	101.152	65.000	466.601	101.152	-65.000/
2438	1442	1	61.644	356.413	65.000	61.644	356.413	-65.000/
2439	1443	1	185.930	249.238	65.000	185.930	249.238	-65.000/
2440	1444	1	545.257	74.265	65.000	545.257	74.265	-65.000/
2441	1445	1	41.156	373.769	65.000	41.156	373.769	-65.000/
2442	1446	1	647.043	49.248	65.000	647.043	49.248	-65.000/
2443	1447	1	144.931	277.460	65.000	144.931	277.460	-65.000/
2444	1448	1	316.747	161.494	65.000	316.747	161.494	-65.000/
2445	1449	1	351.920	143.011	65.000	351.920	143.011	-65.000/
2446	1450	1	20.827	389.397	65.000	20.827	389.397	-65.000/
2447	1451	1	286.753	175.770	65.000	286.753	175.770	-65.000/
2448	1452	1	621.916	49.233	65.000	621.916	49.233	-65.000/
2449	1453	1	439.996	102.013	65.000	439.996	102.013	-65.000/
2450	1454	1	519.618	74.630	65.000	519.618	74.630	-65.000/
2451	1455	1	239.880	202.118	65.000	239.880	202.118	-65.000/
2452	1456	1	163.544	255.427	65.000	163.544	255.427	-65.000/
2453	1457	1	840.000	24.783	65.000	840.000	24.783	-65.000/
2454	1458	1	220.209	212.646	65.000	220.209	212.646	-65.000/
2455	1459	1	817.278	24.808	65.000	817.278	24.808	-65.000/
2456	1460	1	0.000	406.089	65.000	0.000	406.089	-65.000/
2457	1461	1	382.000	122.793	65.000	382.000	122.793	-65.000/
2458	1462	1	794.557	24.833	65.000	794.557	24.833	-65.000/
2459	1463	1	771.699	24.819	65.000	771.699	24.819	-65.000/
2460	1464	1	80.970	319.895	65.000	80.970	319.895	-65.000/
2461	1465	1	596.790	49.218	65.000	596.790	49.218	-65.000/
2462	1466	1	101.930	300.739	65.000	101.930	300.739	-65.000/
2463	1467	1	200.537	223.173	65.000	200.537	223.173	-65.000/
2464	1468	1	60.986	336.846	65.000	60.986	336.846	-65.000/
2465	1469	1	748.842	24.804	65.000	748.842	24.804	-65.000/
2466	1470	1	122.504	280.457	65.000	122.504	280.457	-65.000/
2467	1471	1	493.979	74.995	65.000	493.979	74.995	-65.000/
2468	1472	1	723.576	24.805	65.000	723.576	24.805	-65.000/
2469	1473	1	40.657	353.532	65.000	40.657	353.532	-65.000/
2470	1474	1	253.214	183.956	65.000	253.214	183.956	-65.000/
2471	1475	1	571.242	49.354	65.000	571.242	49.354	-65.000/
2472	1476	1	698.311	24.806	65.000	698.311	24.806	-65.000/
2473	1477	1	180.133	229.782	65.000	180.133	229.782	-65.000/
2474	1478	1	141.999	258.239	65.000	141.999	258.239	-65.000/
2475	1479	1	413.347	99.411	65.000	413.347	99.411	-65.000/
2476	1480	1	20.578	369.115	65.000	20.578	369.115	-65.000/
2477	1481	1	295.909	153.624	65.000	295.909	153.624	-65.000/
2478	1482	1	326.536	137.243	65.000	326.536	137.243	-65.000/
2479	1483	1	672.967	24.715	65.000	672.967	24.715	-65.000/
2480	1484	1	467.735	75.358	65.000	467.735	75.358	-65.000/
2481	1485	1	545.693	49.490	65.000	545.693	49.490	-65.000/

2482	1486	1	0.000	384.787	65.000	0.000	384.787	-65.000/
2483	1487	1	357.041	118.323	65.000	357.041	118.323	-65.000/
2484	1488	1	266.548	165.794	65.000	266.548	165.794	-65.000/
2485	1489	1	159.730	236.390	65.000	159.730	236.390	-65.000/
2486	1490	1	227.584	189.027	65.000	227.584	189.027	-65.000/
2487	1491	1	647.624	24.624	65.000	647.624	24.624	-65.000/
2488	1492	1	80.270	300.778	65.000	80.270	300.778	-65.000/
2489	1493	1	210.537	198.122	65.000	210.537	198.122	-65.000/
2490	1494	1	101.037	281.059	65.000	101.037	281.059	-65.000/
2491	1495	1	60.329	317.279	65.000	60.329	317.279	-65.000/
2492	1496	1	193.489	207.217	65.000	193.489	207.217	-65.000/
2493	1497	1	40.172	334.098	65.000	40.172	334.098	-65.000/
2494	1498	1	120.455	261.052	65.000	120.455	261.052	-65.000/
2495	1499	1	520.222	49.595	65.000	520.222	49.595	-65.000/
2496	1500	1	622.337	24.617	65.000	622.337	24.617	-65.000/
2497	1501	1	441.491	75.721	65.000	441.491	75.721	-65.000/
2498	1502	1	386.698	96.808	65.000	386.698	96.808	-65.000/
2499	1503	1	238.841	173.225	65.000	238.841	173.225	-65.000/
2500	1504	1	20.328	348.833	65.000	20.328	348.833	-65.000/
2501	1505	1	840.000	0.000	65.000	840.000	0.000	-65.000/
2502	1506	1	817.500	0.000	65.000	817.500	0.000	-65.000/
2503	1507	1	795.000	0.000	65.000	795.000	0.000	-65.000/
2504	1508	1	174.587	212.910	65.000	174.587	212.910	-65.000/
2505	1509	1	139.068	239.018	65.000	139.068	239.018	-65.000/
2506	1510	1	597.050	24.609	65.000	597.050	24.609	-65.000/
2507	1511	1	305.064	131.479	65.000	305.064	131.479	-65.000/
2508	1512	1	772.500	0.000	65.000	772.500	0.000	-65.000/
2509	1513	1	0.000	364.460	65.000	0.000	364.460	-65.000/
2510	1514	1	275.070	145.754	65.000	275.070	145.754	-65.000/
2511	1515	1	750.000	0.000	65.000	750.000	0.000	-65.000/
2512	1516	1	494.751	49.699	65.000	494.751	49.699	-65.000/
2513	1517	1	332.082	113.852	65.000	332.082	113.852	-65.000/
2514	1518	1	724.552	0.000	65.000	724.552	0.000	-65.000/
2515	1519	1	250.098	157.424	65.000	250.098	157.424	-65.000/
2516	1520	1	79.570	281.660	65.000	79.570	281.660	-65.000/
2517	1521	1	571.551	24.677	65.000	571.551	24.677	-65.000/
2518	1522	1	415.380	73.974	65.000	415.380	73.974	-65.000/
2519	1523	1	59.820	298.337	65.000	59.820	298.337	-65.000/
2520	1524	1	155.685	218.602	65.000	155.685	218.602	-65.000/
2521	1525	1	99.567	261.838	65.000	99.567	261.838	-65.000/
2522	1526	1	699.103	0.000	65.000	699.103	0.000	-65.000/
2523	1527	1	215.288	175.935	65.000	215.288	175.935	-65.000/
2524	1528	1	39.688	314.663	65.000	39.688	314.663	-65.000/
2525	1529	1	200.865	183.598	65.000	200.865	183.598	-65.000/
2526	1530	1	362.163	93.635	65.000	362.163	93.635	-65.000/
2527	1531	1	468.868	49.564	65.000	468.868	49.564	-65.000/
2528	1532	1	186.441	191.261	65.000	186.441	191.261	-65.000/
2529	1533	1	673.655	0.000	65.000	673.655	0.000	-65.000/
2530	1534	1	118.406	241.647	65.000	118.406	241.647	-65.000/
2531	1535	1	20.086	329.434	65.000	20.086	329.434	-65.000/
2532	1536	1	546.053	24.745	65.000	546.053	24.745	-65.000/
2533	1537	1	224.468	162.494	65.000	224.468	162.494	-65.000/
2534	1538	1	648.206	0.000	65.000	648.206	0.000	-65.000/
2535	1539	1	283.592	125.714	65.000	283.592	125.714	-65.000/
2536	1540	1	0.000	344.133	65.000	0.000	344.133	-65.000/
2537	1541	1	135.845	221.250	65.000	135.845	221.250	-65.000/
2538	1542	1	169.041	196.038	65.000	169.041	196.038	-65.000/
2539	1543	1	257.385	138.970	65.000	257.385	138.970	-65.000/
2540	1544	1	310.137	109.391	65.000	310.137	109.391	-65.000/
2541	1545	1	389.270	72.226	65.000	389.270	72.226	-65.000/
2542	1546	1	207.521	167.684	65.000	207.521	167.684	-65.000/
2543	1547	1	520.593	24.797	65.000	520.593	24.797	-65.000/
2544	1548	1	622.758	0.000	65.000	622.758	0.000	-65.000/
2545	1549	1	442.985	49.429	65.000	442.985	49.429	-65.000/
2546	1550	1	78.679	262.625	65.000	78.679	262.625	-65.000/
2547	1551	1	233.648	149.054	65.000	233.648	149.054	-65.000/

2548	1552	1	59.312	279.395	65.000	59.312	279.395	-65.000/
2549	1553	1	194.820	172.682	65.000	194.820	172.682	-65.000/
2550	1554	1	39.371	295.897	65.000	39.371	295.897	-65.000/
2551	1555	1	337.628	90.462	65.000	337.628	90.462	-65.000/
2552	1556	1	98.097	242.618	65.000	98.097	242.618	-65.000/
2553	1557	1	151.640	200.815	65.000	151.640	200.815	-65.000/
2554	1558	1	597.309	0.000	65.000	597.309	0.000	-65.000/
2555	1559	1	182.119	177.680	65.000	182.119	177.680	-65.000/
2556	1560	1	213.717	155.672	65.000	213.717	155.672	-65.000/
2557	1561	1	19.844	310.035	65.000	19.844	310.035	-65.000/
2558	1562	1	495.133	24.850	65.000	495.133	24.850	-65.000/
2559	1563	1	116.004	223.898	65.000	116.004	223.898	-65.000/
2560	1564	1	417.413	48.537	65.000	417.413	48.537	-65.000/
2561	1565	1	0.000	324.771	65.000	0.000	324.771	-65.000/
2562	1566	1	264.672	120.515	65.000	264.672	120.515	-65.000/
2563	1567	1	364.905	70.007	65.000	364.905	70.007	-65.000/
2564	1568	1	199.754	159.433	65.000	199.754	159.433	-65.000/
2565	1569	1	571.861	0.000	65.000	571.861	0.000	-65.000/
2566	1570	1	165.485	181.140	65.000	165.485	181.140	-65.000/
2567	1571	1	288.192	104.930	65.000	288.192	104.930	-65.000/
2568	1572	1	239.699	132.185	65.000	239.699	132.185	-65.000/
2569	1573	1	219.913	143.660	65.000	219.913	143.660	-65.000/
2570	1574	1	132.621	203.482	65.000	132.621	203.482	-65.000/
2571	1575	1	469.467	24.782	65.000	469.467	24.782	-65.000/
2572	1576	1	188.775	161.766	65.000	188.775	161.766	-65.000/
2573	1577	1	58.667	260.816	65.000	58.667	260.816	-65.000/
2574	1578	1	315.210	87.304	65.000	315.210	87.304	-65.000/
2575	1579	1	77.787	243.590	65.000	77.787	243.590	-65.000/
2576	1580	1	546.412	0.000	65.000	546.412	0.000	-65.000/
2577	1581	1	39.053	277.131	65.000	39.053	277.131	-65.000/
2578	1582	1	202.966	148.850	65.000	202.966	148.850	-65.000/
2579	1583	1	148.851	184.600	65.000	148.851	184.600	-65.000/
2580	1584	1	96.191	224.963	65.000	96.191	224.963	-65.000/
2581	1585	1	177.796	164.099	65.000	177.796	164.099	-65.000/
2582	1586	1	19.685	291.445	65.000	19.685	291.445	-65.000/
2583	1587	1	391.842	47.645	65.000	391.842	47.645	-65.000/
2584	1588	1	340.540	67.787	65.000	340.540	67.787	-65.000/
2585	1589	1	113.603	206.150	65.000	113.603	206.150	-65.000/
2586	1590	1	443.802	24.714	65.000	443.802	24.714	-65.000/
2587	1591	1	520.964	0.000	65.000	520.964	0.000	-65.000/
2588	1592	1	0.000	305.408	65.000	0.000	305.408	-65.000/
2589	1593	1	245.751	115.317	65.000	245.751	115.317	-65.000/
2590	1594	1	190.306	149.310	65.000	190.306	149.310	-65.000/
2591	1595	1	224.484	127.593	65.000	224.484	127.593	-65.000/
2592	1596	1	206.178	138.266	65.000	206.178	138.266	-65.000/
2593	1597	1	268.698	100.835	65.000	268.698	100.835	-65.000/
2594	1598	1	161.929	166.242	65.000	161.929	166.242	-65.000/
2595	1599	1	130.071	186.499	65.000	130.071	186.499	-65.000/
2596	1600	1	292.792	84.146	65.000	292.792	84.146	-65.000/
2597	1601	1	58.021	242.237	65.000	58.021	242.237	-65.000/
2598	1602	1	495.515	0.000	65.000	495.515	0.000	-65.000/
2599	1603	1	38.654	259.007	65.000	38.654	259.007	-65.000/
2600	1604	1	76.378	226.028	65.000	76.378	226.028	-65.000/
2601	1605	1	367.647	46.378	65.000	367.647	46.378	-65.000/
2602	1606	1	177.646	149.770	65.000	177.646	149.770	-65.000/
2603	1607	1	418.292	24.268	65.000	418.292	24.268	-65.000/
2604	1608	1	19.527	272.855	65.000	19.527	272.855	-65.000/
2605	1609	1	146.063	168.386	65.000	146.063	168.386	-65.000/
2606	1610	1	94.285	207.308	65.000	94.285	207.308	-65.000/
2607	1611	1	191.837	136.854	65.000	191.837	136.854	-65.000/
2608	1612	1	317.939	65.549	65.000	317.939	65.549	-65.000/
2609	1613	1	229.055	111.526	65.000	229.055	111.526	-65.000/
2610	1614	1	209.269	123.001	65.000	209.269	123.001	-65.000/
2611	1615	1	0.000	286.994	65.000	0.000	286.994	-65.000/
2612	1616	1	470.067	0.000	65.000	470.067	0.000	-65.000/
2613	1617	1	111.291	188.397	65.000	111.291	188.397	-65.000/

2614	1618	1	249.203	96.739	65.000	249.203	96.739	-65.000/
2615	1619	1	161.313	150.509	65.000	161.313	150.509	-65.000/
2616	1620	1	272.724	81.154	65.000	272.724	81.154	-65.000/
2617	1621	1	343.452	45.112	65.000	343.452	45.112	-65.000/
2618	1622	1	392.782	23.822	65.000	392.782	23.822	-65.000/
2619	1623	1	177.496	135.441	65.000	177.496	135.441	-65.000/
2620	1624	1	127.522	169.515	65.000	127.522	169.515	-65.000/
2621	1625	1	57.019	224.846	65.000	57.019	224.846	-65.000/
2622	1626	1	38.255	240.883	65.000	38.255	240.883	-65.000/
2623	1627	1	74.968	208.466	65.000	74.968	208.466	-65.000/
2624	1628	1	194.066	121.184	65.000	194.066	121.184	-65.000/
2625	1629	1	295.338	63.310	65.000	295.338	63.310	-65.000/
2626	1630	1	444.618	0.000	65.000	444.618	0.000	-65.000/
2627	1631	1	19.327	255.051	65.000	19.327	255.051	-65.000/
2628	1632	1	212.359	107.735	65.000	212.359	107.735	-65.000/
2629	1633	1	144.980	151.248	65.000	144.980	151.248	-65.000/
2630	1634	1	92.343	189.660	65.000	92.343	189.660	-65.000/
2631	1635	1	231.788	93.579	65.000	231.788	93.579	-65.000/
2632	1636	1	0.000	268.580	65.000	0.000	268.580	-65.000/
2633	1637	1	368.582	23.189	65.000	368.582	23.189	-65.000/
2634	1638	1	320.668	43.793	65.000	320.668	43.793	-65.000/
2635	1639	1	160.697	134.775	65.000	160.697	134.775	-65.000/
2636	1640	1	252.655	78.162	65.000	252.655	78.162	-65.000/
2637	1641	1	108.980	170.645	65.000	108.980	170.645	-65.000/
2638	1642	1	419.170	0.000	65.000	419.170	0.000	-65.000/
2639	1643	1	178.862	119.368	65.000	178.862	119.368	-65.000/
2640	1644	1	37.661	223.665	65.000	37.661	223.665	-65.000/
2641	1645	1	274.964	61.030	65.000	274.964	61.030	-65.000/
2642	1646	1	56.017	207.456	65.000	56.017	207.456	-65.000/
2643	1647	1	196.294	105.515	65.000	196.294	105.515	-65.000/
2644	1648	1	125.711	151.050	65.000	125.711	151.050	-65.000/
2645	1649	1	73.394	190.923	65.000	73.394	190.923	-65.000/
2646	1650	1	19.128	237.247	65.000	19.128	237.247	-65.000/
2647	1651	1	214.372	90.418	65.000	214.372	90.418	-65.000/
2648	1652	1	344.382	22.556	65.000	344.382	22.556	-65.000/
2649	1653	1	0.000	251.095	65.000	0.000	251.095	-65.000/
2650	1654	1	143.897	134.110	65.000	143.897	134.110	-65.000/
2651	1655	1	297.884	42.475	65.000	297.884	42.475	-65.000/
2652	1656	1	393.722	0.000	65.000	393.722	0.000	-65.000/
2653	1657	1	90.400	172.013	65.000	90.400	172.013	-65.000/
2654	1658	1	234.520	75.632	65.000	234.520	75.632	-65.000/
2655	1659	1	162.164	118.305	65.000	162.164	118.305	-65.000/
2656	1660	1	180.229	103.295	65.000	180.229	103.295	-65.000/
2657	1661	1	254.590	58.750	65.000	254.590	58.750	-65.000/
2658	1662	1	37.066	206.446	65.000	37.066	206.446	-65.000/
2659	1663	1	106.441	150.852	65.000	106.441	150.852	-65.000/
2660	1664	1	54.854	190.423	65.000	54.854	190.423	-65.000/
2661	1665	1	197.831	88.396	65.000	197.831	88.396	-65.000/
2662	1666	1	321.631	21.897	65.000	321.631	21.897	-65.000/
2663	1667	1	18.830	220.349	65.000	18.830	220.349	-65.000/
2664	1668	1	369.517	0.000	65.000	369.517	0.000	-65.000/
2665	1669	1	71.821	173.380	65.000	71.821	173.380	-65.000/
2666	1670	1	277.205	40.907	65.000	277.205	40.907	-65.000/
2667	1671	1	0.000	233.610	65.000	0.000	233.610	-65.000/
2668	1672	1	216.385	73.102	65.000	216.385	73.102	-65.000/
2669	1673	1	123.900	132.584	65.000	123.900	132.584	-65.000/
2670	1674	1	145.465	117.243	65.000	145.465	117.243	-65.000/
2671	1675	1	163.631	101.836	65.000	163.631	101.836	-65.000/
2672	1676	1	88.119	154.024	65.000	88.119	154.024	-65.000/
2673	1677	1	235.935	56.830	65.000	235.935	56.830	-65.000/
2674	1678	1	181.290	86.374	65.000	181.290	86.374	-65.000/
2675	1679	1	345.312	0.000	65.000	345.312	0.000	-65.000/
2676	1680	1	298.880	21.237	65.000	298.880	21.237	-65.000/
2677	1681	1	36.314	189.923	65.000	36.314	189.923	-65.000/
2678	1682	1	256.525	39.338	65.000	256.525	39.338	-65.000/
2679	1683	1	18.533	203.450	65.000	18.533	203.450	-65.000/

2680	1684	1	199.368	71.277	65.000	199.368	71.277	-65.000/
2681	1685	1	53.692	173.390	65.000	53.692	173.390	-65.000/
2682	1686	1	127.328	115.638	65.000	127.328	115.638	-65.000/
2683	1687	1	0.000	217.032	65.000	0.000	217.032	-65.000/
2684	1688	1	69.797	157.196	65.000	69.797	157.196	-65.000/
2685	1689	1	103.903	131.059	65.000	103.903	131.059	-65.000/
2686	1690	1	147.032	100.376	65.000	147.032	100.376	-65.000/
2687	1691	1	217.279	54.909	65.000	217.279	54.909	-65.000/
2688	1692	1	322.594	0.000	65.000	322.594	0.000	-65.000/
2689	1693	1	164.784	85.054	65.000	164.784	85.054	-65.000/
2690	1694	1	277.918	20.453	65.000	277.918	20.453	-65.000/
2691	1695	1	85.838	136.035	65.000	85.838	136.035	-65.000/
2692	1696	1	237.349	38.027	65.000	237.349	38.027	-65.000/
2693	1697	1	182.351	69.452	65.000	182.351	69.452	-65.000/
2694	1698	1	35.563	173.400	65.000	35.563	173.400	-65.000/
2695	1699	1	18.157	187.341	65.000	18.157	187.341	-65.000/
2696	1700	1	52.200	157.576	65.000	52.200	157.576	-65.000/
2697	1701	1	109.191	114.032	65.000	109.191	114.032	-65.000/
2698	1702	1	130.756	98.691	65.000	130.756	98.691	-65.000/
2699	1703	1	0.000	200.454	65.000	0.000	200.454	-65.000/
2700	1704	1	199.957	53.480	65.000	199.957	53.480	-65.000/
2701	1705	1	299.876	0.000	65.000	299.876	0.000	-65.000/
2702	1706	1	94.144	121.791	65.000	94.144	121.791	-65.000/
2703	1707	1	148.277	83.734	65.000	148.277	83.734	-65.000/
2704	1708	1	67.773	141.011	65.000	67.773	141.011	-65.000/
2705	1709	1	256.957	19.669	65.000	256.957	19.669	-65.000/
2706	1710	1	165.937	68.272	65.000	165.937	68.272	-65.000/
2707	1711	1	218.172	36.716	65.000	218.172	36.716	-65.000/
2708	1712	1	79.217	124.648	65.000	79.217	124.648	-65.000/
2709	1713	1	34.604	157.955	65.000	34.604	157.955	-65.000/
2710	1714	1	114.479	97.006	65.000	114.479	97.006	-65.000/
2711	1715	1	17.781	171.231	65.000	17.781	171.231	-65.000/
2712	1716	1	278.632	0.000	65.000	278.632	0.000	-65.000/
2713	1717	1	182.634	52.052	65.000	182.634	52.052	-65.000/
2714	1718	1	97.399	107.609	65.000	97.399	107.609	-65.000/
2715	1719	1	0.000	184.759	65.000	0.000	184.759	-65.000/
2716	1720	1	132.351	82.320	65.000	132.351	82.320	-65.000/
2717	1721	1	50.709	141.761	65.000	50.709	141.761	-65.000/
2718	1722	1	237.471	19.013	65.000	237.471	19.013	-65.000/
2719	1723	1	84.386	112.523	65.000	84.386	112.523	-65.000/
2720	1724	1	64.290	127.505	65.000	64.290	127.505	-65.000/
2721	1725	1	149.522	67.092	65.000	149.522	67.092	-65.000/
2722	1726	1	200.545	35.683	65.000	200.545	35.683	-65.000/
2723	1727	1	257.389	0.000	65.000	257.389	0.000	-65.000/
2724	1728	1	166.143	51.167	65.000	166.143	51.167	-65.000/
2725	1729	1	100.654	93.427	65.000	100.654	93.427	-65.000/
2726	1730	1	72.596	113.261	65.000	72.596	113.261	-65.000/
2727	1731	1	17.302	156.088	65.000	17.302	156.088	-65.000/
2728	1732	1	217.986	18.358	65.000	217.986	18.358	-65.000/
2729	1733	1	33.645	142.511	65.000	33.645	142.511	-65.000/
2730	1734	1	116.426	80.907	65.000	116.426	80.907	-65.000/
2731	1735	1	85.607	101.186	65.000	85.607	101.186	-65.000/
2732	1736	1	0.000	169.063	65.000	0.000	169.063	-65.000/
2733	1737	1	48.378	127.942	65.000	48.378	127.942	-65.000/
2734	1738	1	133.947	65.950	65.000	133.947	65.950	-65.000/
2735	1739	1	182.917	34.651	65.000	182.917	34.651	-65.000/
2736	1740	1	60.806	113.998	65.000	60.806	113.998	-65.000/
2737	1741	1	237.594	0.000	65.000	237.594	0.000	-65.000/
2738	1742	1	149.652	50.282	65.000	149.652	50.282	-65.000/
2739	1743	1	72.950	101.145	65.000	72.950	101.145	-65.000/
2740	1744	1	199.980	17.842	65.000	199.980	17.842	-65.000/
2741	1745	1	86.828	89.849	65.000	86.828	89.849	-65.000/
2742	1746	1	102.087	78.330	65.000	102.087	78.330	-65.000/
2743	1747	1	32.466	128.380	65.000	32.466	128.380	-65.000/
2744	1748	1	16.822	140.946	65.000	16.822	140.946	-65.000/
2745	1749	1	118.372	64.808	65.000	118.372	64.808	-65.000/



2746	1750	1	166.350	34.062	65.000	166.350	34.062	-65.000/
2747	1751	1	0.000	154.222	65.000	0.000	154.222	-65.000/
2748	1752	1	46.047	114.124	65.000	46.047	114.124	-65.000/
2749	1753	1	217.799	0.000	65.000	217.799	0.000	-65.000/
2750	1754	1	60.292	101.104	65.000	60.292	101.104	-65.000/
2751	1755	1	134.057	49.465	65.000	134.057	49.465	-65.000/
2752	1756	1	73.303	89.029	65.000	73.303	89.029	-65.000/
2753	1757	1	181.974	17.326	65.000	181.974	17.326	-65.000/
2754	1758	1	87.749	75.752	65.000	87.749	75.752	-65.000/
2755	1759	1	149.782	33.473	65.000	149.782	33.473	-65.000/
2756	1760	1	103.521	63.232	65.000	103.521	63.232	-65.000/
2757	1761	1	16.233	126.873	65.000	16.233	126.873	-65.000/
2758	1762	1	31.288	114.249	65.000	31.288	114.249	-65.000/
2759	1763	1	0.000	139.381	65.000	0.000	139.381	-65.000/
2760	1764	1	199.414	0.000	65.000	199.414	0.000	-65.000/
2761	1765	1	45.569	100.927	65.000	45.569	100.927	-65.000/
2762	1766	1	118.461	48.647	65.000	118.461	48.647	-65.000/
2763	1767	1	59.778	88.210	65.000	59.778	88.210	-65.000/
2764	1768	1	165.178	17.031	65.000	165.178	17.031	-65.000/
2765	1769	1	73.819	74.929	65.000	73.819	74.929	-65.000/
2766	1770	1	134.166	32.979	65.000	134.166	32.979	-65.000/
2767	1771	1	88.669	61.656	65.000	88.669	61.656	-65.000/
2768	1772	1	181.030	0.000	65.000	181.030	0.000	-65.000/
2769	1773	1	15.644	112.800	65.000	15.644	112.800	-65.000/
2770	1774	1	30.846	100.751	65.000	30.846	100.751	-65.000/
2771	1775	1	0.000	125.365	65.000	0.000	125.365	-65.000/
2772	1776	1	103.596	47.541	65.000	103.596	47.541	-65.000/
2773	1777	1	45.091	87.731	65.000	45.091	87.731	-65.000/
2774	1778	1	148.383	16.736	65.000	148.383	16.736	-65.000/
2775	1779	1	59.889	74.105	65.000	59.889	74.105	-65.000/
2776	1780	1	118.550	32.486	65.000	118.550	32.486	-65.000/
2777	1781	1	74.335	60.828	65.000	74.335	60.828	-65.000/
2778	1782	1	164.007	0.000	65.000	164.007	0.000	-65.000/
2779	1783	1	88.730	46.435	65.000	88.730	46.435	-65.000/
2780	1784	1	132.716	16.490	65.000	132.716	16.490	-65.000/
2781	1785	1	15.423	99.441	65.000	15.423	99.441	-65.000/
2782	1786	1	0.000	111.350	65.000	0.000	111.350	-65.000/
2783	1787	1	30.403	87.252	65.000	30.403	87.252	-65.000/
2784	1788	1	45.045	73.866	65.000	45.045	73.866	-65.000/
2785	1789	1	103.671	31.850	65.000	103.671	31.850	-65.000/
2786	1790	1	60.000	60.000	65.000	60.000	60.000	-65.000/
2787	1791	1	146.984	0.000	65.000	146.984	0.000	-65.000/
2788	1792	1	74.365	45.718	65.000	74.365	45.718	-65.000/
2789	1793	1	117.049	16.243	65.000	117.049	16.243	-65.000/
2790	1794	1	15.202	86.081	65.000	15.202	86.081	-65.000/
2791	1795	1	0.000	98.130	65.000	0.000	98.130	-65.000/
2792	1796	1	30.202	73.626	65.000	30.202	73.626	-65.000/
2793	1797	1	88.791	31.215	65.000	88.791	31.215	-65.000/
2794	1798	1	45.000	60.000	65.000	45.000	60.000	-65.000/
2795	1799	1	131.266	0.000	65.000	131.266	0.000	-65.000/
2796	1800	1	60.000	45.000	65.000	60.000	45.000	-65.000/
2797	1801	1	102.372	15.925	65.000	102.372	15.925	-65.000/
2798	1802	1	74.395	30.607	65.000	74.395	30.607	-65.000/
2799	1803	1	0.000	84.911	65.000	0.000	84.911	-65.000/
2800	1804	1	15.101	73.041	65.000	15.101	73.041	-65.000/
2801	1805	1	30.000	60.000	65.000	30.000	60.000	-65.000/
2802	1806	1	115.548	0.000	65.000	115.548	0.000	-65.000/
2803	1807	1	87.694	15.607	65.000	87.694	15.607	-65.000/
2804	1808	1	45.029	45.038	65.000	45.029	45.038	-65.000/
2805	1809	1	60.000	30.000	65.000	60.000	30.000	-65.000/
2806	1810	1	0.000	72.455	65.000	0.000	72.455	-65.000/
2807	1811	1	101.073	0.000	65.000	101.073	0.000	-65.000/
2808	1812	1	15.000	60.000	65.000	15.000	60.000	-65.000/
2809	1813	1	73.847	15.304	65.000	73.847	15.304	-65.000/
2810	1814	1	30.057	45.075	65.000	30.057	45.075	-65.000/
2811	1815	1	45.057	30.075	65.000	45.057	30.075	-65.000/

2812	1816	1	86.598	0.000	65.000	86.598	0.000	-65.000/
2813	1817	1	0.000	60.000	65.000	0.000	60.000	-65.000/
2814	1818	1	60.000	15.000	65.000	60.000	15.000	-65.000/
2815	1819	1	15.029	45.188	65.000	15.029	45.188	-65.000/
2816	1820	1	73.299	0.000	65.000	73.299	0.000	-65.000/
2817	1821	1	30.115	30.151	65.000	30.115	30.151	-65.000/
2818	1822	1	45.143	15.038	65.000	45.143	15.038	-65.000/
2819	1823	1	0.000	45.301	65.000	0.000	45.301	-65.000/
2820	1824	1	60.000	0.000	65.000	60.000	0.000	-65.000/
2821	1825	1	15.057	30.377	65.000	15.057	30.377	-65.000/
2822	1826	1	30.286	15.075	65.000	30.286	15.075	-65.000/
2823	1827	1	45.229	0.000	65.000	45.229	0.000	-65.000/
2824	1828	1	0.000	30.603	65.000	0.000	30.603	-65.000/
2825	1829	1	15.143	15.188	65.000	15.143	15.188	-65.000/
2826	1830	1	30.458	0.000	65.000	30.458	0.000	-65.000/
2827	1831	1	0.000	15.301	65.000	0.000	15.301	-65.000/
2828	1832	1	15.229	0.000	65.000	15.229	0.000	-65.000/
2829	1833	1	0.000	0.000	65.000	0.000	0.000	-65.000/

2830 /

2831 NODAL RESTRAINTS AND PRESCRIBED D.O.F.

2832 -----

2833

2834 <<<< FORMAT >>>> (units = mm, degrees)(d(NODE)>0!!!) Node No. MUST be in ascending order. Cannot repeat nodes.

2835 NODE DX-R DY-R DZ-R R1-R R2-R [#NODES d(NODE)] [#NODES d(NODE)] [#NODES d(NODE)] /

2836	950	1	0	0	1	0/
2837	951	1	0	0	1	0/
2838	953	1	0	0	1	0/
2839	961	1	0	0	1	0/
2840	967	1	0	0	1	0/
2841	974	1	0	0	1	0/
2842	979	1	0	0	1	0/
2843	991	1	0	0	1	0/
2844	1001	1	0	0	1	0/
2845	1011	1	0	0	1	0/
2846	1024	1	0	0	1	0/
2847	1043	1	0	0	1	0/
2848	1053	1	0	0	1	0/
2849	1072	1	0	0	1	0/
2850	1088	1	0	0	1	0/
2851	1104	1	0	0	1	0/
2852	1122	1	0	0	1	0/
2853	1142	1	0	0	1	0/
2854	1163	1	0	0	1	0/
2855	1180	1	0	0	1	0/
2856	1201	1	0	0	1	0/
2857	1226	1	0	0	1	0/
2858	1242	1	0	0	1	0/
2859	1272	1	0	0	1	0/
2860	1294	1	0	0	1	0/
2861	1318	1	0	0	1	0/
2862	1344	1	0	0	1	0/
2863	1367	1	0	0	1	0/
2864	1388	1	0	0	1	0/
2865	1409	1	0	0	1	0/
2866	1436	1	0	0	1	0/
2867	1460	1	0	0	1	0/
2868	1486	1	0	0	1	0/
2869	1505	0	1	0	0	1/
2870	1506	0	1	0	0	1/
2871	1507	0	1	0	0	1/
2872	1512	0	1	0	0	1/
2873	1513	1	0	0	1	0/
2874	1515	0	1	0	0	1/
2875	1518	0	1	0	0	1/

2876	1526	0	1	0	0	1/
2877	1533	0	1	0	0	1/
2878	1538	0	1	0	0	1/
2879	1540	1	0	0	1	0/
2880	1548	0	1	0	0	1/
2881	1558	0	1	0	0	1/
2882	1565	1	0	0	1	0/
2883	1569	0	1	0	0	1/
2884	1580	0	1	0	0	1/
2885	1591	0	1	0	0	1/
2886	1592	1	0	0	1	0/
2887	1602	0	1	0	0	1/
2888	1615	1	0	0	1	0/
2889	1616	0	1	0	0	1/
2890	1630	0	1	0	0	1/
2891	1636	1	0	0	1	0/
2892	1642	0	1	0	0	1/
2893	1653	1	0	0	1	0/
2894	1656	0	1	0	0	1/
2895	1668	0	1	0	0	1/
2896	1671	1	0	0	1	0/
2897	1679	0	1	0	0	1/
2898	1687	1	0	0	1	0/
2899	1692	0	1	0	0	1/
2900	1703	1	0	0	1	0/
2901	1705	0	1	0	0	1/
2902	1716	0	1	0	0	1/
2903	1719	1	0	0	1	0/
2904	1727	0	1	0	0	1/
2905	1736	1	0	0	1	0/
2906	1741	0	1	0	0	1/
2907	1751	1	0	0	1	0/
2908	1753	0	1	0	0	1/
2909	1763	1	0	0	1	0/
2910	1764	0	1	0	0	1/
2911	1772	0	1	0	0	1/
2912	1775	1	0	0	1	0/
2913	1782	0	1	0	0	1/
2914	1786	1	0	0	1	0/
2915	1790	0	0	1	0	0/
2916	1791	0	1	0	0	1/
2917	1795	1	0	0	1	0/
2918	1798	0	0	1	0	0/
2919	1799	0	1	0	0	1/
2920	1800	0	0	1	0	0/
2921	1803	1	0	0	1	0/
2922	1805	0	0	1	0	0/
2923	1806	0	1	0	0	1/
2924	1809	0	0	1	0	0/
2925	1810	1	0	0	1	0/
2926	1811	0	1	0	0	1/
2927	1812	0	0	1	0	0/
2928	1816	0	1	0	0	1/
2929	1817	1	0	1	1	0/
2930	1818	0	0	1	0	0/
2931	1820	0	1	0	0	1/
2932	1823	1	0	0	1	0/
2933	1824	0	1	1	0	1/
2934	1827	0	1	0	0	1/
2935	1828	1	0	0	1	0/
2936	1830	0	1	0	0	1/
2937	1831	1	0	0	1	0/
2938	1832	0	1	0	0	1/
2939	1833	1	1	0	1	1/
2940	/					
2941						

AUTO GENERATE NODAL RESTRAINTS

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2942 -----
2943
2944 <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
2945 RTYP DX-R DY-R DZ-R R1-R R2-R X1 Y1 Z1 [ NX SX
NY SY NZ SZ] [X2 Y2 Z2]/
2946 /
2947 AUTO GENERATE RESULTS (DISP OR REACTIONS)
2948 -----
2949
2950 <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
2951 RTYP D(0-5) R(0-5) X1 Y1 Z1 [ NX SX NY SY NZ
SZ] [X2 Y2 Z2]/
2952 /
2953 LINKED NODES
2954 -----
2955
2956 <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
2957 RTYP D(0-5) X1 Y1 Z1 [ NX SX NY SY NZ SZ]
[X2 Y2 Z2]/
2958 /
2959
2960 <NOTES:>
2961 Smearred Reinforcement:
2962 d - Distance from the top of the element to the centroid of the
2963 reinforcement layer.
2964
2965 Truss Elements:
2966 OS - Element offset measured from nodal location (typically middle layer).
2967 Negative OS is toward element bottom surface.
2968
2969 REF - Reinforcement Types (smearred & truss):
2970 1 - Ductile Steel Reinforcement (tension+compression)
2971 2 - Prestressing Steel (tension+compression)
2972 3 - Ductile Steel Reinforcement (tension only)
2973 4 - Ductile Steel Reinforcement (compression only)
2974
2975 Element incidences:
2976 <INC9> - Only required when nine noded element is used.
2977
2978 Element types (MUST input in this order - Shell, solid, then truss):
2979 1 - Shell elements
2980 2 - Solid elements
2981 3 - Truss elements
2982
2983 Coordinates: (Cannot use a mix of type 1 and 2 coordinates)
2984 TYPE - 1 - Top and Bottom coordinates of the node are provided.
2985 2 - Centre Line coordinates of the node are provided.
2986 3 - Coordinates of the node for the solid element are provided.
2987
2988 Restrained D.O.F.:
2989 0 - Unrestrained degree of freedom
2990 1 - Restrained degree of freedom
2991
2992 Auto generate restrained D.O.F.:
2993 TYPE - 1 - Point restraints
2994 2 - Line restraints
2995 3 - Area restraints
2996
2997 (1) DO NOT INSERT OR DELETE ANY LINE.
2998 EXCEPTION: INSERTION OF LINES IN THE SPACE PROVIDED FOR INPUT OF
2999 DATA. IN THIS CASE, LEAVE LINE WITH SLASH AFTER LAST DATA LINE.
3000
3001 (2) BLANK SPACES SHOULD BE USED TO SEPARATE DATA WITHIN A DATA LINE.

```

3002  
3003 (3) ELEMENT INCIDENCE NUMBER 9 (i.e. <INC9>) TO BE IGNORED WHEN 8 NODED  
3004 SERENDIPITY ELEMENT USED.  
3005  
3006 (4) DIMENSIONED FOR: 50 ELEMENTS, 200 NODES, 100 RESTRAINED NODES,  
3007 16 CONCRETE LAYERS, 6 REINFORCEMENT LAYERS, 30 MATERIALS, 20 LAYER  
3008 PATTERNS, MAXIMUM FRONTWIDTH OF 100.  
3009

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1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : Self Weight
12         Load case file name   (8 char. max.) : LOAD1
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 0
18         No. of nodes with imposed displacements : 0
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 436
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.  INIT. BOT  FINAL TOP  INIT. TOP  ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.    TEMP.    TEMP.    TEMP.    TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51         PRESCRIBED NODE DISPLACEMENTS
52         -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         /
57
58         CONCRETE PRESTRAINS
59         -----
60         <NOTE:> UNITS: me
61         <<<<< FORMAT >>>>>
62         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
63         /
64
65         GRAVITATIONAL LOADS
66         -----

```

```

67 <<<< FORMAT >>>>
68 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
69     1      0.00000  0.00000  -1.00000  0.00000/
70     2      0.00000  0.00000  -1.00000  0.00000/
71     3      0.00000  0.00000  -1.00000  0.00000/
72     4      0.00000  0.00000  -1.00000  0.00000/
73     5      0.00000  0.00000  -1.00000  0.00000/
74     6      0.00000  0.00000  -1.00000  0.00000/
75     7      0.00000  0.00000  -1.00000  0.00000/
76     8      0.00000  0.00000  -1.00000  0.00000/
77     9      0.00000  0.00000  -1.00000  0.00000/
78    10      0.00000  0.00000  -1.00000  0.00000/
79    11      0.00000  0.00000  -1.00000  0.00000/
80    12      0.00000  0.00000  -1.00000  0.00000/
81    13      0.00000  0.00000  -1.00000  0.00000/
82    14      0.00000  0.00000  -1.00000  0.00000/
83    15      0.00000  0.00000  -1.00000  0.00000/
84    16      0.00000  0.00000  -1.00000  0.00000/
85    17      0.00000  0.00000  -1.00000  0.00000/
86    18      0.00000  0.00000  -1.00000  0.00000/
87    19      0.00000  0.00000  -1.00000  0.00000/
88    20      0.00000  0.00000  -1.00000  0.00000/
89    21      0.00000  0.00000  -1.00000  0.00000/
90    22      0.00000  0.00000  -1.00000  0.00000/
91    23      0.00000  0.00000  -1.00000  0.00000/
92    24      0.00000  0.00000  -1.00000  0.00000/
93    25      0.00000  0.00000  -1.00000  0.00000/
94    26      0.00000  0.00000  -1.00000  0.00000/
95    27      0.00000  0.00000  -1.00000  0.00000/
96    28      0.00000  0.00000  -1.00000  0.00000/
97    29      0.00000  0.00000  -1.00000  0.00000/
98    30      0.00000  0.00000  -1.00000  0.00000/
99    31      0.00000  0.00000  -1.00000  0.00000/
100   32      0.00000  0.00000  -1.00000  0.00000/
101   33      0.00000  0.00000  -1.00000  0.00000/
102   34      0.00000  0.00000  -1.00000  0.00000/
103   35      0.00000  0.00000  -1.00000  0.00000/
104   36      0.00000  0.00000  -1.00000  0.00000/
105   37      0.00000  0.00000  -1.00000  0.00000/
106   38      0.00000  0.00000  -1.00000  0.00000/
107   39      0.00000  0.00000  -1.00000  0.00000/
108   40      0.00000  0.00000  -1.00000  0.00000/
109   41      0.00000  0.00000  -1.00000  0.00000/
110   42      0.00000  0.00000  -1.00000  0.00000/
111   43      0.00000  0.00000  -1.00000  0.00000/
112   44      0.00000  0.00000  -1.00000  0.00000/
113   45      0.00000  0.00000  -1.00000  0.00000/
114   46      0.00000  0.00000  -1.00000  0.00000/
115   47      0.00000  0.00000  -1.00000  0.00000/
116   48      0.00000  0.00000  -1.00000  0.00000/
117   49      0.00000  0.00000  -1.00000  0.00000/
118   50      0.00000  0.00000  -1.00000  0.00000/
119   51      0.00000  0.00000  -1.00000  0.00000/
120   52      0.00000  0.00000  -1.00000  0.00000/
121   53      0.00000  0.00000  -1.00000  0.00000/
122   54      0.00000  0.00000  -1.00000  0.00000/
123   55      0.00000  0.00000  -1.00000  0.00000/
124   56      0.00000  0.00000  -1.00000  0.00000/
125   57      0.00000  0.00000  -1.00000  0.00000/
126   58      0.00000  0.00000  -1.00000  0.00000/
127   59      0.00000  0.00000  -1.00000  0.00000/
128   60      0.00000  0.00000  -1.00000  0.00000/
129   61      0.00000  0.00000  -1.00000  0.00000/
130   62      0.00000  0.00000  -1.00000  0.00000/
131   63      0.00000  0.00000  -1.00000  0.00000/
132   64      0.00000  0.00000  -1.00000  0.00000/

```

133	65	0.00000	0.00000	-1.00000	0.00000/
134	66	0.00000	0.00000	-1.00000	0.00000/
135	67	0.00000	0.00000	-1.00000	0.00000/
136	68	0.00000	0.00000	-1.00000	0.00000/
137	69	0.00000	0.00000	-1.00000	0.00000/
138	70	0.00000	0.00000	-1.00000	0.00000/
139	71	0.00000	0.00000	-1.00000	0.00000/
140	72	0.00000	0.00000	-1.00000	0.00000/
141	73	0.00000	0.00000	-1.00000	0.00000/
142	74	0.00000	0.00000	-1.00000	0.00000/
143	75	0.00000	0.00000	-1.00000	0.00000/
144	76	0.00000	0.00000	-1.00000	0.00000/
145	77	0.00000	0.00000	-1.00000	0.00000/
146	78	0.00000	0.00000	-1.00000	0.00000/
147	79	0.00000	0.00000	-1.00000	0.00000/
148	80	0.00000	0.00000	-1.00000	0.00000/
149	81	0.00000	0.00000	-1.00000	0.00000/
150	82	0.00000	0.00000	-1.00000	0.00000/
151	83	0.00000	0.00000	-1.00000	0.00000/
152	84	0.00000	0.00000	-1.00000	0.00000/
153	85	0.00000	0.00000	-1.00000	0.00000/
154	86	0.00000	0.00000	-1.00000	0.00000/
155	87	0.00000	0.00000	-1.00000	0.00000/
156	88	0.00000	0.00000	-1.00000	0.00000/
157	89	0.00000	0.00000	-1.00000	0.00000/
158	90	0.00000	0.00000	-1.00000	0.00000/
159	91	0.00000	0.00000	-1.00000	0.00000/
160	92	0.00000	0.00000	-1.00000	0.00000/
161	93	0.00000	0.00000	-1.00000	0.00000/
162	94	0.00000	0.00000	-1.00000	0.00000/
163	95	0.00000	0.00000	-1.00000	0.00000/
164	96	0.00000	0.00000	-1.00000	0.00000/
165	97	0.00000	0.00000	-1.00000	0.00000/
166	98	0.00000	0.00000	-1.00000	0.00000/
167	99	0.00000	0.00000	-1.00000	0.00000/
168	100	0.00000	0.00000	-1.00000	0.00000/
169	101	0.00000	0.00000	-1.00000	0.00000/
170	102	0.00000	0.00000	-1.00000	0.00000/
171	103	0.00000	0.00000	-1.00000	0.00000/
172	104	0.00000	0.00000	-1.00000	0.00000/
173	105	0.00000	0.00000	-1.00000	0.00000/
174	106	0.00000	0.00000	-1.00000	0.00000/
175	107	0.00000	0.00000	-1.00000	0.00000/
176	108	0.00000	0.00000	-1.00000	0.00000/
177	109	0.00000	0.00000	-1.00000	0.00000/
178	110	0.00000	0.00000	-1.00000	0.00000/
179	111	0.00000	0.00000	-1.00000	0.00000/
180	112	0.00000	0.00000	-1.00000	0.00000/
181	113	0.00000	0.00000	-1.00000	0.00000/
182	114	0.00000	0.00000	-1.00000	0.00000/
183	115	0.00000	0.00000	-1.00000	0.00000/
184	116	0.00000	0.00000	-1.00000	0.00000/
185	117	0.00000	0.00000	-1.00000	0.00000/
186	118	0.00000	0.00000	-1.00000	0.00000/
187	119	0.00000	0.00000	-1.00000	0.00000/
188	120	0.00000	0.00000	-1.00000	0.00000/
189	121	0.00000	0.00000	-1.00000	0.00000/
190	122	0.00000	0.00000	-1.00000	0.00000/
191	123	0.00000	0.00000	-1.00000	0.00000/
192	124	0.00000	0.00000	-1.00000	0.00000/
193	125	0.00000	0.00000	-1.00000	0.00000/
194	126	0.00000	0.00000	-1.00000	0.00000/
195	127	0.00000	0.00000	-1.00000	0.00000/
196	128	0.00000	0.00000	-1.00000	0.00000/
197	129	0.00000	0.00000	-1.00000	0.00000/
198	130	0.00000	0.00000	-1.00000	0.00000/











463	395	0.00000	0.00000	-1.00000	0.00000/
464	396	0.00000	0.00000	-1.00000	0.00000/
465	397	0.00000	0.00000	-1.00000	0.00000/
466	398	0.00000	0.00000	-1.00000	0.00000/
467	399	0.00000	0.00000	-1.00000	0.00000/
468	400	0.00000	0.00000	-1.00000	0.00000/
469	401	0.00000	0.00000	-1.00000	0.00000/
470	402	0.00000	0.00000	-1.00000	0.00000/
471	403	0.00000	0.00000	-1.00000	0.00000/
472	404	0.00000	0.00000	-1.00000	0.00000/
473	405	0.00000	0.00000	-1.00000	0.00000/
474	406	0.00000	0.00000	-1.00000	0.00000/
475	407	0.00000	0.00000	-1.00000	0.00000/
476	408	0.00000	0.00000	-1.00000	0.00000/
477	409	0.00000	0.00000	-1.00000	0.00000/
478	410	0.00000	0.00000	-1.00000	0.00000/
479	411	0.00000	0.00000	-1.00000	0.00000/
480	412	0.00000	0.00000	-1.00000	0.00000/
481	413	0.00000	0.00000	-1.00000	0.00000/
482	414	0.00000	0.00000	-1.00000	0.00000/
483	415	0.00000	0.00000	-1.00000	0.00000/
484	416	0.00000	0.00000	-1.00000	0.00000/
485	417	0.00000	0.00000	-1.00000	0.00000/
486	418	0.00000	0.00000	-1.00000	0.00000/
487	419	0.00000	0.00000	-1.00000	0.00000/
488	420	0.00000	0.00000	-1.00000	0.00000/
489	421	0.00000	0.00000	-1.00000	0.00000/
490	422	0.00000	0.00000	-1.00000	0.00000/
491	423	0.00000	0.00000	-1.00000	0.00000/
492	424	0.00000	0.00000	-1.00000	0.00000/
493	425	0.00000	0.00000	-1.00000	0.00000/
494	426	0.00000	0.00000	-1.00000	0.00000/
495	427	0.00000	0.00000	-1.00000	0.00000/
496	428	0.00000	0.00000	-1.00000	0.00000/
497	429	0.00000	0.00000	-1.00000	0.00000/
498	430	0.00000	0.00000	-1.00000	0.00000/
499	431	0.00000	0.00000	-1.00000	0.00000/
500	432	0.00000	0.00000	-1.00000	0.00000/
501	433	0.00000	0.00000	-1.00000	0.00000/
502	434	0.00000	0.00000	-1.00000	0.00000/
503	435	0.00000	0.00000	-1.00000	0.00000/
504	436	0.00000	0.00000	-1.00000	0.00000/

505 /  
506

507 ADDITIONAL LUMPED MASSES

508 -----  
509 <NOTE:> UNITS: kg, m/s, m/s2  
510 <<<<< FORMAT >>>>>  
511 NODE DOF-X DOF-Y DOF-Z MASS Vo-X Vo-Y Vo-Z Acc-X Acc-Y Acc-Z [ #NODE  
512 d(NODE) ] /

513 /

514 IMPULSE, BLAST AND IMPACT FORCES

515 -----  
516 <NOTE:> UNITS: Sec, kN  
517 <<<<< FORMAT >>>>>  
518 NODE DOF T1 F1 T2 F2 T3 F3 T4 F4 [ #NODE d(NODE) ] /  
519 /

520 /

521 GROUND ACCELERATION

522 -----  
523 <NOTE:> UNITS: Sec, G  
524 <<<<< FORMAT >>>>>  
525 TIME ACC-X ACC-Y ACC-Z /  
526 /

527

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : DISP. MASTER
12         Load case file name   (8 char. max.) : LOAD2
13
14         No. of elements with a u.d.l.      : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads : 0
18         No. of nodes with imposed displacements : 1
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads      : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads      : 0
23         No. of ground acceleration data values : 0
24
25          UNIFORMLY DISTRIBUTED LOADS
26          -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31          HYDROSTATIC LOADS
32          -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37          TEMPERATURE LOADS
38          -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44          CONCENTRATED LOADS
45          -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51          PRESCRIBED NODE DISPLACEMENTS
52          -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         471           3           -1.00000/
57         /
58
59          CONCRETE PRESTRAINS
60          -----
61         <NOTE:> UNITS: me
62         <<<<< FORMAT >>>>>
63         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
64         /
65
66          GRAVITATIONAL LOADS

```

```

67                                     -----
68 <<<<< FORMAT >>>>>
69 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
70 /
71
72                                     ADDITIONAL LUMPED MASSES
73                                     -----
74 <NOTE:> UNITS:  kg, m/s, m/s2
75 <<<<< FORMAT >>>>>
76 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
d(NODE) ] /
77 /
78
79                                     IMPULSE, BLAST AND IMPACT FORCES
80                                     -----
81 <NOTE:> UNITS:  Sec, kN
82 <<<<< FORMAT >>>>>
83 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
84 /
85
86                                     GROUND ACCELERATION
87                                     -----
88 <NOTE:> UNITS:  Sec, G
89 <<<<< FORMAT >>>>>
90 TIME  ACC-X  ACC-Y  ACC-Z /
91 /
92

```

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : DISP. SLAVE
12         Load case file name   (8 char. max.) : LOAD3
13
14         No. of elements with a u.d.l.      : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads : 0
18         No. of nodes with imposed displacements : 1
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51         PRESCRIBED NODE DISPLACEMENTS
52         -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         834      -3      471/
57         /
58
59         CONCRETE PRESTRAINS
60         -----
61         <NOTE:> UNITS: me
62         <<<<< FORMAT >>>>>
63         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
64         /
65
66         GRAVITATIONAL LOADS

```



```

67                                     -----
68 <<<<< FORMAT >>>>>
69 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
70 /
71
72                                     ADDITIONAL LUMPED MASSES
73                                     -----
74 <NOTE:> UNITS:  kg, m/s, m/s2
75 <<<<< FORMAT >>>>>
76 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
77 d(NODE) ] /
78 /
79                                     IMPULSE, BLAST AND IMPACT FORCES
80                                     -----
81 <NOTE:> UNITS:  Sec, kN
82 <<<<< FORMAT >>>>>
83 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
84 /
85
86                                     GROUND ACCELERATION
87                                     -----
88 <NOTE:> UNITS:  Sec, G
89 <<<<< FORMAT >>>>>
90 TIME  ACC-X  ACC-Y  ACC-Z /
91 /
92

```

```

1
2          - - - - -
3          -   V e c T o r 4   -
4          -   A u x i l i a r y   D a t a   -
5          - - - - -
6
7  Stiffness Matrix Solver          (1-2) : 2
8  Number of Parallel Threads      : 2
9
10 Shear Analysis Mode              (1-3) : 2
11
12 Concrete Aggregate Type          (1-2) : 1
13 Concrete Conductivity            : 2.19
14 Concrete Fracture Energy          (kN/m) : 0.00
15 Prestressing Friction Coefficient (/r) : 0.30
16 Prestressing Wobble Coefficient  (/m) : 0.00250
17
18 Thermal Time Stepping Factor      : 0.6666667
19
20 Time Integration Method          (1-3) : 3
21
22 1st Mode to Assign Damping        : 1
23 2nd Mode to Assign Damping        : 2
24 Damping Ratio Assignment #1       : 0.00
25 Damping Ratio Assignment #2       : 2.00
26 Ground Acceleration in x-direction : 0.0
27 Ground Acceleration in y-direction : 0.0
28 Ground Acceleration in z-direction : 0.0
29 Mass Factor due to Self-Weight     : 1.0
30
31 Tension Softening Pt 1: Strain     (me) : 0.20
32 Tension Softening Pt 1: Stress     (MPa) : 3.00
33 Tension Softening Pt 2: Strain     (me) : 0.50
34 Tension Softening Pt 2: Stress     (MPa) : 2.00
35 Tension Softening Pt 3: Strain     (me) : 1.00
36 Tension Softening Pt 3: Stress     (MPa) : 1.00
37 Tension Softening Pt 4: Strain     (me) : 2.00
38 Tension Softening Pt 4: Stress     (MPa) : 0.10
39
40 Matrix Type                       : 1
41 Fibre Type                         : 1
42 Volumetric Fraction of Fibres      (%) : 0.0
43 Fibre Length                       (mm) : 50.0
44 Fibre Diameter                     (mm) : 0.60
45 Tensile Strength of Fibre          (MPa) : 1050.0
46 Mean fibre-Matrix Bond Stress      (MPa) : 0.00
47 SLS Equivalent Strength (Euro)     (MPa) : 1.00
48 ULS Equivalent Strength (Euro)     (MPa) : 0.50
49
50
51 NOTES:
52 Concrete Aggregate Type:
53     1. Carbonate
54     2. Silicious
55
56 Concrete Fracture Energy:
57     Input 0 for program generated default value.
58
59
60 Time Stepping Factor for Heat Flow Analysis:
61     0.500 : Crank-Nicolson Scheme (Accurate)
62     0.667 : Galerkin Scheme (Stable)
63
64 Shear Analysis Mode:
65     0. Out-of-Plane Shear Strains Neglected
66     1. Multi-Layer Analysis - Uniform Shear Strain

```

```
67           2. Multi-Layer Analysis - Parabolic Shear Strain
68
69
70 Dynamic Analysis Parameters
71 -----
72
73 Dynamic Analysis Mode:
74     1. Impact
75     2. Ground Acceleration
76     3. Impulse
77
78 Newmark Beta Factor:
79     0.25: Constant Acceleration
80     1/6: Linear Acceleration
81
82 Modal Factors   : Vibration modes to be considered for Rayleigh Damping
83
84 Damping Factors : Corresponding damping ratios for the above vibration modes
85
86 Ground Acceleration directions:
87     1: Acceleration applied in that direction
88     0: Acceleration not applied in that direction
89
90
91 Steel Fibre Reinforced Concrete
92 -----
93
94 Matrix type:
95     1. Concrete
96     2. Mortar
97
98 Fiber type:
99     1. Hooked
100    2. Straight
101
```

Input Files

**Slab PT21 (Sagasetta et al. 2011)**

```

1          - - - - -
2          -   V e c T o r   -
3          -   J O B   D A T A   -
4          - - - - -
5
6 Job Title          (30 char max) : VT4SLAB
7 Job File Name     (8 char max)  : VT4SLAB
8 Date              (30 char max) :
9
10 STRUCTURE DATA
11 -----
12 Structure Type    : 4
13 File Name        (8 char max)  : STRUCT
14
15 LOADING DATA
16 -----
17 No. of Load Stages      : 1000
18 Starting Load Stage No. : 1
19 Load Series ID         (5 char max) : I
20
21 Load File Name          Factors
22 Case (8 char max) | Initial   Final   Inc   Typ  Rep  C-Inc|
23 1      LOAD1          1.00000  1.00000  0.00000  1  1  1.00000
24 2      LOAD2          0.05900 160.00000 0.25000  1  1  1.00000
25 3      LOAD3          1.00000  1.00000  0.00000  1  1  1.00000
26 4      NULL           0.00000  0.00000  0.00000  1  1  0.00000
27 5      NULL           0.00000  0.00000  0.00000  1  1  0.00000
28
29 ANALYSIS PARAMETERS
30 -----
31 Analysis Mode              (1-2) : 1
32 Seed File Name            (8 char max) : NULL
33 Convergence Limit         (>1.0) : 1.000005
34 Averaging Factor          (<1.0) : 0.40
35 Maximum No. of Iterations : 80
36 Convergence Criteria      (1-3) : 2
37 Results File Type         (1-4) : 2
38 Result Output Format       (1-3) : 4
39
40 MATERIAL BEHAVIOUR MODELS
41 -----
42 Concrete Compression Base Curve (0-3) : 1
43 Concrete Compression Post-Peak (0-3) : 1
44 Concrete Compression Softening (0-8) : 1
45 Concrete Tension Stiffening (0-5) : 1
46 Concrete Tension Softening (0-8) : 2
47 Concrete Tension Splitting (1-2) : 1
48 Concrete Confined Strength (0-2) : 1
49 Concrete Dilatation (0-5) : 1
50 Concrete Cracking Criterion (0-4) : 1
51 Concrete Crack Slip Check (0-2) : 1
52 Concrete Crack Width Check (0-2) : 1
53 Concrete Bond or Adhesion (0-4) : 1
54 Concrete Creep and Relaxation (0-1) : 1
55 Concrete Hysteresis (0-3) : 2
56 Reinforcement Hysteresis (0-3) : 1
57 Reinforcement Dowel Action (0-1) : 1
58 Reinforcement Buckling (0-1) : 1
59 Element Strain Histories (0-1) : 1
60 Element Slip Distortions (0-4) : 1
61 Strain Rate Effects (0-1) : 1
62 Structural Damping (0-1) : 1
63 Geometric Nonlinearity (0-1) : 1
64 Crack Allocation Process (0-1) : 1
65
66

```

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67
68 ANALYSIS PARAMETERS:
69 -----
70 1. INTEGRATION SCHEME:
71     1. Selective (Bending - 3 ; Shear - 2)
72     2. Full      (Bending - 3 ; Shear - 3)
73     3. Reduced  (Bending - 2 ; Shear - 2)
74
75 2. CONVERGENCE CRITERIA:
76     1. Displacements - Weighted Average
77     2. Displacements - Maximum Value
78     3. Secant Moduli - RMS
79
80 3. RESULTS FILE TYPE:
81     1. ASCII and Binary Files
82     2. ASCII Files Only
83     3. Binary Files Only
84     4. Last Load Stage Only
85
86 4. RESULTS OUTPUT FORMAT
87     Print concrete strains and stresses of:
88     1. All layers at all gauss points
89     2. Top and bottom layers at all gauss points
90     3. All layers for central gauss point only
91
92 MATERIAL BEHAVIOUR MODELS:
93 -----
94 1. OUT-OF-PLANE SHEAR:
95     0. Shear Not Considered
96     1. Considered - Uniform Shear Strain
97
98 2. GEOMETRIC NONLINEARITY:
99     0. Neglect Effect
100    1. Consider Effect
101
102 3. LOAD HISTORY:
103     0. Neglect Previous Loading Effects
104     1. Consider Previous Loading Effects
105
106 4. CONCRETE COMPRESSION BASE CURVE:
107     0. Linear Elastic
108     1. Normal (Parabolic)
109     2. High Strength
110
111 5. CONCRETE COMPRESSION SOFTENING:
112     0. Neglect Effect
113     1. Vecchio-Collins 1982 Model
114     2. Vecchio-Collins 1986 Model
115     3. Vecchio 1992-A Model
116     4. Vecchio 1992-B Model
117
118 6. CONCRETE TENSION STIFFENING:
119     0. Neglect Effect
120     1. Vecchio-Collins 1982 Model
121     2. Collins-Mitchell Model
122     3. Izumo, Maekawa et al Model
123
124 7. CONCRETE TENSION SOFTENING:
125     0. Neglect Effect
126     1. Linear Softening
127     2. Linear Softening + 10% Residual Stress
128     3. 10% Residual Stress Only
129     4. Yamamoto Model (Base Curve Only)
130     5. Yamamoto Model (Strain Hardening Considered)
131
132 8. CONCRETE STRENGTH ENHANCEMENT:

```

133           0. Biaxial Effects Neglected  
134           1. Biaxial Effects Considered  
135  
136    9. CONCRETE PLASTIC STRAINS:  
137           0. Neglect Effects  
138           1. Consider Effects  
139  
140   10. CONCRETE CRACK SLIP CHECK:  
141           0. Omit Check  
142           1. Perform Check  
143  
144   11. REINFORCEMENT STRESS RESPONSE:  
145           0. Linear Elastic  
146           1. Elastic-Plastic  
147           2. Strain Haredening Considered  
148           3. Bauschinger Effects Considered  
149  
150   12. SPLITTING FAILURE CRITERIA:  
151           0. Neglect Effects  
152           1. Consider Effects  
153  
154   NOTES:  
155   -----  
156   1. This program uses metric units only.  
157  
158   2. Do not insert or delete any line.  
159

```

1          - - - - -
2          -   S T R U C T U R E   -
3          -           D A T A     -
4          -         Version 1.0   -
5          - - - - -
6
7          STRUCTURAL PARAMETERS
8          -----
9
10         Structure title           (30 char. max.) : SLAB
11         Structure file name       (8 char. max.) : STRUCT
12         No. of reinforced concrete material types : 2
13         No. of truss element material types      : 0
14         No. of bond material types              : 0
15         No. of shell elements                  : 275
16         No. of solid elements                  : 0
17         No. of truss elements                  : 0
18         No. of link elements                   : 0
19         No. of nodal points                    : 1169
20         No. of nodes with prescribed d.o.f.    : 88
21
22
23         MATERIAL SPECIFICATIONS
24         -----
25
26         (A) GENERAL
27         <-----SHELL----->          SHELL SOLID <-----SHELL SHEAR REINFORCEMENT----->
28         MAT REF OOP   T   OS   CON REIN REIN DiaZ ROZ   Fyz   Fuz   Esz   eshz
29         euz Agg   clrT clrB Sx   Sy   Sz
30         TYP TYP SSM   (mm) (mm) LYR COMP COMP (mm) (%) (MPa) (MPa) (MPa) (mm/m)
31         (mm/m) (mm) (mm) (mm) (mm) (mm) (mm)
32         1 1 0 250 0 20 4 0 8 0 580 680 200000 2.5 54.3 16 0 0 0 0 250
33         2 1 0 250 0 20 4 0 8 10 580 680 200000 2.5 54.3 16 0 0 0 0 250
34         /
35         (B) CONCRETE
36         -----
37         MAT   f'c   f't   Ec   e'c   Mu   Cc   kc   Density
38         TYP (MPa) (MPa) (MPa) (mm/m) (mm/m) (MPa) (MPa) (MPa) (kg/m^3)
39         1 67.5 0 0 0 0 0 0 2400
40         2 135 0 0 0 0 0 0 2400
41         /
42         (C) SMEARED REINFORCEMENT FOR SHELLS (Total no of input lines must be the same as the
43         number listed under SHELL REIN COMP)
44         -----
45         MAT REF DIR   d   DIA   As   Fy   Fu   Es   esh   eu   Cs   Dep   b/t
46         TYP (1-6) (deg) (mm) (mm) (mm^2/m) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)
47         1 1.00 90.00 50.00 16.00 1608.496 552.00 662.40 200000.00 40.00 100.00
48         0.00 0.00 0/
49         1 1.00 0.00 68.00 20.00 3141.593 597.00 716.40 200000.00 40.00
50         100.00 0.00 0.00 0/
51         1 1.00 0.00 193.00 10.00 785.4 552.00 662.40 200000.00 40.00 100.00
52         0.00 0.00 0/
53         1 1.00 90.00 203.00 10.00 628.32 552.00 662.40 200000.00 40.00 100.00
54         0.00 0.00 0/
55         2 1.00 90.00 50.00 16.00 1608.496 552.00 662.40 200000.00 40.00 100.00
56         0.00 0.00 0/
57         2 1.00 0.00 68.00 20.00 3141.593 597.00 716.40 200000.00 40.00
58         100.00 0.00 0.00 0/
59         2 1.00 0.00 193.00 10.00 785.4 552.00 662.40 200000.00 40.00 100.00
60         0.00 0.00 0/
61         2 1.00 90.00 203.00 10.00 628.32 552.00 662.40 200000.00 40.00 100.00
62         0.00 0.00 0/
63         /
64         (D) SMEARED REINFORCEMENT FOR SOLIDS (Total no of input lines must be the same as the
65         number listed under SOLID REIN COMP)
66         -----

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55 MAT SRF ORIENT. RHO Db Fy Fu [Es esh eu Cs Dep b/t]
56 TYP TYP k l m % mm MPa MPa MPa me me /C me
57 /
58 (E) STEEL FOR TRUSS ELEMENTS
59 -----
60 <NOTE:> TO BE USED FOR TRUSS ELEMENTS ONLY
61 MAT REF OS DIA As Fy Fu Es esh eu Cs Dep b/t
62 TYP (1-6) (mm) (mm) (mm2) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)
63 /
64 (F) BOND
65 -----
66 <NOTE:> TO BE USED FOR EXTERIOR/INTERIOR BONDED ELEMENTS
67 MAT REF { Ao U1 U2 U3 S1 S2 S3 }/{ CPF Cmin No. HOOK }
68 TYP TYP mm^2 MPa MPa MPa mm mm mm 0-1 mm LYR 0/1
69 /
70 ELEMENT INCIDENCES
71 -----
72
73 (A) HETEROSIS ELEMENTS
74 -----
75 <<<< FORMAT >>>> (counterclockwise direction)
76 ELMT INC1 INC2 INC3 INC4 INC5 INC6 INC7 INC8 <INC9> [#ELMT d(ELMT) d(INC1) d(INC4)] x2 /
77 1 1132 1141 1148 1135 1127 1115 1106 1119 1125/
78 2 1147 1140 1133 1120 1109 1118 1126 1134 1128/
79 3 1114 1124 1132 1119 1106 1098 1087 1100 1110/
80 4 1133 1123 1113 1101 1088 1099 1109 1120 1111/
81 5 1113 1103 1093 1081 1067 1076 1088 1101 1090/
82 6 1093 1102 1114 1100 1087 1075 1066 1079 1089/
83 7 1127 1117 1107 1092 1077 1091 1106 1115 1104/
84 8 1108 1116 1126 1118 1109 1095 1082 1094 1105/
85 9 1107 1097 1084 1063 1045 1062 1077 1092 1078/
86 10 1085 1096 1108 1094 1082 1064 1046 1065 1080/
87 11 1084 1070 1054 1035 1014 1028 1045 1063 1047/
88 12 1055 1069 1085 1065 1046 1029 1013 1033 1048/
89 13 1054 1040 1023 1004 984 998 1014 1035 1018/
90 14 1022 1039 1055 1033 1013 996 981 1003 1017/
91 15 1023 1009 992 973 950 968 984 1004 990/
92 16 993 1010 1022 1003 981 964 947 971 987/
93 17 992 979 967 941 917 933 950 973 958/
94 18 966 978 993 971 947 932 915 939 956/
95 19 967 952 937 911 884 900 917 941 925/
96 20 936 951 966 939 915 899 883 910 924/
97 21 937 920 908 878 851 867 884 911 894/
98 22 909 921 936 910 883 869 852 879 895/
99 23 788 739 697 698 700 745 795 790 743/
100 24 6 3 1 2 5 7 9 8 4/
101 25 696 738 787 789 794 746 701 699 744/
102 26 697 652 606 609 617 661 700 698 655/
103 27 17 11 6 8 9 15 22 19 13/
104 28 605 651 696 699 701 659 613 607 653/
105 29 606 570 530 535 537 573 617 609 572/
106 30 35 26 17 19 22 30 39 37 28/
107 31 5 10 16 18 21 14 9 7 12/
108 32 529 569 605 607 613 571 531 526 568/
109 33 530 487 446 450 453 493 537 535 489/
110 34 59 45 35 37 39 52 64 61 48/
111 35 16 25 34 36 38 29 21 18 27/
112 36 447 486 529 526 531 483 438 441 482/
113 37 446 405 364 365 368 408 453 450 406/
114 38 89 73 59 61 64 81 96 93 76/
115 39 34 44 58 60 63 50 38 36 46/
116 40 363 404 447 441 438 398 359 360 400/
117 41 364 326 287 290 295 332 368 365 328/
118 42 126 106 89 93 96 113 133 130 109/
119 43 58 72 88 87 90 75 63 60 71/
120 44 286 325 363 360 359 327 294 291 323/

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121 45 287 257 228 230 232 266 295 290 258/  
122 46 173 147 126 130 133 154 178 174 150/  
123 47 228 199 173 174 178 204 232 230 200/  
124 48 88 105 125 123 124 107 90 87 104/  
125 49 227 256 286 291 294 260 224 223 255/  
126 50 125 146 172 169 168 145 124 123 143/  
127 51 172 198 227 223 224 194 168 169 195/  
128 52 908 897 881 853 816 832 851 878 865/  
129 53 882 896 909 879 852 834 823 854 866/  
130 54 806 799 795 745 700 705 711 761 752/  
131 55 794 800 805 760 709 704 701 746 751/  
132 56 881 872 859 826 779 801 816 853 840/  
133 57 860 871 882 854 823 803 783 827 842/  
134 58 820 812 806 761 711 720 728 770 765/  
135 59 805 811 821 771 729 721 709 760 766/  
136 60 859 849 839 797 754 767 779 826 810/  
137 61 839 830 820 770 728 734 754 797 784/  
138 62 838 850 860 827 783 769 756 798 814/  
139 63 821 831 838 798 756 736 729 771 785/  
140 64 1093 1079 1066 1058 1053 1059 1067 1081 1072/  
141 65 1109 1099 1088 1074 1057 1071 1082 1095 1086/  
142 66 1088 1076 1067 1051 1034 1044 1057 1074 1061/  
143 67 1087 1098 1106 1091 1077 1068 1056 1073 1083/  
144 68 1066 1075 1087 1073 1056 1043 1032 1049 1060/  
145 69 1077 1062 1045 1030 1019 1036 1056 1068 1050/  
146 70 1045 1028 1014 1000 985 1002 1019 1030 1016/  
147 71 1014 998 984 965 948 970 985 1000 983/  
148 72 22 15 9 14 21 23 31 24 20/  
149 73 39 30 22 24 31 41 51 43 33/  
150 74 21 29 38 42 49 40 31 23 32/  
151 75 64 52 39 43 51 62 74 68 54/  
152 76 984 968 950 929 906 928 948 965 946/  
153 77 613 659 701 704 709 667 626 620 662/  
154 78 38 50 63 65 70 57 49 42 53/  
155 79 63 75 90 95 98 83 70 65 79/  
156 80 531 571 613 620 626 582 542 536 574/  
157 81 90 107 124 129 132 116 98 95 110/  
158 82 124 145 168 171 175 151 132 129 149/  
159 83 168 194 224 225 229 201 175 171 197/  
160 84 709 721 729 687 640 635 626 667 674/  
161 85 711 705 700 661 617 624 627 668 663/  
162 86 728 720 711 668 627 636 639 685 675/  
163 87 224 260 294 288 284 254 229 225 253/  
164 88 294 327 359 357 356 317 284 288 319/  
165 89 359 398 438 440 444 399 356 357 397/  
166 90 438 483 531 536 542 495 444 440 488/  
167 91 96 81 64 68 74 92 108 100 84/  
168 92 133 113 96 100 108 127 148 138 117/  
169 93 178 154 133 138 148 166 191 183 159/  
170 94 950 933 917 893 870 889 906 929 912/  
171 95 917 900 884 858 828 848 870 893 877/  
172 96 729 736 756 710 670 658 640 687 695/  
173 97 754 734 728 685 639 656 669 707 693/  
174 98 779 767 754 707 669 682 694 733 725/  
175 99 884 867 851 817 774 804 828 858 836/  
176 100 816 801 779 733 694 717 731 772 759/  
177 101 851 832 816 772 731 757 774 817 796/  
178 102 232 204 178 183 191 216 237 233 209/  
179 103 295 266 232 233 237 259 282 285 263/  
180 104 368 332 295 285 282 331 377 371 330/  
181 105 453 408 368 371 377 419 467 457 413/  
182 106 537 493 453 457 467 506 547 541 499/  
183 107 617 573 537 541 547 586 627 624 579/  
184 108 756 769 783 737 703 686 670 710 727/  
185 109 783 803 823 777 735 722 703 737 763/  
186 110 823 834 852 824 778 762 735 777 802/

187 111 852 869 883 857 829 807 778 824 841/  
188 112 883 899 915 892 864 847 829 857 875/  
189 113 915 932 947 926 903 886 864 892 905/  
190 114 947 964 981 959 943 922 903 926 944/  
191 115 981 996 1013 997 982 960 943 959 980/  
192 116 1013 1029 1046 1031 1020 1001 982 997 1015/  
193 117 1046 1064 1082 1071 1057 1037 1020 1031 1052/  
194 118 1053 1058 1066 1049 1032 1026 1021 1038 1041/  
195 119 1021 1027 1034 1051 1067 1059 1053 1038 1042/  
196 120 1057 1044 1034 1011 994 1005 1020 1037 1024/  
197 121 1032 1043 1056 1036 1019 1008 995 1012 1025/  
198 122 1019 1002 985 975 961 977 995 1008 991/  
199 123 985 970 948 934 919 942 961 975 955/  
200 124 639 636 627 586 547 555 564 601 595/  
201 125 948 928 906 891 873 898 919 934 913/  
202 126 906 889 870 845 815 846 873 891 868/  
203 127 870 848 828 786 755 782 815 845 819/  
204 128 982 1001 1020 1005 994 974 954 969 988/  
205 129 828 804 774 732 691 726 755 786 764/  
206 130 626 635 640 603 565 551 542 582 594/  
207 131 51 41 31 40 49 55 66 56 47/  
208 132 49 57 70 78 85 77 66 55 67/  
209 133 70 83 98 103 114 99 85 78 91/  
210 134 98 116 132 136 142 131 114 103 119/  
211 135 74 62 51 56 66 80 94 82 69/  
212 136 132 151 175 179 187 164 142 136 158/  
213 137 175 201 229 236 241 215 187 179 207/  
214 138 108 92 74 82 94 115 135 120 101/  
215 139 669 656 639 601 564 576 591 628 616/  
216 140 148 127 108 120 135 156 180 162 140/  
217 141 943 960 982 969 954 931 904 923 945/  
218 142 903 922 943 923 904 885 861 880 902/  
219 143 864 886 903 880 861 837 813 843 862/  
220 144 829 847 864 843 813 781 758 791 818/  
221 145 778 807 829 791 758 730 706 742 768/  
222 146 735 762 778 742 706 688 666 702 724/  
223 147 640 658 670 634 597 581 565 603 619/  
224 148 703 722 735 702 666 645 630 665 683/  
225 149 670 686 703 665 630 608 597 634 646/  
226 150 229 254 284 289 293 268 241 236 264/  
227 151 694 682 669 628 591 600 618 657 638/  
228 152 284 317 356 354 353 320 293 289 316/  
229 153 444 495 542 551 565 527 492 470 511/  
230 154 356 399 444 427 410 380 353 354 388/  
231 155 547 506 467 471 484 523 564 555 513/  
232 156 191 166 148 162 180 203 231 214 184/  
233 157 467 419 377 386 407 445 484 471 430/  
234 158 731 717 694 657 618 633 648 690 672/  
235 159 774 757 731 690 648 671 691 732 713/  
236 160 377 331 282 307 335 367 407 386 345/  
237 161 237 216 191 214 231 251 282 259 240/  
238 162 1021 1026 1032 1012 995 989 976 999 1007/  
239 163 1034 1027 1021 999 976 986 994 1011 1006/  
240 164 954 974 994 986 976 953 927 938 962/  
241 165 995 977 961 957 949 963 976 989 972/  
242 166 564 523 484 504 514 552 591 576 540/  
243 167 484 445 407 425 437 477 514 504 462/  
244 168 410 427 444 470 492 463 432 422 443/  
245 169 353 380 410 422 432 402 373 361 390/  
246 170 66 77 85 97 112 102 94 80 86/  
247 171 135 115 94 102 112 128 144 141 118/  
248 172 85 99 114 122 134 121 112 97 111/  
249 173 114 131 142 155 167 152 134 122 139/  
250 174 142 164 187 196 210 189 167 155 177/  
251 175 187 215 241 246 252 235 210 196 218/  
252 176 492 527 565 581 597 560 525 510 545/

253 177 618 600 591 552 514 524 543 578 563/  
 254 178 241 268 293 305 310 280 252 246 274/  
 255 179 293 320 353 361 373 341 310 305 336/  
 256 180 648 633 618 578 543 549 559 602 592/  
 257 181 407 367 335 348 376 409 437 425 385/  
 258 182 904 931 954 938 927 901 874 890 914/  
 259 183 691 671 648 602 559 590 623 660 629/  
 260 184 861 885 904 890 874 844 809 835 863/  
 261 185 813 837 861 835 809 773 741 775 808/  
 262 186 758 781 813 775 741 718 689 723 749/  
 263 187 706 730 758 723 689 664 637 673 692/  
 264 188 666 688 706 673 637 622 598 632 650/  
 265 189 630 645 666 632 598 580 562 596 611/  
 266 190 597 608 630 596 562 544 525 560 577/  
 267 191 961 942 919 916 907 930 949 957 935/  
 268 192 919 898 873 856 833 876 907 916 887/  
 269 193 873 846 815 780 750 793 833 856 825/  
 270 194 815 782 755 719 680 716 750 780 748/  
 271 195 755 726 691 660 623 647 680 719 684/  
 272 196 335 307 282 251 231 248 272 303 276/  
 273 197 231 203 180 202 226 247 272 248 222/  
 274 198 976 963 949 930 907 918 927 953 940/  
 275 199 112 121 134 153 170 157 144 128 137/  
 276 200 134 152 167 186 208 188 170 153 165/  
 277 201 167 189 210 220 242 219 208 186 205/  
 278 202 210 235 252 270 281 267 242 220 245/  
 279 203 432 463 492 510 525 498 466 449 476/  
 280 204 180 156 135 163 192 211 226 202 182/  
 281 205 135 141 144 161 181 185 192 163 160/  
 282 206 335 303 272 296 315 346 376 348 318/  
 283 207 373 402 432 449 466 429 396 384 416/  
 284 208 514 477 437 458 473 509 543 524 494/  
 285 209 437 409 376 394 421 451 473 458 428/  
 286 210 525 544 562 533 501 479 466 498 512/  
 287 211 252 280 310 321 340 308 281 270 297/  
 288 212 310 341 373 384 396 369 340 321 350/  
 289 213 272 247 226 250 277 300 315 296 273/  
 290 214 927 918 907 876 833 855 874 901 888/  
 291 215 809 844 874 855 833 792 747 776 822/  
 292 216 741 773 809 776 747 714 679 708 740/  
 293 217 689 718 741 708 679 649 625 654 681/  
 294 218 637 664 689 654 625 599 575 604 631/  
 295 219 598 622 637 604 575 556 538 566 588/  
 296 220 562 580 598 566 538 516 501 533 548/  
 297 221 833 793 750 715 676 712 747 792 753/  
 298 222 750 716 680 643 612 641 676 715 678/  
 299 223 559 549 543 509 473 485 502 532 517/  
 300 224 680 647 623 587 554 584 612 643 615/  
 301 225 623 590 559 528 500 521 554 587 558/  
 302 226 181 161 144 157 170 190 213 193 176/  
 303 227 502 485 473 451 421 436 459 478 464/  
 304 228 559 532 502 478 459 475 500 528 505/  
 305 229 679 714 747 712 676 642 614 644 677/  
 306 230 226 211 192 217 243 262 277 250 238/  
 307 231 376 346 315 342 372 393 421 394 370/  
 308 232 625 649 679 644 614 589 561 593 621/  
 309 233 396 429 466 479 501 468 434 417 452/  
 310 234 575 599 625 593 561 539 515 546 567/  
 311 235 538 556 575 546 515 497 472 507 520/  
 312 236 501 516 538 507 472 455 434 468 481/  
 313 237 315 300 277 306 339 351 372 342 324/  
 314 238 192 185 181 193 213 221 243 217 206/  
 315 239 170 188 208 234 261 239 213 190 212/  
 316 240 208 219 242 265 279 271 261 234 244/  
 317 241 242 267 281 304 314 301 279 265 278/  
 318 242 340 369 396 417 434 403 375 352 383/

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319 243 281 308 340 352 375 343 314 304 329/
320 244 676 641 612 583 553 585 614 642 610/
321 245 612 584 554 519 491 518 553 583 550/
322 246 554 521 500 460 420 456 491 519 490/
323 247 421 393 372 392 414 435 459 436 415/
324 248 434 455 472 439 411 391 375 403 424/
325 249 472 497 515 480 454 431 411 439 465/
326 250 515 539 561 534 503 474 454 480 508/
327 251 561 589 614 585 553 522 503 534 557/
328 252 277 262 243 269 299 311 339 306 283/
329 253 243 221 213 239 261 275 299 269 249/
330 254 372 351 339 378 420 418 414 392 382/
331 255 553 518 491 461 433 469 503 522 496/
332 256 314 343 375 391 411 381 355 337 362/
333 257 279 301 314 337 355 338 313 302 312/
334 258 420 460 500 475 459 435 414 418 448/
335 259 261 271 279 302 313 322 333 292 298/
336 260 355 381 411 431 454 423 387 374 401/
337 261 433 412 387 423 454 474 503 469 442/
338 262 313 338 355 374 387 358 333 322 347/
339 263 420 378 339 311 299 334 366 389 349/
340 264 420 389 366 395 433 461 491 456 426/
341 265 387 412 433 395 366 344 333 358 379/
342 266 366 334 299 275 261 292 333 344 309/
343 267 1114 1102 1093 1103 1113 1122 1129 1121 1112/
344 268 1147 1154 1158 1152 1144 1139 1133 1140 1146/
345 269 1144 1137 1129 1122 1113 1123 1133 1139 1131/
346 270 1166 1168 1169 1167 1165 1160 1155 1161 1164/
347 271 1158 1163 1166 1161 1155 1150 1144 1152 1157/
348 272 1159 1153 1148 1141 1132 1138 1143 1151 1145/
349 273 1114 1121 1129 1136 1143 1138 1132 1124 1130/
350 274 1165 1162 1159 1151 1143 1149 1155 1160 1156/
351 275 1144 1150 1155 1149 1143 1136 1129 1137 1142/
352 /
353 (B1) AUTO GENERATE SOLID ELEMENTS & COORDINATES FOR PRIMARY STRUCTURAL ELEMENT (BEAM OR
SLAB)
354 -----
355 <<<<< FORMAT >>>>> (Xi, Yi, & Zi must be in increasing order)(Total solid elements
generated = Sum of NElemX x Sum of NElemY x Sum of NElemZ)(Total solid nodes generated
= (Sum of NElemX + 1) x (Sum of NElemY + 1) x (Sum of NElemZ + 1))
356 Xi NElemX Yi NElemY Zi NElemZ/
357 /
358 (B2) AUTO GENERATE SOLID ELEMENTS, COORDINATES & MAT TYPES FOR EXTENSIONS TO BEAM OR
SLAB (EG: LOAD PLATES, COLUMN STUBS OR T-BEAM FLANGES, ETC)
359 -----
360 <<<<< FORMAT >>>>> (Existing coords -> X1,Y1,Z1,X2,Y2,Z2) (Length can be + or - for new
coords)
361 X1 Y1 Z1 X2 Y2 Z2 Length NElem Mat/
362 /
363 (B3) SOLID ELEMENTS
364 -----
365 <<<<< FORMAT >>>>> (Note that element no must follow the last shell element no)
366 ELMT INC1 INC2 INC3 INC4 INC5 INC6 INC7 INC8 [#ELMT d(ELMT) d(INC)-Xdir] [#ELMT d(ELMT)
d(INC)-Ydir] [#ELMT d(ELMT) d(INC)-Zdir]/
367 /
368 (C1) AUTO GENERATE TRUSS ELEMENTS & MATERIAL ASSIGNMENTS
369 -----
370 <<<<< FORMAT >>>>> <X2 > X1, or Y2 > Y1, etc>
371 Mat X1 Y1 Z1 X2 Y2 Z2 NRBarX SpacX NRBarY
SpacY NRBarZ SpacZ/
372 /
373 (C2) TRUSS ELEMENTS
374 -----
375 <<<<< FORMAT >>>>>

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376 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC)] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC)
    ]/
377 /
378 (C3) AUTO GENERATE SPRING SUPPORT ELEMENTS, MATERIAL ASSIGNMENTS, COORDINATES, &
    RESTRAINTS
379 -----
    --
380 <<<<< FORMAT >>>>>
381 Mat Length X1      Y1      Z1      X2      Y2      Z2 [ NX      SX      NY      SY
    NZ      SZ] /
382 /
383 (D1) LINK ELEMENTS
384 -----
385 <<<<< FORMAT >>>>>
386 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC)] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC) ]/
387 /
388          MATERIAL AND ELEMENT TYPE ASSIGNMENT
389 -----
390
391 <<<<< FORMAT >>>>> (ETYPE=1 for shell, ETYPE=2 for solid, ETYPE=3 for frame or truss)
    Elmt No. MUST be in ascending order
392 ELMT MAT ETYPE  [#ELMT d(ELMT)]-Xdir [#ELMT d(ELMT)]-Ydir [#ELMT d(ELMT)]-Zdir/
393 1 1 1/
394 2 1 1/
395 3 1 1/
396 4 1 1/
397 5 1 1/
398 6 1 1/
399 7 1 1/
400 8 1 1/
401 9 1 1/
402 10 1 1/
403 11 1 1/
404 12 1 1/
405 13 1 1/
406 14 1 1/
407 15 1 1/
408 16 1 1/
409 17 1 1/
410 18 1 1/
411 19 1 1/
412 20 1 1/
413 21 1 1/
414 22 1 1/
415 23 1 1/
416 24 1 1/
417 25 1 1/
418 26 1 1/
419 27 1 1/
420 28 1 1/
421 29 1 1/
422 30 1 1/
423 31 1 1/
424 32 1 1/
425 33 1 1/
426 34 1 1/
427 35 1 1/
428 36 1 1/
429 37 1 1/
430 38 1 1/
431 39 1 1/
432 40 1 1/
433 41 2 1/
434 42 1 1/
435 43 1 1/
436 44 2 1/

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437 45 2 1/  
438 46 1 1/  
439 47 1 1/  
440 48 1 1/  
441 49 2 1/  
442 50 1 1/  
443 51 1 1/  
444 52 1 1/  
445 53 1 1/  
446 54 1 1/  
447 55 1 1/  
448 56 1 1/  
449 57 1 1/  
450 58 1 1/  
451 59 1 1/  
452 60 1 1/  
453 61 1 1/  
454 62 1 1/  
455 63 1 1/  
456 64 1 1/  
457 65 1 1/  
458 66 1 1/  
459 67 1 1/  
460 68 1 1/  
461 69 1 1/  
462 70 1 1/  
463 71 1 1/  
464 72 1 1/  
465 73 1 1/  
466 74 1 1/  
467 75 1 1/  
468 76 1 1/  
469 77 1 1/  
470 78 1 1/  
471 79 1 1/  
472 80 1 1/  
473 81 1 1/  
474 82 1 1/  
475 83 1 1/  
476 84 1 1/  
477 85 1 1/  
478 86 1 1/  
479 87 2 1/  
480 88 2 1/  
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482 90 1 1/  
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493 101 1 1/  
494 102 1 1/  
495 103 2 1/  
496 104 2 1/  
497 105 1 1/  
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499 107 1 1/  
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501 109 1 1/  
502 110 1 1/

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544 152 1 1/  
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633 241 1 1/  
634 242 1 1/

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663 271 1 1/  
664 272 1 1/  
665 273 1 1/  
666 274 1 1/  
667 275 1 1/  
668 /

COORDINATES

669 -----  
670  
671  
672 <<<<< FORMAT >>>>> (units = mm)  
673 TOP or C/L <BOT>  
674 NODE TYPE X Y Z <X Y Z> [#NODE d(NODE) d(X) d(Y) d(Z)]-Xdir [#NODE  
d(NODE) d(X) d(Y) d(Z)]-Ydir [#NODE d(NODE) d(X) d(Y) d(Z)]-Zdir  
675 1 1 1500.000 1500.000 125.000 1500.000 1500.000 -125.000/  
676 2 1 1450.000 1500.000 125.000 1450.000 1500.000 -125.000/  
677 3 1 1500.000 1450.000 125.000 1500.000 1450.000 -125.000/  
678 4 1 1450.236 1450.233 125.000 1450.236 1450.233 -125.000/  
679 5 1 1400.000 1500.000 125.000 1400.000 1500.000 -125.000/  
680 6 1 1500.000 1400.000 125.000 1500.000 1400.000 -125.000/  
681 7 1 1400.473 1450.465 125.000 1400.473 1450.465 -125.000/  
682 8 1 1450.473 1400.465 125.000 1450.473 1400.465 -125.000/  
683 9 1 1400.946 1400.930 125.000 1400.946 1400.930 -125.000/  
684 10 1 1350.000 1500.000 125.000 1350.000 1500.000 -125.000/  
685 11 1 1500.000 1350.000 125.000 1500.000 1350.000 -125.000/  
686 12 1 1350.855 1450.335 125.000 1350.855 1450.335 -125.000/  
687 13 1 1450.742 1350.401 125.000 1450.742 1350.401 -125.000/  
688 14 1 1351.711 1400.671 125.000 1351.711 1400.671 -125.000/  
689 15 1 1401.485 1350.801 125.000 1401.485 1350.801 -125.000/  
690 16 1 1300.000 1500.000 125.000 1300.000 1500.000 -125.000/  
691 17 1 1500.000 1300.000 125.000 1500.000 1300.000 -125.000/  
692 18 1 1301.238 1450.206 125.000 1301.238 1450.206 -125.000/  
693 19 1 1451.012 1300.336 125.000 1451.012 1300.336 -125.000/  
694 20 1 1352.385 1350.445 125.000 1352.385 1350.445 -125.000/  
695 21 1 1302.475 1400.411 125.000 1302.475 1400.411 -125.000/  
696 22 1 1402.024 1300.672 125.000 1402.024 1300.672 -125.000/  
697 23 1 1303.286 1350.089 125.000 1303.286 1350.089 -125.000/  
698 24 1 1353.060 1300.219 125.000 1353.060 1300.219 -125.000/  
699 25 1 1250.000 1500.000 125.000 1250.000 1500.000 -125.000/

700	26	1	1500.000	1250.000	125.000	1500.000	1250.000	-125.000/
701	27	1	1251.689	1450.030	125.000	1251.689	1450.030	-125.000/
702	28	1	1451.064	1249.948	125.000	1451.064	1249.948	-125.000/
703	29	1	1253.378	1400.060	125.000	1253.378	1400.060	-125.000/
704	30	1	1402.129	1249.896	125.000	1402.129	1249.896	-125.000/
705	31	1	1304.096	1299.767	125.000	1304.096	1299.767	-125.000/
706	32	1	1254.239	1349.764	125.000	1254.239	1349.764	-125.000/
707	33	1	1352.940	1249.065	125.000	1352.940	1249.065	-125.000/
708	34	1	1200.000	1500.000	125.000	1200.000	1500.000	-125.000/
709	35	1	1500.000	1200.000	125.000	1500.000	1200.000	-125.000/
710	36	1	1202.140	1449.854	125.000	1202.140	1449.854	-125.000/
711	37	1	1451.117	1199.560	125.000	1451.117	1199.560	-125.000/
712	38	1	1204.281	1399.709	125.000	1204.281	1399.709	-125.000/
713	39	1	1402.233	1199.121	125.000	1402.233	1199.121	-125.000/
714	40	1	1255.100	1299.469	125.000	1255.100	1299.469	-125.000/
715	41	1	1303.752	1248.233	125.000	1303.752	1248.233	-125.000/
716	42	1	1205.192	1349.439	125.000	1205.192	1349.439	-125.000/
717	43	1	1352.820	1197.910	125.000	1352.820	1197.910	-125.000/
718	44	1	1150.000	1500.000	125.000	1150.000	1500.000	-125.000/
719	45	1	1500.000	1150.000	125.000	1500.000	1150.000	-125.000/
720	46	1	1152.394	1450.043	125.000	1152.394	1450.043	-125.000/
721	47	1	1254.686	1248.051	125.000	1254.686	1248.051	-125.000/
722	48	1	1451.016	1148.709	125.000	1451.016	1148.709	-125.000/
723	49	1	1206.103	1299.170	125.000	1206.103	1299.170	-125.000/
724	50	1	1154.789	1400.086	125.000	1154.789	1400.086	-125.000/
725	51	1	1303.407	1196.698	125.000	1303.407	1196.698	-125.000/
726	52	1	1402.033	1147.418	125.000	1402.033	1147.418	-125.000/
727	53	1	1156.218	1350.044	125.000	1156.218	1350.044	-125.000/
728	54	1	1352.408	1145.718	125.000	1352.408	1145.718	-125.000/
729	55	1	1205.621	1247.870	125.000	1205.621	1247.870	-125.000/
730	56	1	1254.273	1196.634	125.000	1254.273	1196.634	-125.000/
731	57	1	1157.648	1300.001	125.000	1157.648	1300.001	-125.000/
732	58	1	1100.000	1500.000	125.000	1100.000	1500.000	-125.000/
733	59	1	1500.000	1100.000	125.000	1500.000	1100.000	-125.000/
734	60	1	1102.649	1450.232	125.000	1102.649	1450.232	-125.000/
735	61	1	1450.916	1097.858	125.000	1450.916	1097.858	-125.000/
736	62	1	1302.783	1144.017	125.000	1302.783	1144.017	-125.000/
737	63	1	1105.297	1400.464	125.000	1105.297	1400.464	-125.000/
738	64	1	1401.832	1095.716	125.000	1401.832	1095.716	-125.000/
739	65	1	1107.245	1350.648	125.000	1107.245	1350.648	-125.000/
740	66	1	1205.139	1196.570	125.000	1205.139	1196.570	-125.000/
741	67	1	1157.600	1249.423	125.000	1157.600	1249.423	-125.000/
742	68	1	1351.995	1093.526	125.000	1351.995	1093.526	-125.000/
743	69	1	1252.352	1142.944	125.000	1252.352	1142.944	-125.000/
744	70	1	1109.193	1300.832	125.000	1109.193	1300.832	-125.000/
745	71	1	1053.253	1450.444	125.000	1053.253	1450.444	-125.000/
746	72	1	1050.000	1500.000	125.000	1050.000	1500.000	-125.000/
747	73	1	1500.000	1050.000	125.000	1500.000	1050.000	-125.000/
748	74	1	1302.159	1091.335	125.000	1302.159	1091.335	-125.000/
749	75	1	1056.506	1400.889	125.000	1056.506	1400.889	-125.000/
750	76	1	1451.192	1047.031	125.000	1451.192	1047.031	-125.000/
751	77	1	1157.553	1198.845	125.000	1157.553	1198.845	-125.000/
752	78	1	1109.579	1250.976	125.000	1109.579	1250.976	-125.000/
753	79	1	1058.576	1351.543	125.000	1058.576	1351.543	-125.000/
754	80	1	1201.921	1141.872	125.000	1201.921	1141.872	-125.000/
755	81	1	1402.384	1044.062	125.000	1402.384	1044.062	-125.000/
756	82	1	1250.431	1089.254	125.000	1250.431	1089.254	-125.000/
757	83	1	1060.646	1302.197	125.000	1060.646	1302.197	-125.000/
758	84	1	1352.010	1040.106	125.000	1352.010	1040.106	-125.000/
759	85	1	1109.966	1201.121	125.000	1109.966	1201.121	-125.000/
760	86	1	1154.427	1146.281	125.000	1154.427	1146.281	-125.000/
761	87	1	1003.857	1450.657	125.000	1003.857	1450.657	-125.000/
762	88	1	1000.000	1500.000	125.000	1000.000	1500.000	-125.000/
763	89	1	1500.000	1000.000	125.000	1500.000	1000.000	-125.000/
764	90	1	1007.715	1401.314	125.000	1007.715	1401.314	-125.000/
765	91	1	1061.537	1252.871	125.000	1061.537	1252.871	-125.000/

766	92	1	1301.636	1036.150	125.000	1301.636	1036.150	-125.000/
767	93	1	1451.468	996.204	125.000	1451.468	996.204	-125.000/
768	94	1	1198.704	1087.173	125.000	1198.704	1087.173	-125.000/
769	95	1	1009.907	1352.438	125.000	1009.907	1352.438	-125.000/
770	96	1	1402.936	992.408	125.000	1402.936	992.408	-125.000/
771	97	1	1106.933	1150.690	125.000	1106.933	1150.690	-125.000/
772	98	1	1012.099	1303.563	125.000	1012.099	1303.563	-125.000/
773	99	1	1062.429	1203.544	125.000	1062.429	1203.544	-125.000/
774	100	1	1352.025	986.686	125.000	1352.025	986.686	-125.000/
775	101	1	1245.902	1029.755	125.000	1245.902	1029.755	-125.000/
776	102	1	1151.301	1093.717	125.000	1151.301	1093.717	-125.000/
777	103	1	1013.495	1254.765	125.000	1013.495	1254.765	-125.000/
778	104	1	954.115	1451.018	125.000	954.115	1451.018	-125.000/
779	105	1	950.000	1500.000	125.000	950.000	1500.000	-125.000/
780	106	1	1500.000	950.000	125.000	1500.000	950.000	-125.000/
781	107	1	958.230	1402.035	125.000	958.230	1402.035	-125.000/
782	108	1	1301.114	980.965	125.000	1301.114	980.965	-125.000/
783	109	1	1452.798	945.909	125.000	1452.798	945.909	-125.000/
784	110	1	961.289	1353.443	125.000	961.289	1353.443	-125.000/
785	111	1	1059.856	1153.896	125.000	1059.856	1153.896	-125.000/
786	112	1	1103.899	1100.260	125.000	1103.899	1100.260	-125.000/
787	113	1	1405.597	941.819	125.000	1405.597	941.819	-125.000/
788	114	1	1014.891	1205.966	125.000	1014.891	1205.966	-125.000/
789	115	1	1190.167	1023.360	125.000	1190.167	1023.360	-125.000/
790	116	1	964.347	1304.851	125.000	964.347	1304.851	-125.000/
791	117	1	1357.028	934.977	125.000	1357.028	934.977	-125.000/
792	118	1	1142.804	1037.084	125.000	1142.804	1037.084	-125.000/
793	119	1	966.354	1256.566	125.000	966.354	1256.566	-125.000/
794	120	1	1241.372	970.256	125.000	1241.372	970.256	-125.000/
795	121	1	1057.282	1104.248	125.000	1057.282	1104.248	-125.000/
796	122	1	1012.779	1157.101	125.000	1012.779	1157.101	-125.000/
797	123	1	904.373	1451.378	125.000	904.373	1451.378	-125.000/
798	124	1	908.746	1402.757	125.000	908.746	1402.757	-125.000/
799	125	1	900.000	1500.000	125.000	900.000	1500.000	-125.000/
800	126	1	1500.000	900.000	125.000	1500.000	900.000	-125.000/
801	127	1	1308.458	928.135	125.000	1308.458	928.135	-125.000/
802	128	1	1095.441	1050.809	125.000	1095.441	1050.809	-125.000/
803	129	1	912.671	1354.448	125.000	912.671	1354.448	-125.000/
804	130	1	1454.129	895.615	125.000	1454.129	895.615	-125.000/
805	131	1	968.360	1208.280	125.000	968.360	1208.280	-125.000/
806	132	1	916.596	1306.140	125.000	916.596	1306.140	-125.000/
807	133	1	1408.257	891.229	125.000	1408.257	891.229	-125.000/
808	134	1	1010.666	1108.236	125.000	1010.666	1108.236	-125.000/
809	135	1	1181.630	959.546	125.000	1181.630	959.546	-125.000/
810	136	1	919.212	1258.367	125.000	919.212	1258.367	-125.000/
811	137	1	1051.048	1055.402	125.000	1051.048	1055.402	-125.000/
812	138	1	1362.030	883.268	125.000	1362.030	883.268	-125.000/
813	139	1	967.153	1159.941	125.000	967.153	1159.941	-125.000/
814	140	1	1254.743	914.083	125.000	1254.743	914.083	-125.000/
815	141	1	1134.307	980.452	125.000	1134.307	980.452	-125.000/
816	142	1	921.829	1210.594	125.000	921.829	1210.594	-125.000/
817	143	1	854.855	1451.583	125.000	854.855	1451.583	-125.000/
818	144	1	1086.983	1001.358	125.000	1086.983	1001.358	-125.000/
819	145	1	859.709	1403.165	125.000	859.709	1403.165	-125.000/
820	146	1	850.000	1500.000	125.000	850.000	1500.000	-125.000/
821	147	1	1500.000	850.000	125.000	1500.000	850.000	-125.000/
822	148	1	1315.803	875.306	125.000	1315.803	875.306	-125.000/
823	149	1	864.060	1355.288	125.000	864.060	1355.288	-125.000/
824	150	1	1455.635	845.976	125.000	1455.635	845.976	-125.000/
825	151	1	868.410	1307.411	125.000	868.410	1307.411	-125.000/
826	152	1	965.946	1111.601	125.000	965.946	1111.601	-125.000/
827	153	1	1006.656	1059.994	125.000	1006.656	1059.994	-125.000/
828	154	1	1411.270	841.952	125.000	1411.270	841.952	-125.000/
829	155	1	921.528	1162.780	125.000	921.528	1162.780	-125.000/
830	156	1	1201.028	900.030	125.000	1201.028	900.030	-125.000/
831	157	1	1044.815	1006.555	125.000	1044.815	1006.555	-125.000/

832	158	1	871.862	1260.299	125.000	871.862	1260.299	-125.000/
833	159	1	1367.854	834.698	125.000	1367.854	834.698	-125.000/
834	160	1	1106.348	943.591	125.000	1106.348	943.591	-125.000/
835	161	1	1073.369	967.616	125.000	1073.369	967.616	-125.000/
836	162	1	1268.114	857.910	125.000	1268.114	857.910	-125.000/
837	163	1	1139.328	919.566	125.000	1139.328	919.566	-125.000/
838	164	1	875.313	1213.187	125.000	875.313	1213.187	-125.000/
839	165	1	961.331	1062.364	125.000	961.331	1062.364	-125.000/
840	166	1	1324.439	827.444	125.000	1324.439	827.444	-125.000/
841	167	1	921.226	1114.966	125.000	921.226	1114.966	-125.000/
842	168	1	810.672	1403.574	125.000	810.672	1403.574	-125.000/
843	169	1	805.336	1451.787	125.000	805.336	1451.787	-125.000/
844	170	1	1002.646	1011.752	125.000	1002.646	1011.752	-125.000/
845	171	1	815.448	1356.128	125.000	815.448	1356.128	-125.000/
846	172	1	800.000	1500.000	125.000	800.000	1500.000	-125.000/
847	173	1	1500.000	800.000	125.000	1500.000	800.000	-125.000/
848	174	1	1457.141	796.338	125.000	1457.141	796.338	-125.000/
849	175	1	820.225	1308.682	125.000	820.225	1308.682	-125.000/
850	176	1	1035.804	966.741	125.000	1035.804	966.741	-125.000/
851	177	1	875.725	1166.269	125.000	875.725	1166.269	-125.000/
852	178	1	1414.283	792.675	125.000	1414.283	792.675	-125.000/
853	179	1	824.511	1262.231	125.000	824.511	1262.231	-125.000/
854	180	1	1220.425	840.514	125.000	1220.425	840.514	-125.000/
855	181	1	1059.756	933.873	125.000	1059.756	933.873	-125.000/
856	182	1	1157.406	867.551	125.000	1157.406	867.551	-125.000/
857	183	1	1373.679	786.129	125.000	1373.679	786.129	-125.000/
858	184	1	1280.756	808.013	125.000	1280.756	808.013	-125.000/
859	185	1	1078.390	906.730	125.000	1078.390	906.730	-125.000/
860	186	1	916.005	1064.734	125.000	916.005	1064.734	-125.000/
861	187	1	828.798	1215.779	125.000	828.798	1215.779	-125.000/
862	188	1	956.715	1013.127	125.000	956.715	1013.127	-125.000/
863	189	1	876.137	1119.351	125.000	876.137	1119.351	-125.000/
864	190	1	998.238	965.867	125.000	998.238	965.867	-125.000/
865	191	1	1333.075	779.582	125.000	1333.075	779.582	-125.000/
866	192	1	1097.025	879.586	125.000	1097.025	879.586	-125.000/
867	193	1	1026.793	926.927	125.000	1026.793	926.927	-125.000/
868	194	1	759.430	1403.456	125.000	759.430	1403.456	-125.000/
869	195	1	754.715	1451.728	125.000	754.715	1451.728	-125.000/
870	196	1	829.923	1169.758	125.000	829.923	1169.758	-125.000/
871	197	1	765.291	1356.343	125.000	765.291	1356.343	-125.000/
872	198	1	750.000	1500.000	125.000	750.000	1500.000	-125.000/
873	199	1	1500.000	750.000	125.000	1500.000	750.000	-125.000/
874	200	1	1457.520	748.141	125.000	1457.520	748.141	-125.000/
875	201	1	771.151	1309.230	125.000	771.151	1309.230	-125.000/
876	202	1	1175.485	815.535	125.000	1175.485	815.535	-125.000/
877	203	1	1237.074	788.582	125.000	1237.074	788.582	-125.000/
878	204	1	1415.041	746.282	125.000	1415.041	746.282	-125.000/
879	205	1	871.886	1070.984	125.000	871.886	1070.984	-125.000/
880	206	1	1041.585	891.689	125.000	1041.585	891.689	-125.000/
881	207	1	775.918	1263.334	125.000	775.918	1263.334	-125.000/
882	208	1	910.784	1014.503	125.000	910.784	1014.503	-125.000/
883	209	1	1378.070	744.229	125.000	1378.070	744.229	-125.000/
884	210	1	831.048	1123.737	125.000	831.048	1123.737	-125.000/
885	211	1	1113.785	835.071	125.000	1113.785	835.071	-125.000/
886	212	1	950.511	961.699	125.000	950.511	961.699	-125.000/
887	213	1	993.830	919.981	125.000	993.830	919.981	-125.000/
888	214	1	1293.399	758.116	125.000	1293.399	758.116	-125.000/
889	215	1	780.684	1217.439	125.000	780.684	1217.439	-125.000/
890	216	1	1341.099	742.177	125.000	1341.099	742.177	-125.000/
891	217	1	1056.377	856.451	125.000	1056.377	856.451	-125.000/
892	218	1	782.566	1172.140	125.000	782.566	1172.140	-125.000/
893	219	1	867.634	1022.618	125.000	867.634	1022.618	-125.000/
894	220	1	827.766	1077.235	125.000	827.766	1077.235	-125.000/
895	221	1	1004.780	876.648	125.000	1004.780	876.648	-125.000/
896	222	1	1191.715	765.697	125.000	1191.715	765.697	-125.000/
897	223	1	704.094	1451.669	125.000	704.094	1451.669	-125.000/

898	224	1	708.188	1403.338	125.000	708.188	1403.338	-125.000/
899	225	1	715.133	1356.558	125.000	715.133	1356.558	-125.000/
900	226	1	1130.545	790.556	125.000	1130.545	790.556	-125.000/
901	227	1	700.000	1500.000	125.000	700.000	1500.000	-125.000/
902	228	1	1500.000	700.000	125.000	1500.000	700.000	-125.000/
903	229	1	722.078	1309.777	125.000	722.078	1309.777	-125.000/
904	230	1	1457.899	699.945	125.000	1457.899	699.945	-125.000/
905	231	1	1253.722	736.650	125.000	1253.722	736.650	-125.000/
906	232	1	1415.798	699.889	125.000	1415.798	699.889	-125.000/
907	233	1	1382.461	702.330	125.000	1382.461	702.330	-125.000/
908	234	1	902.783	957.531	125.000	902.783	957.531	-125.000/
909	235	1	784.449	1126.842	125.000	784.449	1126.842	-125.000/
910	236	1	727.324	1264.438	125.000	727.324	1264.438	-125.000/
911	237	1	1349.124	704.771	125.000	1349.124	704.771	-125.000/
912	238	1	1072.407	811.944	125.000	1072.407	811.944	-125.000/
913	239	1	944.306	910.270	125.000	944.306	910.270	-125.000/
914	240	1	1308.762	712.572	125.000	1308.762	712.572	-125.000/
915	241	1	732.570	1219.099	125.000	732.570	1219.099	-125.000/
916	242	1	824.484	1030.733	125.000	824.484	1030.733	-125.000/
917	243	1	1015.729	833.316	125.000	1015.729	833.316	-125.000/
918	244	1	860.037	972.089	125.000	860.037	972.089	-125.000/
919	245	1	782.645	1081.223	125.000	782.645	1081.223	-125.000/
920	246	1	735.210	1174.523	125.000	735.210	1174.523	-125.000/
921	247	1	1146.357	742.811	125.000	1146.357	742.811	-125.000/
922	248	1	1207.945	715.858	125.000	1207.945	715.858	-125.000/
923	249	1	958.413	861.612	125.000	958.413	861.612	-125.000/
924	250	1	1088.437	767.437	125.000	1088.437	767.437	-125.000/
925	251	1	1276.425	682.967	125.000	1276.425	682.967	-125.000/
926	252	1	737.849	1129.947	125.000	737.849	1129.947	-125.000/
927	253	1	663.369	1355.262	125.000	663.369	1355.262	-125.000/
928	254	1	672.645	1308.855	125.000	672.645	1308.855	-125.000/
929	255	1	652.047	1450.834	125.000	652.047	1450.834	-125.000/
930	256	1	650.000	1500.000	125.000	650.000	1500.000	-125.000/
931	257	1	1500.000	650.000	125.000	1500.000	650.000	-125.000/
932	258	1	1453.950	649.972	125.000	1453.950	649.972	-125.000/
933	259	1	1324.126	667.028	125.000	1324.126	667.028	-125.000/
934	260	1	654.094	1401.669	125.000	654.094	1401.669	-125.000/
935	261	1	894.781	900.560	125.000	894.781	900.560	-125.000/
936	262	1	1031.029	788.818	125.000	1031.029	788.818	-125.000/
937	263	1	1366.013	658.486	125.000	1366.013	658.486	-125.000/
938	264	1	679.175	1264.352	125.000	679.175	1264.352	-125.000/
939	265	1	817.292	986.647	125.000	817.292	986.647	-125.000/
940	266	1	1407.899	649.945	125.000	1407.899	649.945	-125.000/
941	267	1	780.841	1035.605	125.000	780.841	1035.605	-125.000/
942	268	1	685.705	1219.850	125.000	685.705	1219.850	-125.000/
943	269	1	972.520	812.954	125.000	972.520	812.954	-125.000/
944	270	1	737.524	1085.212	125.000	737.524	1085.212	-125.000/
945	271	1	852.441	921.560	125.000	852.441	921.560	-125.000/
946	272	1	1162.168	695.067	125.000	1162.168	695.067	-125.000/
947	273	1	1103.874	721.912	125.000	1103.874	721.912	-125.000/
948	274	1	688.553	1176.106	125.000	688.553	1176.106	-125.000/
949	275	1	912.046	846.575	125.000	912.046	846.575	-125.000/
950	276	1	1226.408	664.057	125.000	1226.408	664.057	-125.000/
951	277	1	1046.329	744.319	125.000	1046.329	744.319	-125.000/
952	278	1	776.155	992.108	125.000	776.155	992.108	-125.000/
953	279	1	810.100	942.561	125.000	810.100	942.561	-125.000/
954	280	1	691.401	1132.363	125.000	691.401	1132.363	-125.000/
955	281	1	737.198	1040.477	125.000	737.198	1040.477	-125.000/
956	282	1	1299.128	629.285	125.000	1299.128	629.285	-125.000/
957	283	1	988.649	766.858	125.000	988.649	766.858	-125.000/
958	284	1	623.211	1307.933	125.000	623.211	1307.933	-125.000/
959	285	1	1349.564	614.643	125.000	1349.564	614.643	-125.000/
960	286	1	600.000	1500.000	125.000	600.000	1500.000	-125.000/
961	287	1	1500.000	600.000	125.000	1500.000	600.000	-125.000/
962	288	1	611.605	1353.966	125.000	611.605	1353.966	-125.000/
963	289	1	631.025	1264.267	125.000	631.025	1264.267	-125.000/

964	290	1	1450.000	600.000	125.000	1450.000	600.000	-125.000/
965	291	1	600.000	1450.000	125.000	600.000	1450.000	-125.000/
966	292	1	856.082	866.114	125.000	856.082	866.114	-125.000/
967	293	1	638.840	1220.601	125.000	638.840	1220.601	-125.000/
968	294	1	600.000	1400.000	125.000	600.000	1400.000	-125.000/
969	295	1	1400.000	600.000	125.000	1400.000	600.000	-125.000/
970	296	1	1119.310	676.387	125.000	1119.310	676.387	-125.000/
971	297	1	691.518	1088.116	125.000	691.518	1088.116	-125.000/
972	298	1	827.641	889.770	125.000	827.641	889.770	-125.000/
973	299	1	929.311	792.591	125.000	929.311	792.591	-125.000/
974	300	1	1061.391	701.013	125.000	1061.391	701.013	-125.000/
975	301	1	771.469	948.611	125.000	771.469	948.611	-125.000/
976	302	1	799.200	913.427	125.000	799.200	913.427	-125.000/
977	303	1	1176.390	645.147	125.000	1176.390	645.147	-125.000/
978	304	1	735.018	997.569	125.000	735.018	997.569	-125.000/
979	305	1	641.896	1177.690	125.000	641.896	1177.690	-125.000/
980	306	1	1004.778	720.762	125.000	1004.778	720.762	-125.000/
981	307	1	1244.870	612.256	125.000	1244.870	612.256	-125.000/
982	308	1	691.635	1043.869	125.000	691.635	1043.869	-125.000/
983	309	1	871.646	816.566	125.000	871.646	816.566	-125.000/
984	310	1	644.952	1134.780	125.000	644.952	1134.780	-125.000/
985	311	1	946.268	744.898	125.000	946.268	744.898	-125.000/
986	312	1	765.029	915.015	125.000	765.029	915.015	-125.000/
987	313	1	788.299	884.293	125.000	788.299	884.293	-125.000/
988	314	1	732.838	954.660	125.000	732.838	954.660	-125.000/
989	315	1	1076.452	657.708	125.000	1076.452	657.708	-125.000/
990	316	1	585.305	1262.415	125.000	585.305	1262.415	-125.000/
991	317	1	575.337	1304.430	125.000	575.337	1304.430	-125.000/
992	318	1	1131.808	629.172	125.000	1131.808	629.172	-125.000/
993	319	1	565.063	1352.032	125.000	565.063	1352.032	-125.000/
994	320	1	595.274	1220.400	125.000	595.274	1220.400	-125.000/
995	321	1	645.512	1091.020	125.000	645.512	1091.020	-125.000/
996	322	1	802.841	857.980	125.000	802.841	857.980	-125.000/
997	323	1	552.394	1449.817	125.000	552.394	1449.817	-125.000/
998	324	1	1021.329	680.498	125.000	1021.329	680.498	-125.000/
999	325	1	550.000	1500.000	125.000	550.000	1500.000	-125.000/
1000	326	1	1500.000	550.000	125.000	1500.000	550.000	-125.000/
1001	327	1	554.789	1399.634	125.000	554.789	1399.634	-125.000/
1002	328	1	1449.951	550.302	125.000	1449.951	550.302	-125.000/
1003	329	1	690.218	1000.398	125.000	690.218	1000.398	-125.000/
1004	330	1	1349.987	558.666	125.000	1349.987	558.666	-125.000/
1005	331	1	1300.073	566.728	125.000	1300.073	566.728	-125.000/
1006	332	1	1399.901	550.603	125.000	1399.901	550.603	-125.000/
1007	333	1	817.383	831.668	125.000	817.383	831.668	-125.000/
1008	334	1	887.210	767.019	125.000	887.210	767.019	-125.000/
1009	335	1	1190.613	595.227	125.000	1190.613	595.227	-125.000/
1010	336	1	597.872	1178.974	125.000	597.872	1178.974	-125.000/
1011	337	1	730.858	916.602	125.000	730.858	916.602	-125.000/
1012	338	1	758.588	881.419	125.000	758.588	881.419	-125.000/
1013	339	1	963.226	697.204	125.000	963.226	697.204	-125.000/
1014	340	1	646.071	1047.260	125.000	646.071	1047.260	-125.000/
1015	341	1	600.470	1137.548	125.000	600.470	1137.548	-125.000/
1016	342	1	1037.880	640.235	125.000	1037.880	640.235	-125.000/
1017	343	1	688.802	956.928	125.000	688.802	956.928	-125.000/
1018	344	1	831.246	786.557	125.000	831.246	786.557	-125.000/
1019	345	1	1247.988	555.123	125.000	1247.988	555.123	-125.000/
1020	346	1	1087.226	613.197	125.000	1087.226	613.197	-125.000/
1021	347	1	768.121	849.180	125.000	768.121	849.180	-125.000/
1022	348	1	1144.306	581.956	125.000	1144.306	581.956	-125.000/
1023	349	1	904.303	715.509	125.000	904.303	715.509	-125.000/
1024	350	1	600.650	1094.140	125.000	600.650	1094.140	-125.000/
1025	351	1	981.267	659.983	125.000	981.267	659.983	-125.000/
1026	352	1	645.419	1003.228	125.000	645.419	1003.228	-125.000/
1027	353	1	551.709	1220.200	125.000	551.709	1220.200	-125.000/
1028	354	1	539.586	1260.563	125.000	539.586	1260.563	-125.000/
1029	355	1	728.878	878.544	125.000	728.878	878.544	-125.000/

1030	356	1	527.463	1300.926	125.000	527.463	1300.926	-125.000/
1031	357	1	518.520	1350.098	125.000	518.520	1350.098	-125.000/
1032	358	1	777.653	816.941	125.000	777.653	816.941	-125.000/
1033	359	1	509.577	1399.269	125.000	509.577	1399.269	-125.000/
1034	360	1	504.789	1449.634	125.000	504.789	1449.634	-125.000/
1035	361	1	553.849	1180.258	125.000	553.849	1180.258	-125.000/
1036	362	1	688.161	916.580	125.000	688.161	916.580	-125.000/
1037	363	1	500.000	1500.000	125.000	500.000	1500.000	-125.000/
1038	364	1	1500.000	500.000	125.000	1500.000	500.000	-125.000/
1039	365	1	1449.901	500.603	125.000	1449.901	500.603	-125.000/
1040	366	1	845.108	741.447	125.000	845.108	741.447	-125.000/
1041	367	1	1195.902	543.517	125.000	1195.902	543.517	-125.000/
1042	368	1	1399.803	501.206	125.000	1399.803	501.206	-125.000/
1043	369	1	600.829	1050.733	125.000	600.829	1050.733	-125.000/
1044	370	1	1047.686	598.788	125.000	1047.686	598.788	-125.000/
1045	371	1	1350.411	502.689	125.000	1350.411	502.689	-125.000/
1046	372	1	999.309	622.761	125.000	999.309	622.761	-125.000/
1047	373	1	555.988	1140.316	125.000	555.988	1140.316	-125.000/
1048	374	1	733.400	840.380	125.000	733.400	840.380	-125.000/
1049	375	1	644.767	959.196	125.000	644.767	959.196	-125.000/
1050	376	1	1098.000	568.685	125.000	1098.000	568.685	-125.000/
1051	377	1	1301.018	504.171	125.000	1301.018	504.171	-125.000/
1052	378	1	921.396	663.998	125.000	921.396	663.998	-125.000/
1053	379	1	788.647	771.516	125.000	788.647	771.516	-125.000/
1054	380	1	517.310	1217.724	125.000	517.310	1217.724	-125.000/
1055	381	1	687.519	876.232	125.000	687.519	876.232	-125.000/
1056	382	1	946.205	636.453	125.000	946.205	636.453	-125.000/
1057	383	1	600.383	1006.381	125.000	600.383	1006.381	-125.000/
1058	384	1	555.788	1097.261	125.000	555.788	1097.261	-125.000/
1059	385	1	1149.598	533.259	125.000	1149.598	533.259	-125.000/
1060	386	1	1251.105	497.989	125.000	1251.105	497.989	-125.000/
1061	387	1	737.923	802.215	125.000	737.923	802.215	-125.000/
1062	388	1	496.500	1253.020	125.000	496.500	1253.020	-125.000/
1063	389	1	862.337	686.119	125.000	862.337	686.119	-125.000/
1064	390	1	516.367	1180.981	125.000	516.367	1180.981	-125.000/
1065	391	1	645.464	916.558	125.000	645.464	916.558	-125.000/
1066	392	1	971.014	608.908	125.000	971.014	608.908	-125.000/
1067	393	1	1008.146	584.380	125.000	1008.146	584.380	-125.000/
1068	394	1	1057.492	557.342	125.000	1057.492	557.342	-125.000/
1069	395	1	799.641	726.091	125.000	799.641	726.091	-125.000/
1070	396	1	555.587	1054.206	125.000	555.587	1054.206	-125.000/
1071	397	1	467.612	1342.233	125.000	467.612	1342.233	-125.000/
1072	398	1	459.535	1396.149	125.000	459.535	1396.149	-125.000/
1073	399	1	475.690	1288.316	125.000	475.690	1288.316	-125.000/
1074	400	1	454.767	1448.075	125.000	454.767	1448.075	-125.000/
1075	401	1	691.054	835.648	125.000	691.054	835.648	-125.000/
1076	402	1	515.424	1144.238	125.000	515.424	1144.238	-125.000/
1077	403	1	599.936	962.029	125.000	599.936	962.029	-125.000/
1078	404	1	450.000	1500.000	125.000	450.000	1500.000	-125.000/
1079	405	1	1500.000	450.000	125.000	1500.000	450.000	-125.000/
1080	406	1	1449.906	450.162	125.000	1449.906	450.162	-125.000/
1081	407	1	1201.191	491.807	125.000	1201.191	491.807	-125.000/
1082	408	1	1399.813	450.325	125.000	1399.813	450.325	-125.000/
1083	409	1	1103.294	523.000	125.000	1103.294	523.000	-125.000/
1084	410	1	482.912	1215.248	125.000	482.912	1215.248	-125.000/
1085	411	1	646.160	873.921	125.000	646.160	873.921	-125.000/
1086	412	1	746.048	756.475	125.000	746.048	756.475	-125.000/
1087	413	1	1350.621	450.591	125.000	1350.621	450.591	-125.000/
1088	414	1	942.719	595.054	125.000	942.719	595.054	-125.000/
1089	415	1	977.073	573.856	125.000	977.073	573.856	-125.000/
1090	416	1	513.825	1101.376	125.000	513.825	1101.376	-125.000/
1091	417	1	555.347	1009.534	125.000	555.347	1009.534	-125.000/
1092	418	1	911.142	612.923	125.000	911.142	612.923	-125.000/
1093	419	1	1301.430	450.857	125.000	1301.430	450.857	-125.000/
1094	420	1	879.566	630.792	125.000	879.566	630.792	-125.000/
1095	421	1	1016.983	545.999	125.000	1016.983	545.999	-125.000/



1096	422	1	478.885	1181.704	125.000	478.885	1181.704	-125.000/
1097	423	1	694.590	795.064	125.000	694.590	795.064	-125.000/
1098	424	1	600.301	918.009	125.000	600.301	918.009	-125.000/
1099	425	1	1154.889	484.561	125.000	1154.889	484.561	-125.000/
1100	426	1	812.245	672.962	125.000	812.245	672.962	-125.000/
1101	427	1	453.414	1245.477	125.000	453.414	1245.477	-125.000/
1102	428	1	1062.025	515.592	125.000	1062.025	515.592	-125.000/
1103	429	1	512.226	1058.513	125.000	512.226	1058.513	-125.000/
1104	430	1	1252.149	446.010	125.000	1252.149	446.010	-125.000/
1105	431	1	648.708	830.917	125.000	648.708	830.917	-125.000/
1106	432	1	474.859	1148.160	125.000	474.859	1148.160	-125.000/
1107	433	1	754.173	710.735	125.000	754.173	710.735	-125.000/
1108	434	1	555.106	964.863	125.000	555.106	964.863	-125.000/
1109	435	1	946.000	563.332	125.000	946.000	563.332	-125.000/
1110	436	1	983.132	538.804	125.000	983.132	538.804	-125.000/
1111	437	1	1108.587	477.314	125.000	1108.587	477.314	-125.000/
1112	438	1	409.492	1393.030	125.000	409.492	1393.030	-125.000/
1113	439	1	600.665	873.990	125.000	600.665	873.990	-125.000/
1114	440	1	416.704	1334.368	125.000	416.704	1334.368	-125.000/
1115	441	1	404.746	1446.515	125.000	404.746	1446.515	-125.000/
1116	442	1	700.683	749.047	125.000	700.683	749.047	-125.000/
1117	443	1	443.725	1203.069	125.000	443.725	1203.069	-125.000/
1118	444	1	423.916	1275.705	125.000	423.916	1275.705	-125.000/
1119	445	1	1202.868	441.162	125.000	1202.868	441.162	-125.000/
1120	446	1	1500.000	400.000	125.000	1500.000	400.000	-125.000/
1121	447	1	400.000	1500.000	125.000	400.000	1500.000	-125.000/
1122	448	1	912.581	568.906	125.000	912.581	568.906	-125.000/
1123	449	1	471.862	1105.490	125.000	471.862	1105.490	-125.000/
1124	450	1	1449.911	399.722	125.000	1449.911	399.722	-125.000/
1125	451	1	1020.757	508.185	125.000	1020.757	508.185	-125.000/
1126	452	1	511.114	1013.469	125.000	511.114	1013.469	-125.000/
1127	453	1	1399.823	399.444	125.000	1399.823	399.444	-125.000/
1128	454	1	651.257	787.914	125.000	651.257	787.914	-125.000/
1129	455	1	555.138	919.461	125.000	555.138	919.461	-125.000/
1130	456	1	824.849	619.834	125.000	824.849	619.834	-125.000/
1131	457	1	1350.832	398.494	125.000	1350.832	398.494	-125.000/
1132	458	1	1066.559	473.842	125.000	1066.559	473.842	-125.000/
1133	459	1	949.281	531.609	125.000	949.281	531.609	-125.000/
1134	460	1	879.162	574.480	125.000	879.162	574.480	-125.000/
1135	461	1	762.152	659.806	125.000	762.152	659.806	-125.000/
1136	462	1	1155.804	436.073	125.000	1155.804	436.073	-125.000/
1137	463	1	434.037	1160.661	125.000	434.037	1160.661	-125.000/
1138	464	1	987.749	504.395	125.000	987.749	504.395	-125.000/
1139	465	1	602.923	829.802	125.000	602.923	829.802	-125.000/
1140	466	1	468.865	1062.820	125.000	468.865	1062.820	-125.000/
1141	467	1	1301.841	397.544	125.000	1301.841	397.544	-125.000/
1142	468	1	510.003	968.426	125.000	510.003	968.426	-125.000/
1143	469	1	706.776	703.029	125.000	706.776	703.029	-125.000/
1144	470	1	408.566	1224.433	125.000	408.566	1224.433	-125.000/
1145	471	1	1253.193	394.030	125.000	1253.193	394.030	-125.000/
1146	472	1	555.170	874.059	125.000	555.170	874.059	-125.000/
1147	473	1	1024.530	470.371	125.000	1024.530	470.371	-125.000/
1148	474	1	655.318	741.618	125.000	655.318	741.618	-125.000/
1149	475	1	914.020	524.889	125.000	914.020	524.889	-125.000/
1150	476	1	429.263	1115.267	125.000	429.263	1115.267	-125.000/
1151	477	1	1108.741	430.983	125.000	1108.741	430.983	-125.000/
1152	478	1	954.740	500.605	125.000	954.740	500.605	-125.000/
1153	479	1	466.882	1017.405	125.000	466.882	1017.405	-125.000/
1154	480	1	605.182	785.614	125.000	605.182	785.614	-125.000/
1155	481	1	509.857	922.409	125.000	509.857	922.409	-125.000/
1156	482	1	353.424	1447.156	125.000	353.424	1447.156	-125.000/
1157	483	1	356.848	1394.312	125.000	356.848	1394.312	-125.000/
1158	484	1	1204.545	390.517	125.000	1204.545	390.517	-125.000/
1159	485	1	992.365	469.986	125.000	992.365	469.986	-125.000/
1160	486	1	350.000	1500.000	125.000	350.000	1500.000	-125.000/
1161	487	1	1500.000	350.000	125.000	1500.000	350.000	-125.000/

1162	488	1	360.928	1338.254	125.000	360.928	1338.254	-125.000/
1163	489	1	1450.064	349.540	125.000	1450.064	349.540	-125.000/
1164	490	1	826.954	565.337	125.000	826.954	565.337	-125.000/
1165	491	1	770.132	608.876	125.000	770.132	608.876	-125.000/
1166	492	1	393.215	1173.161	125.000	393.215	1173.161	-125.000/
1167	493	1	1400.128	349.080	125.000	1400.128	349.080	-125.000/
1168	494	1	1063.591	430.226	125.000	1063.591	430.226	-125.000/
1169	495	1	365.008	1282.197	125.000	365.008	1282.197	-125.000/
1170	496	1	712.920	652.794	125.000	712.920	652.794	-125.000/
1171	497	1	557.139	828.686	125.000	557.139	828.686	-125.000/
1172	498	1	424.490	1069.873	125.000	424.490	1069.873	-125.000/
1173	499	1	1351.019	347.937	125.000	1351.019	347.937	-125.000/
1174	500	1	878.759	518.168	125.000	878.759	518.168	-125.000/
1175	501	1	464.900	971.989	125.000	464.900	971.989	-125.000/
1176	502	1	960.199	469.601	125.000	960.199	469.601	-125.000/
1177	503	1	659.380	695.322	125.000	659.380	695.322	-125.000/
1178	504	1	1156.720	387.585	125.000	1156.720	387.585	-125.000/
1179	505	1	924.322	482.811	125.000	924.322	482.811	-125.000/
1180	506	1	1301.909	346.795	125.000	1301.909	346.795	-125.000/
1181	507	1	509.712	876.393	125.000	509.712	876.393	-125.000/
1182	508	1	608.312	738.572	125.000	608.312	738.572	-125.000/
1183	509	1	1018.441	429.470	125.000	1018.441	429.470	-125.000/
1184	510	1	386.664	1125.043	125.000	386.664	1125.043	-125.000/
1185	511	1	354.655	1231.248	125.000	354.655	1231.248	-125.000/
1186	512	1	421.984	1022.997	125.000	421.984	1022.997	-125.000/
1187	513	1	1253.029	344.169	125.000	1253.029	344.169	-125.000/
1188	514	1	1108.894	384.652	125.000	1108.894	384.652	-125.000/
1189	515	1	559.107	783.314	125.000	559.107	783.314	-125.000/
1190	516	1	464.577	925.358	125.000	464.577	925.358	-125.000/
1191	517	1	976.533	435.102	125.000	976.533	435.102	-125.000/
1192	518	1	719.063	602.559	125.000	719.063	602.559	-125.000/
1193	519	1	774.745	556.195	125.000	774.745	556.195	-125.000/
1194	520	1	511.257	829.911	125.000	511.257	829.911	-125.000/
1195	521	1	829.059	510.841	125.000	829.059	510.841	-125.000/
1196	522	1	663.687	645.782	125.000	663.687	645.782	-125.000/
1197	523	1	1204.148	341.542	125.000	1204.148	341.542	-125.000/
1198	524	1	1060.623	386.610	125.000	1060.623	386.610	-125.000/
1199	525	1	380.114	1076.925	125.000	380.114	1076.925	-125.000/
1200	526	1	302.102	1447.797	125.000	302.102	1447.797	-125.000/
1201	527	1	344.301	1180.298	125.000	344.301	1180.298	-125.000/
1202	528	1	893.905	465.018	125.000	893.905	465.018	-125.000/
1203	529	1	300.000	1500.000	125.000	300.000	1500.000	-125.000/
1204	530	1	1500.000	300.000	125.000	1500.000	300.000	-125.000/
1205	531	1	304.203	1395.593	125.000	304.203	1395.593	-125.000/
1206	532	1	934.625	440.734	125.000	934.625	440.734	-125.000/
1207	533	1	419.478	976.121	125.000	419.478	976.121	-125.000/
1208	534	1	611.442	691.531	125.000	611.442	691.531	-125.000/
1209	535	1	1450.217	299.359	125.000	1450.217	299.359	-125.000/
1210	536	1	305.152	1342.141	125.000	305.152	1342.141	-125.000/
1211	537	1	1400.434	298.717	125.000	1400.434	298.717	-125.000/
1212	538	1	464.254	878.727	125.000	464.254	878.727	-125.000/
1213	539	1	561.306	735.526	125.000	561.306	735.526	-125.000/
1214	540	1	1155.888	339.121	125.000	1155.888	339.121	-125.000/
1215	541	1	1351.206	297.381	125.000	1351.206	297.381	-125.000/
1216	542	1	306.100	1288.689	125.000	306.100	1288.689	-125.000/
1217	543	1	1012.352	388.568	125.000	1012.352	388.568	-125.000/
1218	544	1	377.086	1028.589	125.000	377.086	1028.589	-125.000/
1219	545	1	338.923	1131.335	125.000	338.923	1131.335	-125.000/
1220	546	1	512.802	783.428	125.000	512.802	783.428	-125.000/
1221	547	1	1301.977	296.045	125.000	1301.977	296.045	-125.000/
1222	548	1	418.907	928.566	125.000	418.907	928.566	-125.000/
1223	549	1	960.701	400.218	125.000	960.701	400.218	-125.000/
1224	550	1	723.232	550.222	125.000	723.232	550.222	-125.000/
1225	551	1	300.743	1238.062	125.000	300.743	1238.062	-125.000/
1226	552	1	1107.628	336.700	125.000	1107.628	336.700	-125.000/
1227	553	1	667.995	596.242	125.000	667.995	596.242	-125.000/

1228	554	1	779.358	503.514	125.000	779.358	503.514	-125.000/
1229	555	1	1252.864	294.307	125.000	1252.864	294.307	-125.000/
1230	556	1	465.376	831.135	125.000	465.376	831.135	-125.000/
1231	557	1	614.476	641.953	125.000	614.476	641.953	-125.000/
1232	558	1	839.926	457.935	125.000	839.926	457.935	-125.000/
1233	559	1	909.050	411.868	125.000	909.050	411.868	-125.000/
1234	560	1	333.545	1082.371	125.000	333.545	1082.371	-125.000/
1235	561	1	563.505	687.739	125.000	563.505	687.739	-125.000/
1236	562	1	374.057	980.252	125.000	374.057	980.252	-125.000/
1237	563	1	1058.693	337.919	125.000	1058.693	337.919	-125.000/
1238	564	1	1203.751	292.568	125.000	1203.751	292.568	-125.000/
1239	565	1	295.387	1187.435	125.000	295.387	1187.435	-125.000/
1240	566	1	418.336	881.012	125.000	418.336	881.012	-125.000/
1241	567	1	514.152	735.315	125.000	514.152	735.315	-125.000/
1242	568	1	251.378	1448.460	125.000	251.378	1448.460	-125.000/
1243	569	1	250.000	1500.000	125.000	250.000	1500.000	-125.000/
1244	570	1	1500.000	250.000	125.000	1500.000	250.000	-125.000/
1245	571	1	252.757	1396.921	125.000	252.757	1396.921	-125.000/
1246	572	1	1450.139	249.476	125.000	1450.139	249.476	-125.000/
1247	573	1	1400.278	248.952	125.000	1400.278	248.952	-125.000/
1248	574	1	253.127	1344.638	125.000	253.127	1344.638	-125.000/
1249	575	1	466.497	783.543	125.000	466.497	783.543	-125.000/
1250	576	1	1155.056	290.658	125.000	1155.056	290.658	-125.000/
1251	577	1	330.778	1032.910	125.000	330.778	1032.910	-125.000/
1252	578	1	1009.759	339.137	125.000	1009.759	339.137	-125.000/
1253	579	1	1350.799	247.967	125.000	1350.799	247.967	-125.000/
1254	580	1	373.237	931.775	125.000	373.237	931.775	-125.000/
1255	581	1	291.181	1137.626	125.000	291.181	1137.626	-125.000/
1256	582	1	253.497	1292.354	125.000	253.497	1292.354	-125.000/
1257	583	1	671.718	544.250	125.000	671.718	544.250	-125.000/
1258	584	1	727.400	497.886	125.000	727.400	497.886	-125.000/
1259	585	1	617.511	592.376	125.000	617.511	592.376	-125.000/
1260	586	1	1301.319	246.982	125.000	1301.319	246.982	-125.000/
1261	587	1	785.947	450.853	125.000	785.947	450.853	-125.000/
1262	588	1	419.092	832.960	125.000	419.092	832.960	-125.000/
1263	589	1	565.266	638.125	125.000	565.266	638.125	-125.000/
1264	590	1	850.793	405.030	125.000	850.793	405.030	-125.000/
1265	591	1	1106.361	288.749	125.000	1106.361	288.749	-125.000/
1266	592	1	958.211	346.122	125.000	958.211	346.122	-125.000/
1267	593	1	515.503	687.201	125.000	515.503	687.201	-125.000/
1268	594	1	249.710	1241.814	125.000	249.710	1241.814	-125.000/
1269	595	1	1252.128	245.374	125.000	1252.128	245.374	-125.000/
1270	596	1	328.012	983.449	125.000	328.012	983.449	-125.000/
1271	597	1	286.975	1087.816	125.000	286.975	1087.816	-125.000/
1272	598	1	372.418	883.298	125.000	372.418	883.298	-125.000/
1273	599	1	466.999	735.103	125.000	466.999	735.103	-125.000/
1274	600	1	1056.763	289.227	125.000	1056.763	289.227	-125.000/
1275	601	1	1202.937	243.765	125.000	1202.937	243.765	-125.000/
1276	602	1	906.664	353.108	125.000	906.664	353.108	-125.000/
1277	603	1	245.923	1191.274	125.000	245.923	1191.274	-125.000/
1278	604	1	419.848	784.907	125.000	419.848	784.907	-125.000/
1279	605	1	200.000	1500.000	125.000	200.000	1500.000	-125.000/
1280	606	1	1500.000	200.000	125.000	1500.000	200.000	-125.000/
1281	607	1	200.655	1449.124	125.000	200.655	1449.124	-125.000/
1282	608	1	284.471	1037.231	125.000	284.471	1037.231	-125.000/
1283	609	1	1450.061	199.594	125.000	1450.061	199.594	-125.000/
1284	610	1	620.067	540.268	125.000	620.067	540.268	-125.000/
1285	611	1	327.181	934.421	125.000	327.181	934.421	-125.000/
1286	612	1	675.441	492.258	125.000	675.441	492.258	-125.000/
1287	613	1	201.310	1398.248	125.000	201.310	1398.248	-125.000/
1288	614	1	567.026	588.510	125.000	567.026	588.510	-125.000/
1289	615	1	732.839	445.130	125.000	732.839	445.130	-125.000/
1290	616	1	1153.901	242.168	125.000	1153.901	242.168	-125.000/
1291	617	1	1400.123	199.187	125.000	1400.123	199.187	-125.000/
1292	618	1	1007.165	289.706	125.000	1007.165	289.706	-125.000/
1293	619	1	242.828	1140.992	125.000	242.828	1140.992	-125.000/

1294	620	1	201.102	1347.134	125.000	201.102	1347.134	-125.000/
1295	621	1	516.061	637.562	125.000	516.061	637.562	-125.000/
1296	622	1	372.809	834.784	125.000	372.809	834.784	-125.000/
1297	623	1	792.536	398.192	125.000	792.536	398.192	-125.000/
1298	624	1	1350.392	198.553	125.000	1350.392	198.553	-125.000/
1299	625	1	467.500	686.662	125.000	467.500	686.662	-125.000/
1300	626	1	200.893	1296.020	125.000	200.893	1296.020	-125.000/
1301	627	1	1300.661	197.920	125.000	1300.661	197.920	-125.000/
1302	628	1	1104.866	240.572	125.000	1104.866	240.572	-125.000/
1303	629	1	850.895	348.810	125.000	850.895	348.810	-125.000/
1304	630	1	281.966	986.646	125.000	281.966	986.646	-125.000/
1305	631	1	419.915	736.631	125.000	419.915	736.631	-125.000/
1306	632	1	326.350	885.392	125.000	326.350	885.392	-125.000/
1307	633	1	955.721	292.027	125.000	955.721	292.027	-125.000/
1308	634	1	239.732	1090.710	125.000	239.732	1090.710	-125.000/
1309	635	1	198.677	1245.566	125.000	198.677	1245.566	-125.000/
1310	636	1	1251.391	196.441	125.000	1251.391	196.441	-125.000/
1311	637	1	373.199	786.271	125.000	373.199	786.271	-125.000/
1312	638	1	1055.186	240.574	125.000	1055.186	240.574	-125.000/
1313	639	1	1202.122	194.962	125.000	1202.122	194.962	-125.000/
1314	640	1	196.460	1195.113	125.000	196.460	1195.113	-125.000/
1315	641	1	622.623	488.161	125.000	622.623	488.161	-125.000/
1316	642	1	568.416	536.287	125.000	568.416	536.287	-125.000/
1317	643	1	679.730	439.407	125.000	679.730	439.407	-125.000/
1318	644	1	516.619	587.924	125.000	516.619	587.924	-125.000/
1319	645	1	281.125	937.066	125.000	281.125	937.066	-125.000/
1320	646	1	237.791	1040.002	125.000	237.791	1040.002	-125.000/
1321	647	1	738.278	392.373	125.000	738.278	392.373	-125.000/
1322	648	1	904.277	294.348	125.000	904.277	294.348	-125.000/
1323	649	1	466.856	637.000	125.000	466.856	637.000	-125.000/
1324	650	1	326.462	836.808	125.000	326.462	836.808	-125.000/
1325	651	1	150.000	1500.000	125.000	150.000	1500.000	-125.000/
1326	652	1	1500.000	150.000	125.000	1500.000	150.000	-125.000/
1327	653	1	150.295	1449.519	125.000	150.295	1449.519	-125.000/
1328	654	1	419.983	688.355	125.000	419.983	688.355	-125.000/
1329	655	1	1449.880	149.825	125.000	1449.880	149.825	-125.000/
1330	656	1	1152.747	193.678	125.000	1152.747	193.678	-125.000/
1331	657	1	1005.506	240.577	125.000	1005.506	240.577	-125.000/
1332	658	1	194.474	1144.359	125.000	194.474	1144.359	-125.000/
1333	659	1	150.591	1399.038	125.000	150.591	1399.038	-125.000/
1334	660	1	795.127	344.512	125.000	795.127	344.512	-125.000/
1335	661	1	1399.760	149.650	125.000	1399.760	149.650	-125.000/
1336	662	1	150.421	1348.170	125.000	150.421	1348.170	-125.000/
1337	663	1	1349.898	149.068	125.000	1349.898	149.068	-125.000/
1338	664	1	372.832	738.160	125.000	372.832	738.160	-125.000/
1339	665	1	235.851	989.293	125.000	235.851	989.293	-125.000/
1340	666	1	280.283	887.486	125.000	280.283	887.486	-125.000/
1341	667	1	150.250	1297.302	125.000	150.250	1297.302	-125.000/
1342	668	1	1300.037	148.485	125.000	1300.037	148.485	-125.000/
1343	669	1	1103.371	192.395	125.000	1103.371	192.395	-125.000/
1344	670	1	192.489	1093.605	125.000	192.489	1093.605	-125.000/
1345	671	1	850.998	292.590	125.000	850.998	292.590	-125.000/
1346	672	1	954.494	241.749	125.000	954.494	241.749	-125.000/
1347	673	1	326.573	788.223	125.000	326.573	788.223	-125.000/
1348	674	1	148.779	1246.579	125.000	148.779	1246.579	-125.000/
1349	675	1	1250.415	147.526	125.000	1250.415	147.526	-125.000/
1350	676	1	569.805	484.063	125.000	569.805	484.063	-125.000/
1351	677	1	516.077	535.459	125.000	516.077	535.459	-125.000/
1352	678	1	625.781	434.681	125.000	625.781	434.681	-125.000/
1353	679	1	466.212	587.337	125.000	466.212	587.337	-125.000/
1354	680	1	684.019	386.555	125.000	684.019	386.555	-125.000/
1355	681	1	418.570	639.301	125.000	418.570	639.301	-125.000/
1356	682	1	1053.609	191.921	125.000	1053.609	191.921	-125.000/
1357	683	1	235.089	939.415	125.000	235.089	939.415	-125.000/
1358	684	1	741.987	339.735	125.000	741.987	339.735	-125.000/
1359	685	1	1200.793	146.567	125.000	1200.793	146.567	-125.000/

1360	686	1	191.112	1042.772	125.000	191.112	1042.772	-125.000/
1361	687	1	147.307	1195.856	125.000	147.307	1195.856	-125.000/
1362	688	1	280.115	838.831	125.000	280.115	838.831	-125.000/
1363	689	1	372.465	690.048	125.000	372.465	690.048	-125.000/
1364	690	1	903.483	242.921	125.000	903.483	242.921	-125.000/
1365	691	1	797.718	290.831	125.000	797.718	290.831	-125.000/
1366	692	1	325.899	740.388	125.000	325.899	740.388	-125.000/
1367	693	1	1151.219	145.491	125.000	1151.219	145.491	-125.000/
1368	694	1	1003.846	191.448	125.000	1003.846	191.448	-125.000/
1369	695	1	145.913	1145.203	125.000	145.913	1145.203	-125.000/
1370	696	1	100.000	1500.000	125.000	100.000	1500.000	-125.000/
1371	697	1	1500.000	100.000	125.000	1500.000	100.000	-125.000/
1372	698	1	1449.698	100.056	125.000	1449.698	100.056	-125.000/
1373	699	1	99.936	1449.914	125.000	99.936	1449.914	-125.000/
1374	700	1	1399.397	100.113	125.000	1399.397	100.113	-125.000/
1375	701	1	99.872	1399.828	125.000	99.872	1399.828	-125.000/
1376	702	1	234.326	889.536	125.000	234.326	889.536	-125.000/
1377	703	1	189.735	991.940	125.000	189.735	991.940	-125.000/
1378	704	1	99.740	1349.206	125.000	99.740	1349.206	-125.000/
1379	705	1	1349.405	99.582	125.000	1349.405	99.582	-125.000/
1380	706	1	279.947	790.175	125.000	279.947	790.175	-125.000/
1381	707	1	1101.645	144.415	125.000	1101.645	144.415	-125.000/
1382	708	1	417.156	590.247	125.000	417.156	590.247	-125.000/
1383	709	1	99.607	1298.583	125.000	99.607	1298.583	-125.000/
1384	710	1	144.519	1094.550	125.000	144.519	1094.550	-125.000/
1385	711	1	1299.414	99.051	125.000	1299.414	99.051	-125.000/
1386	712	1	515.536	482.993	125.000	515.536	482.993	-125.000/
1387	713	1	851.294	241.539	125.000	851.294	241.539	-125.000/
1388	714	1	463.739	534.631	125.000	463.739	534.631	-125.000/
1389	715	1	571.831	429.955	125.000	571.831	429.955	-125.000/
1390	716	1	628.938	381.201	125.000	628.938	381.201	-125.000/
1391	717	1	953.267	191.471	125.000	953.267	191.471	-125.000/
1392	718	1	370.283	641.602	125.000	370.283	641.602	-125.000/
1393	719	1	688.847	334.958	125.000	688.847	334.958	-125.000/
1394	720	1	1249.438	98.611	125.000	1249.438	98.611	-125.000/
1395	721	1	98.881	1247.591	125.000	98.881	1247.591	-125.000/
1396	722	1	189.052	941.763	125.000	189.052	941.763	-125.000/
1397	723	1	325.224	692.554	125.000	325.224	692.554	-125.000/
1398	724	1	234.009	840.911	125.000	234.009	840.911	-125.000/
1399	725	1	1051.837	143.892	125.000	1051.837	143.892	-125.000/
1400	726	1	745.697	287.097	125.000	745.697	287.097	-125.000/
1401	727	1	143.612	1043.774	125.000	143.612	1043.774	-125.000/
1402	728	1	1199.463	98.172	125.000	1199.463	98.172	-125.000/
1403	729	1	98.154	1196.599	125.000	98.154	1196.599	-125.000/
1404	730	1	278.965	742.617	125.000	278.965	742.617	-125.000/
1405	731	1	902.689	191.494	125.000	902.689	191.494	-125.000/
1406	732	1	799.106	240.156	125.000	799.106	240.156	-125.000/
1407	733	1	1002.028	143.370	125.000	1002.028	143.370	-125.000/
1408	734	1	1149.691	97.303	125.000	1149.691	97.303	-125.000/
1409	735	1	188.370	891.586	125.000	188.370	891.586	-125.000/
1410	736	1	97.352	1146.047	125.000	97.352	1146.047	-125.000/
1411	737	1	142.706	992.997	125.000	142.706	992.997	-125.000/
1412	738	1	50.000	1500.000	125.000	50.000	1500.000	-125.000/
1413	739	1	1500.000	50.000	125.000	1500.000	50.000	-125.000/
1414	740	1	413.404	539.558	125.000	413.404	539.558	-125.000/
1415	741	1	368.101	593.157	125.000	368.101	593.157	-125.000/
1416	742	1	233.692	792.285	125.000	233.692	792.285	-125.000/
1417	743	1	1449.616	50.028	125.000	1449.616	50.028	-125.000/
1418	744	1	49.968	1449.724	125.000	49.968	1449.724	-125.000/
1419	745	1	1399.232	50.056	125.000	1399.232	50.056	-125.000/
1420	746	1	49.936	1399.448	125.000	49.936	1399.448	-125.000/
1421	747	1	461.266	481.924	125.000	461.266	481.924	-125.000/
1422	748	1	635.473	329.970	125.000	635.473	329.970	-125.000/
1423	749	1	322.773	644.835	125.000	322.773	644.835	-125.000/
1424	750	1	573.858	375.846	125.000	573.858	375.846	-125.000/
1425	751	1	49.870	1348.903	125.000	49.870	1348.903	-125.000/

1426	752	1	1349.003	49.791	125.000	1349.003	49.791	-125.000/
1427	753	1	513.010	425.749	125.000	513.010	425.749	-125.000/
1428	754	1	1099.920	96.435	125.000	1099.920	96.435	-125.000/
1429	755	1	693.675	283.362	125.000	693.675	283.362	-125.000/
1430	756	1	96.550	1095.496	125.000	96.550	1095.496	-125.000/
1431	757	1	851.591	190.488	125.000	851.591	190.488	-125.000/
1432	758	1	277.984	695.059	125.000	277.984	695.059	-125.000/
1433	759	1	951.749	143.206	125.000	951.749	143.206	-125.000/
1434	760	1	49.804	1298.359	125.000	49.804	1298.359	-125.000/
1435	761	1	1298.774	49.526	125.000	1298.774	49.526	-125.000/
1436	762	1	187.904	842.990	125.000	187.904	842.990	-125.000/
1437	763	1	142.160	942.583	125.000	142.160	942.583	-125.000/
1438	764	1	748.159	237.185	125.000	748.159	237.185	-125.000/
1439	765	1	1248.554	49.306	125.000	1248.554	49.306	-125.000/
1440	766	1	49.440	1247.630	125.000	49.440	1247.630	-125.000/
1441	767	1	1050.065	95.864	125.000	1050.065	95.864	-125.000/
1442	768	1	232.773	744.734	125.000	232.773	744.734	-125.000/
1443	769	1	96.113	1044.775	125.000	96.113	1044.775	-125.000/
1444	770	1	1198.333	49.086	125.000	1198.333	49.086	-125.000/
1445	771	1	49.077	1196.901	125.000	49.077	1196.901	-125.000/
1446	772	1	901.469	143.042	125.000	901.469	143.042	-125.000/
1447	773	1	363.069	544.486	125.000	363.069	544.486	-125.000/
1448	774	1	800.494	189.481	125.000	800.494	189.481	-125.000/
1449	775	1	320.321	597.116	125.000	320.321	597.116	-125.000/
1450	776	1	409.652	488.870	125.000	409.652	488.870	-125.000/
1451	777	1	141.614	892.169	125.000	141.614	892.169	-125.000/
1452	778	1	187.438	794.394	125.000	187.438	794.394	-125.000/
1453	779	1	1000.211	95.292	125.000	1000.211	95.292	-125.000/
1454	780	1	582.098	324.981	125.000	582.098	324.981	-125.000/
1455	781	1	275.262	648.067	125.000	275.262	648.067	-125.000/
1456	782	1	642.007	278.739	125.000	642.007	278.739	-125.000/
1457	783	1	95.676	994.055	125.000	95.676	994.055	-125.000/
1458	784	1	1148.214	48.652	125.000	1148.214	48.652	-125.000/
1459	785	1	48.676	1146.392	125.000	48.676	1146.392	-125.000/
1460	786	1	697.211	234.214	125.000	697.211	234.214	-125.000/
1461	787	1	0.000	1500.000	125.000	0.000	1500.000	-125.000/
1462	788	1	1500.000	0.000	125.000	1500.000	0.000	-125.000/
1463	789	1	0.000	1449.534	125.000	0.000	1449.534	-125.000/
1464	790	1	1449.534	0.000	125.000	1449.534	0.000	-125.000/
1465	791	1	231.853	697.183	125.000	231.853	697.183	-125.000/
1466	792	1	454.189	421.543	125.000	454.189	421.543	-125.000/
1467	793	1	510.484	368.504	125.000	510.484	368.504	-125.000/
1468	794	1	0.000	1399.068	125.000	0.000	1399.068	-125.000/
1469	795	1	1399.068	0.000	125.000	1399.068	0.000	-125.000/
1470	796	1	850.668	142.319	125.000	850.668	142.319	-125.000/
1471	797	1	1098.095	48.218	125.000	1098.095	48.218	-125.000/
1472	798	1	48.275	1095.883	125.000	48.275	1095.883	-125.000/
1473	799	1	1348.601	0.000	125.000	1348.601	0.000	-125.000/
1474	800	1	0.000	1348.601	125.000	0.000	1348.601	-125.000/
1475	801	1	950.230	94.941	125.000	950.230	94.941	-125.000/
1476	802	1	141.207	843.523	125.000	141.207	843.523	-125.000/
1477	803	1	95.267	943.403	125.000	95.267	943.403	-125.000/
1478	804	1	750.620	187.273	125.000	750.620	187.273	-125.000/
1479	805	1	0.000	1298.135	125.000	0.000	1298.135	-125.000/
1480	806	1	1298.135	0.000	125.000	1298.135	0.000	-125.000/
1481	807	1	186.580	746.851	125.000	186.580	746.851	-125.000/
1482	808	1	315.430	549.794	125.000	315.430	549.794	-125.000/
1483	809	1	358.038	495.815	125.000	358.038	495.815	-125.000/
1484	810	1	1047.934	47.932	125.000	1047.934	47.932	-125.000/
1485	811	1	0.000	1247.669	125.000	0.000	1247.669	-125.000/
1486	812	1	1247.669	0.000	125.000	1247.669	0.000	-125.000/
1487	813	1	272.541	601.076	125.000	272.541	601.076	-125.000/
1488	814	1	48.056	1045.290	125.000	48.056	1045.290	-125.000/
1489	815	1	590.338	274.116	125.000	590.338	274.116	-125.000/
1490	816	1	900.250	94.590	125.000	900.250	94.590	-125.000/
1491	817	1	799.866	141.595	125.000	799.866	141.595	-125.000/

1492	818	1	229.322	650.600	125.000	229.322	650.600	-125.000/
1493	819	1	647.060	230.517	125.000	647.060	230.517	-125.000/
1494	820	1	1197.203	0.000	125.000	1197.203	0.000	-125.000/
1495	821	1	0.000	1197.203	125.000	0.000	1197.203	-125.000/
1496	822	1	400.897	434.640	125.000	400.897	434.640	-125.000/
1497	823	1	94.858	892.752	125.000	94.858	892.752	-125.000/
1498	824	1	140.800	794.877	125.000	140.800	794.877	-125.000/
1499	825	1	525.411	317.213	125.000	525.411	317.213	-125.000/
1500	826	1	997.774	47.646	125.000	997.774	47.646	-125.000/
1501	827	1	47.838	994.696	125.000	47.838	994.696	-125.000/
1502	828	1	700.747	185.065	125.000	700.747	185.065	-125.000/
1503	829	1	185.722	699.307	125.000	185.722	699.307	-125.000/
1504	830	1	1146.736	0.000	125.000	1146.736	0.000	-125.000/
1505	831	1	0.000	1146.736	125.000	0.000	1146.736	-125.000/
1506	832	1	849.744	94.150	125.000	849.744	94.150	-125.000/
1507	833	1	447.111	361.162	125.000	447.111	361.162	-125.000/
1508	834	1	94.511	844.056	125.000	94.511	844.056	-125.000/
1509	835	1	310.538	502.472	125.000	310.538	502.472	-125.000/
1510	836	1	750.693	139.999	125.000	750.693	139.999	-125.000/
1511	837	1	267.790	555.103	125.000	267.790	555.103	-125.000/
1512	838	1	0.000	1096.270	125.000	0.000	1096.270	-125.000/
1513	839	1	1096.270	0.000	125.000	1096.270	0.000	-125.000/
1514	840	1	947.551	47.471	125.000	947.551	47.471	-125.000/
1515	841	1	140.168	747.422	125.000	140.168	747.422	-125.000/
1516	842	1	47.634	944.137	125.000	47.634	944.137	-125.000/
1517	843	1	226.791	604.018	125.000	226.791	604.018	-125.000/
1518	844	1	347.604	447.738	125.000	347.604	447.738	-125.000/
1519	845	1	596.910	226.821	125.000	596.910	226.821	-125.000/
1520	846	1	540.338	265.922	125.000	540.338	265.922	-125.000/
1521	847	1	183.382	653.133	125.000	183.382	653.133	-125.000/
1522	848	1	652.114	182.296	125.000	652.114	182.296	-125.000/
1523	849	1	1045.804	0.000	125.000	1045.804	0.000	-125.000/
1524	850	1	0.000	1045.804	125.000	0.000	1045.804	-125.000/
1525	851	1	799.238	93.710	125.000	799.238	93.710	-125.000/
1526	852	1	94.163	795.360	125.000	94.163	795.360	-125.000/
1527	853	1	897.327	47.295	125.000	897.327	47.295	-125.000/
1528	854	1	47.429	893.578	125.000	47.429	893.578	-125.000/
1529	855	1	392.141	380.411	125.000	392.141	380.411	-125.000/
1530	856	1	468.725	309.444	125.000	468.725	309.444	-125.000/
1531	857	1	139.537	699.967	125.000	139.537	699.967	-125.000/
1532	858	1	701.521	138.403	125.000	701.521	138.403	-125.000/
1533	859	1	995.338	0.000	125.000	995.338	0.000	-125.000/
1534	860	1	0.000	995.338	125.000	0.000	995.338	-125.000/
1535	861	1	263.039	509.129	125.000	263.039	509.129	-125.000/
1536	862	1	222.641	558.912	125.000	222.641	558.912	-125.000/
1537	863	1	300.957	456.630	125.000	300.957	456.630	-125.000/
1538	864	1	181.041	606.959	125.000	181.041	606.959	-125.000/
1539	865	1	846.841	47.075	125.000	846.841	47.075	-125.000/
1540	866	1	47.255	843.997	125.000	47.255	843.997	-125.000/
1541	867	1	750.766	92.725	125.000	750.766	92.725	-125.000/
1542	868	1	549.234	220.216	125.000	549.234	220.216	-125.000/
1543	869	1	93.757	747.993	125.000	93.757	747.993	-125.000/
1544	870	1	603.481	179.527	125.000	603.481	179.527	-125.000/
1545	871	1	0.000	944.871	125.000	0.000	944.871	-125.000/
1546	872	1	944.871	0.000	125.000	944.871	0.000	-125.000/
1547	873	1	490.338	257.727	125.000	490.338	257.727	-125.000/
1548	874	1	337.171	399.661	125.000	337.171	399.661	-125.000/
1549	875	1	137.704	654.058	125.000	137.704	654.058	-125.000/
1550	876	1	408.490	324.636	125.000	408.490	324.636	-125.000/
1551	877	1	653.859	136.345	125.000	653.859	136.345	-125.000/
1552	878	1	796.355	46.855	125.000	796.355	46.855	-125.000/
1553	879	1	47.081	794.416	125.000	47.081	794.416	-125.000/
1554	880	1	218.490	513.807	125.000	218.490	513.807	-125.000/
1555	881	1	894.405	0.000	125.000	894.405	0.000	-125.000/
1556	882	1	0.000	894.405	125.000	0.000	894.405	-125.000/
1557	883	1	93.351	700.626	125.000	93.351	700.626	-125.000/

1558	884	1	702.294	91.740	125.000	702.294	91.740	-125.000/
1559	885	1	254.310	465.521	125.000	254.310	465.521	-125.000/
1560	886	1	177.492	562.722	125.000	177.492	562.722	-125.000/
1561	887	1	429.091	282.776	125.000	429.091	282.776	-125.000/
1562	888	1	362.763	342.037	125.000	362.763	342.037	-125.000/
1563	889	1	558.130	174.511	125.000	558.130	174.511	-125.000/
1564	890	1	291.376	410.787	125.000	291.376	410.787	-125.000/
1565	891	1	501.559	213.611	125.000	501.559	213.611	-125.000/
1566	892	1	135.871	608.149	125.000	135.871	608.149	-125.000/
1567	893	1	606.198	134.287	125.000	606.198	134.287	-125.000/
1568	894	1	748.028	46.363	125.000	748.028	46.363	-125.000/
1569	895	1	46.879	746.641	125.000	46.879	746.641	-125.000/
1570	896	1	0.000	843.939	125.000	0.000	843.939	-125.000/
1571	897	1	843.939	0.000	125.000	843.939	0.000	-125.000/
1572	898	1	449.693	240.915	125.000	449.693	240.915	-125.000/
1573	899	1	92.026	654.983	125.000	92.026	654.983	-125.000/
1574	900	1	655.605	90.394	125.000	655.605	90.394	-125.000/
1575	901	1	317.037	359.437	125.000	317.037	359.437	-125.000/
1576	902	1	211.125	471.172	125.000	211.125	471.172	-125.000/
1577	903	1	173.942	518.486	125.000	173.942	518.486	-125.000/
1578	904	1	245.581	421.914	125.000	245.581	421.914	-125.000/
1579	905	1	133.137	564.409	125.000	133.137	564.409	-125.000/
1580	906	1	512.779	169.494	125.000	512.779	169.494	-125.000/
1581	907	1	369.868	288.111	125.000	369.868	288.111	-125.000/
1582	908	1	793.473	0.000	125.000	793.473	0.000	-125.000/
1583	909	1	0.000	793.473	125.000	0.000	793.473	-125.000/
1584	910	1	46.676	698.867	125.000	46.676	698.867	-125.000/
1585	911	1	699.701	45.870	125.000	699.701	45.870	-125.000/
1586	912	1	561.847	130.651	125.000	561.847	130.651	-125.000/
1587	913	1	460.922	200.978	125.000	460.922	200.978	-125.000/
1588	914	1	274.958	371.124	125.000	274.958	371.124	-125.000/
1589	915	1	90.700	609.340	125.000	90.700	609.340	-125.000/
1590	916	1	389.458	256.107	125.000	389.458	256.107	-125.000/
1591	917	1	608.915	89.047	125.000	608.915	89.047	-125.000/
1592	918	1	333.386	303.663	125.000	333.386	303.663	-125.000/
1593	919	1	409.047	224.102	125.000	409.047	224.102	-125.000/
1594	920	1	745.290	0.000	125.000	745.290	0.000	-125.000/
1595	921	1	0.000	745.290	125.000	0.000	745.290	-125.000/
1596	922	1	167.940	476.822	125.000	167.940	476.822	-125.000/
1597	923	1	203.759	428.536	125.000	203.759	428.536	-125.000/
1598	924	1	46.013	653.438	125.000	46.013	653.438	-125.000/
1599	925	1	653.749	45.197	125.000	653.749	45.197	-125.000/
1600	926	1	130.404	520.668	125.000	130.404	520.668	-125.000/
1601	927	1	296.903	319.214	125.000	296.903	319.214	-125.000/
1602	928	1	472.152	161.041	125.000	472.152	161.041	-125.000/
1603	929	1	517.496	127.014	125.000	517.496	127.014	-125.000/
1604	930	1	347.389	265.968	125.000	347.389	265.968	-125.000/
1605	931	1	232.878	382.810	125.000	232.878	382.810	-125.000/
1606	932	1	88.783	566.095	125.000	88.783	566.095	-125.000/
1607	933	1	565.564	86.791	125.000	565.564	86.791	-125.000/
1608	934	1	420.286	188.345	125.000	420.286	188.345	-125.000/
1609	935	1	362.071	238.506	125.000	362.071	238.506	-125.000/
1610	936	1	0.000	697.107	125.000	0.000	697.107	-125.000/
1611	937	1	697.107	0.000	125.000	697.107	0.000	-125.000/
1612	938	1	258.539	331.460	125.000	258.539	331.460	-125.000/
1613	939	1	45.350	608.009	125.000	45.350	608.009	-125.000/
1614	940	1	313.020	274.132	125.000	313.020	274.132	-125.000/
1615	941	1	607.797	44.523	125.000	607.797	44.523	-125.000/
1616	942	1	376.753	211.043	125.000	376.753	211.043	-125.000/
1617	943	1	161.938	435.158	125.000	161.938	435.158	-125.000/
1618	944	1	125.855	479.599	125.000	125.855	479.599	-125.000/
1619	945	1	193.305	389.994	125.000	193.305	389.994	-125.000/
1620	946	1	477.248	121.055	125.000	477.248	121.055	-125.000/
1621	947	1	86.866	522.850	125.000	86.866	522.850	-125.000/
1622	948	1	431.524	152.587	125.000	431.524	152.587	-125.000/
1623	949	1	324.909	243.825	125.000	324.909	243.825	-125.000/



1624	950	1	522.212	84.535	125.000	522.212	84.535	-125.000/
1625	951	1	0.000	651.893	125.000	0.000	651.893	-125.000/
1626	952	1	651.893	0.000	125.000	651.893	0.000	-125.000/
1627	953	1	278.651	282.297	125.000	278.651	282.297	-125.000/
1628	954	1	220.175	343.706	125.000	220.175	343.706	-125.000/
1629	955	1	386.472	178.043	125.000	386.472	178.043	-125.000/
1630	956	1	44.392	565.254	125.000	44.392	565.254	-125.000/
1631	957	1	334.684	220.904	125.000	334.684	220.904	-125.000/
1632	958	1	564.989	43.395	125.000	564.989	43.395	-125.000/
1633	959	1	121.306	438.529	125.000	121.306	438.529	-125.000/
1634	960	1	153.732	397.178	125.000	153.732	397.178	-125.000/
1635	961	1	344.459	197.984	125.000	344.459	197.984	-125.000/
1636	962	1	242.425	296.177	125.000	242.425	296.177	-125.000/
1637	963	1	292.654	244.602	125.000	292.654	244.602	-125.000/
1638	964	1	83.770	482.375	125.000	83.770	482.375	-125.000/
1639	965	1	437.000	115.095	125.000	437.000	115.095	-125.000/
1640	966	1	0.000	606.679	125.000	0.000	606.679	-125.000/
1641	967	1	606.679	0.000	125.000	606.679	0.000	-125.000/
1642	968	1	482.344	81.069	125.000	482.344	81.069	-125.000/
1643	969	1	182.851	351.452	125.000	182.851	351.452	-125.000/
1644	970	1	396.191	145.043	125.000	396.191	145.043	-125.000/
1645	971	1	43.433	522.499	125.000	43.433	522.499	-125.000/
1646	972	1	302.886	217.624	125.000	302.886	217.624	-125.000/
1647	973	1	522.180	42.267	125.000	522.180	42.267	-125.000/
1648	974	1	206.199	310.057	125.000	206.199	310.057	-125.000/
1649	975	1	352.659	167.742	125.000	352.659	167.742	-125.000/
1650	976	1	260.399	245.380	125.000	260.399	245.380	-125.000/
1651	977	1	313.118	190.647	125.000	313.118	190.647	-125.000/
1652	978	1	0.000	564.414	125.000	0.000	564.414	-125.000/
1653	979	1	564.414	0.000	125.000	564.414	0.000	-125.000/
1654	980	1	115.162	400.982	125.000	115.162	400.982	-125.000/
1655	981	1	80.673	441.900	125.000	80.673	441.900	-125.000/
1656	982	1	145.527	359.198	125.000	145.527	359.198	-125.000/
1657	983	1	401.133	109.562	125.000	401.133	109.562	-125.000/
1658	984	1	442.477	77.603	125.000	442.477	77.603	-125.000/
1659	985	1	360.858	137.499	125.000	360.858	137.499	-125.000/
1660	986	1	226.311	260.893	125.000	226.311	260.893	-125.000/
1661	987	1	41.885	482.577	125.000	41.885	482.577	-125.000/
1662	988	1	171.409	317.961	125.000	171.409	317.961	-125.000/
1663	989	1	271.088	214.345	125.000	271.088	214.345	-125.000/
1664	990	1	482.561	40.534	125.000	482.561	40.534	-125.000/
1665	991	1	320.740	160.954	125.000	320.740	160.954	-125.000/
1666	992	1	522.148	0.000	125.000	522.148	0.000	-125.000/
1667	993	1	0.000	522.148	125.000	0.000	522.148	-125.000/
1668	994	1	192.222	276.407	125.000	192.222	276.407	-125.000/
1669	995	1	281.776	183.309	125.000	281.776	183.309	-125.000/
1670	996	1	76.591	404.786	125.000	76.591	404.786	-125.000/
1671	997	1	109.018	363.435	125.000	109.018	363.435	-125.000/
1672	998	1	406.074	74.080	125.000	406.074	74.080	-125.000/
1673	999	1	233.007	223.515	125.000	233.007	223.515	-125.000/
1674	1000	1	365.265	104.028	125.000	365.265	104.028	-125.000/
1675	1001	1	136.618	325.865	125.000	136.618	325.865	-125.000/
1676	1002	1	328.363	131.262	125.000	328.363	131.262	-125.000/
1677	1003	1	40.337	442.655	125.000	40.337	442.655	-125.000/
1678	1004	1	442.943	38.801	125.000	442.943	38.801	-125.000/
1679	1005	1	159.966	284.469	125.000	159.966	284.469	-125.000/
1680	1006	1	205.083	236.472	125.000	205.083	236.472	-125.000/
1681	1007	1	243.361	197.408	125.000	243.361	197.408	-125.000/
1682	1008	1	288.822	154.167	125.000	288.822	154.167	-125.000/
1683	1009	1	482.779	0.000	125.000	482.779	0.000	-125.000/
1684	1010	1	0.000	482.779	125.000	0.000	482.779	-125.000/
1685	1011	1	177.158	249.429	125.000	177.158	249.429	-125.000/
1686	1012	1	253.716	171.301	125.000	253.716	171.301	-125.000/
1687	1013	1	72.508	367.672	125.000	72.508	367.672	-125.000/
1688	1014	1	369.671	70.557	125.000	369.671	70.557	-125.000/
1689	1015	1	102.341	329.896	125.000	102.341	329.896	-125.000/

1690	1016	1	332.289	99.211	125.000	332.289	99.211	-125.000/
1691	1017	1	38.295	405.823	125.000	38.295	405.823	-125.000/
1692	1018	1	406.467	37.040	125.000	406.467	37.040	-125.000/
1693	1019	1	295.867	125.025	125.000	295.867	125.025	-125.000/
1694	1020	1	127.709	292.532	125.000	127.709	292.532	-125.000/
1695	1021	1	205.615	201.651	125.000	205.615	201.651	-125.000/
1696	1022	1	0.000	443.409	125.000	0.000	443.409	-125.000/
1697	1023	1	443.409	0.000	125.000	443.409	0.000	-125.000/
1698	1024	1	148.012	256.391	125.000	148.012	256.391	-125.000/
1699	1025	1	259.899	144.254	125.000	259.899	144.254	-125.000/
1700	1026	1	215.635	180.472	125.000	215.635	180.472	-125.000/
1701	1027	1	183.855	212.050	125.000	183.855	212.050	-125.000/
1702	1028	1	336.215	67.159	125.000	336.215	67.159	-125.000/
1703	1029	1	68.063	333.927	125.000	68.063	333.927	-125.000/
1704	1030	1	299.313	94.393	125.000	299.313	94.393	-125.000/
1705	1031	1	95.664	296.357	125.000	95.664	296.357	-125.000/
1706	1032	1	225.655	159.292	125.000	225.655	159.292	-125.000/
1707	1033	1	36.254	368.992	125.000	36.254	368.992	-125.000/
1708	1034	1	162.095	222.450	125.000	162.095	222.450	-125.000/
1709	1035	1	369.991	35.279	125.000	369.991	35.279	-125.000/
1710	1036	1	266.082	117.207	125.000	266.082	117.207	-125.000/
1711	1037	1	118.865	263.354	125.000	118.865	263.354	-125.000/
1712	1038	1	190.232	187.573	125.000	190.232	187.573	-125.000/
1713	1039	1	0.000	406.860	125.000	0.000	406.860	-125.000/
1714	1040	1	406.860	0.000	125.000	406.860	0.000	-125.000/
1715	1041	1	196.132	168.927	125.000	196.132	168.927	-125.000/
1716	1042	1	170.770	193.790	125.000	170.770	193.790	-125.000/
1717	1043	1	230.976	134.341	125.000	230.976	134.341	-125.000/
1718	1044	1	136.058	228.313	125.000	136.058	228.313	-125.000/
1719	1045	1	302.758	63.761	125.000	302.758	63.761	-125.000/
1720	1046	1	63.618	300.182	125.000	63.618	300.182	-125.000/
1721	1047	1	336.350	33.579	125.000	336.350	33.579	-125.000/
1722	1048	1	34.032	335.206	125.000	34.032	335.206	-125.000/
1723	1049	1	202.032	150.281	125.000	202.032	150.281	-125.000/
1724	1050	1	269.048	88.573	125.000	269.048	88.573	-125.000/
1725	1051	1	151.308	200.008	125.000	151.308	200.008	-125.000/
1726	1052	1	89.105	266.508	125.000	89.105	266.508	-125.000/
1727	1053	1	174.849	173.495	125.000	174.849	173.495	-125.000/
1728	1054	1	370.311	0.000	125.000	370.311	0.000	-125.000/
1729	1055	1	0.000	370.311	125.000	0.000	370.311	-125.000/
1730	1056	1	236.298	109.390	125.000	236.298	109.390	-125.000/
1731	1057	1	110.021	234.177	125.000	110.021	234.177	-125.000/
1732	1058	1	176.630	157.382	125.000	176.630	157.382	-125.000/
1733	1059	1	157.685	175.530	125.000	157.685	175.530	-125.000/
1734	1060	1	205.692	126.769	125.000	205.692	126.769	-125.000/
1735	1061	1	127.104	203.991	125.000	127.104	203.991	-125.000/
1736	1062	1	272.013	59.938	125.000	272.013	59.938	-125.000/
1737	1063	1	302.709	31.880	125.000	302.709	31.880	-125.000/
1738	1064	1	59.346	269.661	125.000	59.346	269.661	-125.000/
1739	1065	1	31.809	301.421	125.000	31.809	301.421	-125.000/
1740	1066	1	178.410	141.269	125.000	178.410	141.269	-125.000/
1741	1067	1	140.520	177.566	125.000	140.520	177.566	-125.000/
1742	1068	1	238.783	82.752	125.000	238.783	82.752	-125.000/
1743	1069	1	0.000	336.485	125.000	0.000	336.485	-125.000/
1744	1070	1	336.485	0.000	125.000	336.485	0.000	-125.000/
1745	1071	1	82.547	236.658	125.000	82.547	236.658	-125.000/
1746	1072	1	155.945	155.582	125.000	155.945	155.582	-125.000/
1747	1073	1	209.351	103.258	125.000	209.351	103.258	-125.000/
1748	1074	1	102.900	207.973	125.000	102.900	207.973	-125.000/
1749	1075	1	180.407	119.198	125.000	180.407	119.198	-125.000/
1750	1076	1	118.150	179.668	125.000	118.150	179.668	-125.000/
1751	1077	1	241.268	56.115	125.000	241.268	56.115	-125.000/
1752	1078	1	271.728	29.969	125.000	271.728	29.969	-125.000/
1753	1079	1	154.205	135.634	125.000	154.205	135.634	-125.000/
1754	1080	1	29.673	270.552	125.000	29.673	270.552	-125.000/
1755	1081	1	135.260	153.783	125.000	135.260	153.783	-125.000/

1756	1082	1	55.074	239.140	125.000	55.074	239.140	-125.000/
1757	1083	1	211.089	78.065	125.000	211.089	78.065	-125.000/
1758	1084	1	302.659	0.000	125.000	302.659	0.000	-125.000/
1759	1085	1	0.000	302.659	125.000	0.000	302.659	-125.000/
1760	1086	1	77.312	209.571	125.000	77.312	209.571	-125.000/
1761	1087	1	182.404	97.126	125.000	182.404	97.126	-125.000/
1762	1088	1	95.779	181.770	125.000	95.779	181.770	-125.000/
1763	1089	1	155.204	113.765	125.000	155.204	113.765	-125.000/
1764	1090	1	113.242	154.834	125.000	113.242	154.834	-125.000/
1765	1091	1	212.828	52.872	125.000	212.828	52.872	-125.000/
1766	1092	1	240.747	28.058	125.000	240.747	28.058	-125.000/
1767	1093	1	130.000	130.000	125.000	130.000	130.000	-125.000/
1768	1094	1	27.537	239.683	125.000	27.537	239.683	-125.000/
1769	1095	1	51.723	211.168	125.000	51.723	211.168	-125.000/
1770	1096	1	0.000	271.443	125.000	0.000	271.443	-125.000/
1771	1097	1	271.443	0.000	125.000	271.443	0.000	-125.000/
1772	1098	1	183.396	73.378	125.000	183.396	73.378	-125.000/
1773	1099	1	72.076	182.483	125.000	72.076	182.483	-125.000/
1774	1100	1	156.202	91.896	125.000	156.202	91.896	-125.000/
1775	1101	1	91.223	155.885	125.000	91.223	155.885	-125.000/
1776	1102	1	130.000	108.333	125.000	130.000	108.333	-125.000/
1777	1103	1	130.000	130.000	125.000	130.000	130.000	-125.000/
1778	1104	1	212.161	26.436	125.000	212.161	26.436	-125.000/
1779	1105	1	25.862	211.331	125.000	25.862	211.331	-125.000/
1780	1106	1	184.388	49.630	125.000	184.388	49.630	-125.000/
1781	1107	1	240.226	0.000	125.000	240.226	0.000	-125.000/
1782	1108	1	0.000	240.226	125.000	0.000	240.226	-125.000/
1783	1109	1	48.373	183.197	125.000	48.373	183.197	-125.000/
1784	1110	1	156.698	69.189	125.000	156.698	69.189	-125.000/
1785	1111	1	68.538	156.242	125.000	68.538	156.242	-125.000/
1786	1112	1	108.287	108.357	125.000	108.287	108.357	-125.000/
1787	1113	1	86.667	130.000	125.000	86.667	130.000	-125.000/
1788	1114	1	130.000	86.667	125.000	130.000	86.667	-125.000/
1789	1115	1	183.575	24.815	125.000	183.575	24.815	-125.000/
1790	1116	1	0.000	211.494	125.000	0.000	211.494	-125.000/
1791	1117	1	211.494	0.000	125.000	211.494	0.000	-125.000/
1792	1118	1	24.186	182.979	125.000	24.186	182.979	-125.000/
1793	1119	1	157.194	46.482	125.000	157.194	46.482	-125.000/
1794	1120	1	45.853	156.598	125.000	45.853	156.598	-125.000/
1795	1121	1	108.242	86.714	125.000	108.242	86.714	-125.000/
1796	1122	1	86.575	108.381	125.000	86.575	108.381	-125.000/
1797	1123	1	65.000	130.000	125.000	65.000	130.000	-125.000/
1798	1124	1	130.000	65.000	125.000	130.000	65.000	-125.000/
1799	1125	1	156.788	23.241	125.000	156.788	23.241	-125.000/
1800	1126	1	0.000	182.762	125.000	0.000	182.762	-125.000/
1801	1127	1	182.762	0.000	125.000	182.762	0.000	-125.000/
1802	1128	1	22.927	156.490	125.000	22.927	156.490	-125.000/
1803	1129	1	86.483	86.761	125.000	86.483	86.761	-125.000/
1804	1130	1	108.196	65.071	125.000	108.196	65.071	-125.000/
1805	1131	1	64.862	108.404	125.000	64.862	108.404	-125.000/
1806	1132	1	130.000	43.333	125.000	130.000	43.333	-125.000/
1807	1133	1	43.333	130.000	125.000	43.333	130.000	-125.000/
1808	1134	1	0.000	156.381	125.000	0.000	156.381	-125.000/
1809	1135	1	156.381	0.000	125.000	156.381	0.000	-125.000/
1810	1136	1	86.391	65.142	125.000	86.391	65.142	-125.000/
1811	1137	1	64.725	86.808	125.000	64.725	86.808	-125.000/
1812	1138	1	108.150	43.428	125.000	108.150	43.428	-125.000/
1813	1139	1	43.150	108.428	125.000	43.150	108.428	-125.000/
1814	1140	1	21.667	130.000	125.000	21.667	130.000	-125.000/
1815	1141	1	130.000	21.667	125.000	130.000	21.667	-125.000/
1816	1142	1	64.725	65.142	125.000	64.725	65.142	-125.000/
1817	1143	1	86.299	43.522	125.000	86.299	43.522	-125.000/
1818	1144	1	42.966	86.855	125.000	42.966	86.855	-125.000/
1819	1145	1	108.242	21.714	125.000	108.242	21.714	-125.000/
1820	1146	1	21.575	108.381	125.000	21.575	108.381	-125.000/
1821	1147	1	0.000	130.000	125.000	0.000	130.000	-125.000/

1822	1148	1	130.000	0.000	125.000	130.000	0.000	-125.000/
1823	1149	1	64.725	43.475	125.000	64.725	43.475	-125.000/
1824	1150	1	43.058	65.142	125.000	43.058	65.142	-125.000/
1825	1151	1	86.483	21.761	125.000	86.483	21.761	-125.000/
1826	1152	1	21.483	86.761	125.000	21.483	86.761	-125.000/
1827	1153	1	108.333	0.000	125.000	108.333	0.000	-125.000/
1828	1154	1	0.000	108.333	125.000	0.000	108.333	-125.000/
1829	1155	1	43.150	43.428	125.000	43.150	43.428	-125.000/
1830	1156	1	64.862	21.737	125.000	64.862	21.737	-125.000/
1831	1157	1	21.529	65.071	125.000	21.529	65.071	-125.000/
1832	1158	1	0.000	86.667	125.000	0.000	86.667	-125.000/
1833	1159	1	86.667	0.000	125.000	86.667	0.000	-125.000/
1834	1160	1	43.242	21.714	125.000	43.242	21.714	-125.000/
1835	1161	1	21.575	43.381	125.000	21.575	43.381	-125.000/
1836	1162	1	65.000	0.000	125.000	65.000	0.000	-125.000/
1837	1163	1	0.000	65.000	125.000	0.000	65.000	-125.000/
1838	1164	1	21.621	21.690	125.000	21.621	21.690	-125.000/
1839	1165	1	43.333	0.000	125.000	43.333	0.000	-125.000/
1840	1166	1	0.000	43.333	125.000	0.000	43.333	-125.000/
1841	1167	1	21.667	0.000	125.000	21.667	0.000	-125.000/
1842	1168	1	0.000	21.667	125.000	0.000	21.667	-125.000/
1843	1169	1	0.000	0.000	125.000	0.000	0.000	-125.000/

1844 /

1845 NODAL RESTRAINTS AND PRESCRIBED D.O.F.

1846 -----

1847

1848 <<<< FORMAT >>>> (units = mm, degrees)(d(NODE)>0!!!) Node No. MUST be in ascending order. Cannot repeat nodes.

1849 NODE DX-R DY-R DZ-R R1-R R2-R [#NODES d(NODE)] [#NODES d(NODE)] [#NODES d(NODE)] /

1850	787	1	0	0	1	0/
1851	788	0	1	0	0	1/
1852	789	1	0	0	1	0/
1853	790	0	1	0	0	1/
1854	794	1	0	0	1	0/
1855	795	0	1	0	0	1/
1856	799	0	1	0	0	1/
1857	800	1	0	0	1	0/
1858	805	1	0	0	1	0/
1859	806	0	1	0	0	1/
1860	811	1	0	0	1	0/
1861	812	0	1	0	0	1/
1862	820	0	1	0	0	1/
1863	821	1	0	0	1	0/
1864	830	0	1	0	0	1/
1865	831	1	0	0	1	0/
1866	838	1	0	0	1	0/
1867	839	0	1	0	0	1/
1868	849	0	1	0	0	1/
1869	850	1	0	0	1	0/
1870	859	0	1	0	0	1/
1871	860	1	0	0	1	0/
1872	871	1	0	0	1	0/
1873	872	0	1	0	0	1/
1874	881	0	1	0	0	1/
1875	882	1	0	0	1	0/
1876	896	1	0	0	1	0/
1877	897	0	1	0	0	1/
1878	908	0	1	0	0	1/
1879	909	1	0	0	1	0/
1880	920	0	1	0	0	1/
1881	921	1	0	0	1	0/
1882	936	1	0	0	1	0/
1883	937	0	1	0	0	1/
1884	951	1	0	0	1	0/
1885	952	0	1	0	0	1/

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1886      966      1      0      0      1      0/
1887      967      0      1      0      0      1/
1888      978      1      0      0      1      0/
1889      979      0      1      0      0      1/
1890      992      0      1      0      0      1/
1891      993      1      0      0      1      0/
1892     1009      0      1      0      0      1/
1893     1010      1      0      0      1      0/
1894     1022      1      0      0      1      0/
1895     1023      0      1      0      0      1/
1896     1039      1      0      0      1      0/
1897     1040      0      1      0      0      1/
1898     1054      0      1      0      0      1/
1899     1055      1      0      0      1      0/
1900     1069      1      0      0      1      0/
1901     1070      0      1      0      0      1/
1902     1084      0      1      0      0      1/
1903     1085      1      0      0      1      0/
1904     1093      0      0      1      0      0/
1905     1096      1      0      0      1      0/
1906     1097      0      1      0      0      1/
1907     1102      0      0      1      0      0/
1908     1103      0      0      1      0      0/
1909     1107      0      1      0      0      1/
1910     1108      1      0      0      1      0/
1911     1113      0      0      1      0      0/
1912     1114      0      0      1      0      0/
1913     1116      1      0      0      1      0/
1914     1117      0      1      0      0      1/
1915     1123      0      0      1      0      0/
1916     1124      0      0      1      0      0/
1917     1126      1      0      0      1      0/
1918     1127      0      1      0      0      1/
1919     1132      0      0      1      0      0/
1920     1133      0      0      1      0      0/
1921     1134      1      0      0      1      0/
1922     1135      0      1      0      0      1/
1923     1140      0      0      1      0      0/
1924     1141      0      0      1      0      0/
1925     1147      1      0      1      1      0/
1926     1148      0      1      1      0      1/
1927     1153      0      1      0      0      1/
1928     1154      1      0      0      1      0/
1929     1158      1      0      0      1      0/
1930     1159      0      1      0      0      1/
1931     1162      0      1      0      0      1/
1932     1163      1      0      0      1      0/
1933     1165      0      1      0      0      1/
1934     1166      1      0      0      1      0/
1935     1167      0      1      0      0      1/
1936     1168      1      0      0      1      0/
1937     1169      1      1      0      1      1/
1938 /
1939          AUTO GENERATE NODAL RESTRAINTS
1940          -----
1941
1942 <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc]          < RTYP = 2 or 3>
1943 RTYP  DX-R  DY-R  DZ-R  R1-R  R2-R  X1  Y1  Z1  [ NX  SX
NY  SY  NZ  SZ]  [X2  Y2  Z2]/
1944 /
1945          AUTO GENERATE RESULTS (DISP OR REACTIONS)
1946          -----
1947
1948 <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>

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1949 RTYP D(0-5) R(0-5) X1 Y1 Z1 [ NX SX NY SY NZ
SZ] [X2 Y2 Z2]/
1950 /
1951 LINKED NODES
1952 -----
1953
1954 <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
1955 RTYP D(0-5) X1 Y1 Z1 [ NX SX NY SY NZ SZ]
[X2 Y2 Z2]/
1956 /
1957
1958 <NOTES:>
1959 Smearred Reinforcement:
1960 d - Distance from the top of the element to the centroid of the
1961 reinforcement layer.
1962
1963 Truss Elements:
1964 OS - Element offset measured from nodal location (typically middle layer).
1965 Negative OS is toward element bottom surface.
1966
1967 REF - Reinforcement Types (smearred & truss):
1968 1 - Ductile Steel Reinforcement (tension+compression)
1969 2 - Prestressing Steel (tension+compression)
1970 3 - Ductile Steel Reinforcement (tension only)
1971 4 - Ductile Steel Reinforcement (compression only)
1972
1973 Element incidences:
1974 <INC9> - Only required when nine noded element is used.
1975
1976 Element types (MUST input in this order - Shell, solid, then truss):
1977 1 - Shell elements
1978 2 - Solid elements
1979 3 - Truss elements
1980
1981 Coordinates: (Cannot use a mix of type 1 and 2 coordinates)
1982 TYPE - 1 - Top and Bottom coordinates of the node are provided.
1983 2 - Centre Line coordinates of the node are provided.
1984 3 - Coordinates of the node for the solid element are provided.
1985
1986 Restrained D.O.F.:
1987 0 - Unrestrained degree of freedom
1988 1 - Restrained degree of freedom
1989
1990 Auto generate restrained D.O.F.:
1991 TYPE - 1 - Point restraints
1992 2 - Line restraints
1993 3 - Area restraints
1994
1995 (1) DO NOT INSERT OR DELETE ANY LINE.
1996 EXCEPTION: INSERTION OF LINES IN THE SPACE PROVIDED FOR INPUT OF
1997 DATA. IN THIS CASE, LEAVE LINE WITH SLASH AFTER LAST DATA LINE.
1998
1999 (2) BLANK SPACES SHOULD BE USED TO SEPARATE DATA WITHIN A DATA LINE.
2000
2001 (3) ELEMENT INCIDENCE NUMBER 9 (i.e. <INC9>) TO BE IGNORED WHEN 8 NODED
2002 SERENDIPITY ELEMENT USED.
2003
2004 (4) DIMENSIONED FOR: 50 ELEMENTS, 200 NODES, 100 RESTRAINED NODES,
2005 16 CONCRETE LAYERS, 6 REINFORCEMENT LAYERS, 30 MATERIALS, 20 LAYER
2006 PATTERNS, MAXIMUM FRONTWIDTH OF 100.
2007

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1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : Self Weight
12         Load case file name   (8 char. max.) : LOAD1
13
14         No. of elements with a u.d.l.      : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads : 0
18         No. of nodes with imposed displacements : 0
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads      : 275
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads      : 0
23         No. of ground acceleration data values : 0
24
25          UNIFORMLY DISTRIBUTED LOADS
26          -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31          HYDROSTATIC LOADS
32          -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37          TEMPERATURE LOADS
38          -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44          CONCENTRATED LOADS
45          -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51          PRESCRIBED NODE DISPLACEMENTS
52          -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         /
57
58          CONCRETE PRESTRAINS
59          -----
60         <NOTE:> UNITS: me
61         <<<<< FORMAT >>>>>
62         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
63         /
64
65          GRAVITATIONAL LOADS
66          -----

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67 <<<< FORMAT >>>>
68 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
69      1      0.00000  0.00000  -1.00000  0.00000/
70      2      0.00000  0.00000  -1.00000  0.00000/
71      3      0.00000  0.00000  -1.00000  0.00000/
72      4      0.00000  0.00000  -1.00000  0.00000/
73      5      0.00000  0.00000  -1.00000  0.00000/
74      6      0.00000  0.00000  -1.00000  0.00000/
75      7      0.00000  0.00000  -1.00000  0.00000/
76      8      0.00000  0.00000  -1.00000  0.00000/
77      9      0.00000  0.00000  -1.00000  0.00000/
78     10      0.00000  0.00000  -1.00000  0.00000/
79     11      0.00000  0.00000  -1.00000  0.00000/
80     12      0.00000  0.00000  -1.00000  0.00000/
81     13      0.00000  0.00000  -1.00000  0.00000/
82     14      0.00000  0.00000  -1.00000  0.00000/
83     15      0.00000  0.00000  -1.00000  0.00000/
84     16      0.00000  0.00000  -1.00000  0.00000/
85     17      0.00000  0.00000  -1.00000  0.00000/
86     18      0.00000  0.00000  -1.00000  0.00000/
87     19      0.00000  0.00000  -1.00000  0.00000/
88     20      0.00000  0.00000  -1.00000  0.00000/
89     21      0.00000  0.00000  -1.00000  0.00000/
90     22      0.00000  0.00000  -1.00000  0.00000/
91     23      0.00000  0.00000  -1.00000  0.00000/
92     24      0.00000  0.00000  -1.00000  0.00000/
93     25      0.00000  0.00000  -1.00000  0.00000/
94     26      0.00000  0.00000  -1.00000  0.00000/
95     27      0.00000  0.00000  -1.00000  0.00000/
96     28      0.00000  0.00000  -1.00000  0.00000/
97     29      0.00000  0.00000  -1.00000  0.00000/
98     30      0.00000  0.00000  -1.00000  0.00000/
99     31      0.00000  0.00000  -1.00000  0.00000/
100    32      0.00000  0.00000  -1.00000  0.00000/
101    33      0.00000  0.00000  -1.00000  0.00000/
102    34      0.00000  0.00000  -1.00000  0.00000/
103    35      0.00000  0.00000  -1.00000  0.00000/
104    36      0.00000  0.00000  -1.00000  0.00000/
105    37      0.00000  0.00000  -1.00000  0.00000/
106    38      0.00000  0.00000  -1.00000  0.00000/
107    39      0.00000  0.00000  -1.00000  0.00000/
108    40      0.00000  0.00000  -1.00000  0.00000/
109    41      0.00000  0.00000  -1.00000  0.00000/
110    42      0.00000  0.00000  -1.00000  0.00000/
111    43      0.00000  0.00000  -1.00000  0.00000/
112    44      0.00000  0.00000  -1.00000  0.00000/
113    45      0.00000  0.00000  -1.00000  0.00000/
114    46      0.00000  0.00000  -1.00000  0.00000/
115    47      0.00000  0.00000  -1.00000  0.00000/
116    48      0.00000  0.00000  -1.00000  0.00000/
117    49      0.00000  0.00000  -1.00000  0.00000/
118    50      0.00000  0.00000  -1.00000  0.00000/
119    51      0.00000  0.00000  -1.00000  0.00000/
120    52      0.00000  0.00000  -1.00000  0.00000/
121    53      0.00000  0.00000  -1.00000  0.00000/
122    54      0.00000  0.00000  -1.00000  0.00000/
123    55      0.00000  0.00000  -1.00000  0.00000/
124    56      0.00000  0.00000  -1.00000  0.00000/
125    57      0.00000  0.00000  -1.00000  0.00000/
126    58      0.00000  0.00000  -1.00000  0.00000/
127    59      0.00000  0.00000  -1.00000  0.00000/
128    60      0.00000  0.00000  -1.00000  0.00000/
129    61      0.00000  0.00000  -1.00000  0.00000/
130    62      0.00000  0.00000  -1.00000  0.00000/
131    63      0.00000  0.00000  -1.00000  0.00000/
132    64      0.00000  0.00000  -1.00000  0.00000/

```



133	65	0.00000	0.00000	-1.00000	0.00000/
134	66	0.00000	0.00000	-1.00000	0.00000/
135	67	0.00000	0.00000	-1.00000	0.00000/
136	68	0.00000	0.00000	-1.00000	0.00000/
137	69	0.00000	0.00000	-1.00000	0.00000/
138	70	0.00000	0.00000	-1.00000	0.00000/
139	71	0.00000	0.00000	-1.00000	0.00000/
140	72	0.00000	0.00000	-1.00000	0.00000/
141	73	0.00000	0.00000	-1.00000	0.00000/
142	74	0.00000	0.00000	-1.00000	0.00000/
143	75	0.00000	0.00000	-1.00000	0.00000/
144	76	0.00000	0.00000	-1.00000	0.00000/
145	77	0.00000	0.00000	-1.00000	0.00000/
146	78	0.00000	0.00000	-1.00000	0.00000/
147	79	0.00000	0.00000	-1.00000	0.00000/
148	80	0.00000	0.00000	-1.00000	0.00000/
149	81	0.00000	0.00000	-1.00000	0.00000/
150	82	0.00000	0.00000	-1.00000	0.00000/
151	83	0.00000	0.00000	-1.00000	0.00000/
152	84	0.00000	0.00000	-1.00000	0.00000/
153	85	0.00000	0.00000	-1.00000	0.00000/
154	86	0.00000	0.00000	-1.00000	0.00000/
155	87	0.00000	0.00000	-1.00000	0.00000/
156	88	0.00000	0.00000	-1.00000	0.00000/
157	89	0.00000	0.00000	-1.00000	0.00000/
158	90	0.00000	0.00000	-1.00000	0.00000/
159	91	0.00000	0.00000	-1.00000	0.00000/
160	92	0.00000	0.00000	-1.00000	0.00000/
161	93	0.00000	0.00000	-1.00000	0.00000/
162	94	0.00000	0.00000	-1.00000	0.00000/
163	95	0.00000	0.00000	-1.00000	0.00000/
164	96	0.00000	0.00000	-1.00000	0.00000/
165	97	0.00000	0.00000	-1.00000	0.00000/
166	98	0.00000	0.00000	-1.00000	0.00000/
167	99	0.00000	0.00000	-1.00000	0.00000/
168	100	0.00000	0.00000	-1.00000	0.00000/
169	101	0.00000	0.00000	-1.00000	0.00000/
170	102	0.00000	0.00000	-1.00000	0.00000/
171	103	0.00000	0.00000	-1.00000	0.00000/
172	104	0.00000	0.00000	-1.00000	0.00000/
173	105	0.00000	0.00000	-1.00000	0.00000/
174	106	0.00000	0.00000	-1.00000	0.00000/
175	107	0.00000	0.00000	-1.00000	0.00000/
176	108	0.00000	0.00000	-1.00000	0.00000/
177	109	0.00000	0.00000	-1.00000	0.00000/
178	110	0.00000	0.00000	-1.00000	0.00000/
179	111	0.00000	0.00000	-1.00000	0.00000/
180	112	0.00000	0.00000	-1.00000	0.00000/
181	113	0.00000	0.00000	-1.00000	0.00000/
182	114	0.00000	0.00000	-1.00000	0.00000/
183	115	0.00000	0.00000	-1.00000	0.00000/
184	116	0.00000	0.00000	-1.00000	0.00000/
185	117	0.00000	0.00000	-1.00000	0.00000/
186	118	0.00000	0.00000	-1.00000	0.00000/
187	119	0.00000	0.00000	-1.00000	0.00000/
188	120	0.00000	0.00000	-1.00000	0.00000/
189	121	0.00000	0.00000	-1.00000	0.00000/
190	122	0.00000	0.00000	-1.00000	0.00000/
191	123	0.00000	0.00000	-1.00000	0.00000/
192	124	0.00000	0.00000	-1.00000	0.00000/
193	125	0.00000	0.00000	-1.00000	0.00000/
194	126	0.00000	0.00000	-1.00000	0.00000/
195	127	0.00000	0.00000	-1.00000	0.00000/
196	128	0.00000	0.00000	-1.00000	0.00000/
197	129	0.00000	0.00000	-1.00000	0.00000/
198	130	0.00000	0.00000	-1.00000	0.00000/





```

331      263      0.00000      0.00000      -1.00000      0.00000/
332      264      0.00000      0.00000      -1.00000      0.00000/
333      265      0.00000      0.00000      -1.00000      0.00000/
334      266      0.00000      0.00000      -1.00000      0.00000/
335      267      0.00000      0.00000      -1.00000      0.00000/
336      268      0.00000      0.00000      -1.00000      0.00000/
337      269      0.00000      0.00000      -1.00000      0.00000/
338      270      0.00000      0.00000      -1.00000      0.00000/
339      271      0.00000      0.00000      -1.00000      0.00000/
340      272      0.00000      0.00000      -1.00000      0.00000/
341      273      0.00000      0.00000      -1.00000      0.00000/
342      274      0.00000      0.00000      -1.00000      0.00000/
343      275      0.00000      0.00000      -1.00000      0.00000/
344 /
345
346                      ADDITIONAL LUMPED MASSES
347                      -----
348 <NOTE:> UNITS: kg, m/s, m/s2
349 <<<<< FORMAT >>>>>
350 NODE DOF-X DOF-Y DOF-Z MASS Vo-X Vo-Y Vo-Z Acc-X Acc-Y Acc-Z [ #NODE
351 d(NODE) ] /
352 /
353                      IMPULSE, BLAST AND IMPACT FORCES
354                      -----
355 <NOTE:> UNITS: Sec, kN
356 <<<<< FORMAT >>>>>
357 NODE DOF T1 F1 T2 F2 T3 F3 T4 F4 [ #NODE d(NODE) ] /
358 /
359
360                      GROUND ACCELERATION
361                      -----
362 <NOTE:> UNITS: Sec, G
363 <<<<< FORMAT >>>>>
364 TIME ACC-X ACC-Y ACC-Z /
365 /
366

```

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0    -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title          (30 char. max.) : SLAB
11         Load case title          (30 char. max.) : DISP. MASTER
12         Load case file name      (8 char. max.) : LOAD2
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 0
18         No. of nodes with imposed displacements : 1
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25          UNIFORMLY DISTRIBUTED LOADS
26          -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31          HYDROSTATIC LOADS
32          -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37          TEMPERATURE LOADS
38          -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44          CONCENTRATED LOADS
45          -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51          PRESCRIBED NODE DISPLACEMENTS
52          -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         294           3           -1.00000/
57         /
58
59          CONCRETE PRESTRAINS
60          -----
61         <NOTE:> UNITS: me
62         <<<<< FORMAT >>>>>
63         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
64         /
65
66          GRAVITATIONAL LOADS

```

```

67                                     -----
68 <<<<< FORMAT >>>>>
69 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
70 /
71
72                                     ADDITIONAL LUMPED MASSES
73                                     -----
74 <NOTE:> UNITS:  kg, m/s, m/s2
75 <<<<< FORMAT >>>>>
76 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
d(NODE) ] /
77 /
78
79                                     IMPULSE, BLAST AND IMPACT FORCES
80                                     -----
81 <NOTE:> UNITS:  Sec, kN
82 <<<<< FORMAT >>>>>
83 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
84 /
85
86                                     GROUND ACCELERATION
87                                     -----
88 <NOTE:> UNITS:  Sec, G
89 <<<<< FORMAT >>>>>
90 TIME  ACC-X  ACC-Y  ACC-Z /
91 /
92

```

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : DISP. SLAVE
12         Load case file name   (8 char. max.) : LOAD3
13
14         No. of elements with a u.d.l.      : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads : 0
18         No. of nodes with imposed displacements : 1
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads : 0
23         No. of ground acceleration data values : 0
24
25          UNIFORMLY DISTRIBUTED LOADS
26          -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31          HYDROSTATIC LOADS
32          -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37          TEMPERATURE LOADS
38          -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44          CONCENTRATED LOADS
45          -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51          PRESCRIBED NODE DISPLACEMENTS
52          -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         295           -3           294/
57         /
58
59          CONCRETE PRESTRAINS
60          -----
61         <NOTE:> UNITS: me
62         <<<<< FORMAT >>>>>
63         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
64         /
65
66          GRAVITATIONAL LOADS

```

```

67                                     -----
68 <<<<< FORMAT >>>>>
69 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
70 /
71
72                                     ADDITIONAL LUMPED MASSES
73                                     -----
74 <NOTE:> UNITS:  kg, m/s, m/s2
75 <<<<< FORMAT >>>>>
76 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
77 d(NODE) ] /
78 /
79                                     IMPULSE, BLAST AND IMPACT FORCES
80                                     -----
81 <NOTE:> UNITS:  Sec, kN
82 <<<<< FORMAT >>>>>
83 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
84 /
85
86                                     GROUND ACCELERATION
87                                     -----
88 <NOTE:> UNITS:  Sec, G
89 <<<<< FORMAT >>>>>
90 TIME  ACC-X  ACC-Y  ACC-Z /
91 /
92

```



```

1
2      - - - - -
3      -       V e c T o r 4       -
4      -   A u x i l i a r y   D a t a   -
5      - - - - -
6
7  Stiffness Matrix Solver          (1-2) : 2
8  Number of Parallel Threads      : 2
9
10 Shear Analysis Mode              (1-3) : 2
11
12 Concrete Aggregate Type          (1-2) : 1
13 Concrete Conductivity            : 2.19
14 Concrete Fracture Energy         (kN/m) : 0.00
15 Prestressing Friction Coefficient (/r) : 0.30
16 Prestressing Wobble Coefficient (/m) : 0.00250
17
18 Thermal Time Stepping Factor      : 0.6666667
19
20 Time Integration Method          (1-3) : 3
21
22 1st Mode to Assign Damping       : 1
23 2nd Mode to Assign Damping       : 2
24 Damping Ratio Assignment #1      : 0.00
25 Damping Ratio Assignment #2      : 2.00
26 Ground Acceleration in x-direction : 0.0
27 Ground Acceleration in y-direction : 0.0
28 Ground Acceleration in z-direction : 0.0
29 Mass Factor due to Self-Weight    : 1.0
30
31 Tension Softening Pt 1: Strain    (me) : 0.20
32 Tension Softening Pt 1: Stress    (MPa) : 3.00
33 Tension Softening Pt 2: Strain    (me) : 0.50
34 Tension Softening Pt 2: Stress    (MPa) : 2.00
35 Tension Softening Pt 3: Strain    (me) : 1.00
36 Tension Softening Pt 3: Stress    (MPa) : 1.00
37 Tension Softening Pt 4: Strain    (me) : 2.00
38 Tension Softening Pt 4: Stress    (MPa) : 0.10
39
40 Matrix Type                      : 1
41 Fibre Type                        : 1
42 Volumetric Fraction of Fibres     (%) : 0.0
43 Fibre Length                      (mm) : 50.0
44 Fibre Diameter                    (mm) : 0.60
45 Tensile Strength of Fibre         (MPa) : 1050.0
46 Mean fibre-Matrix Bond Stress     (MPa) : 0.00
47 SLS Equivalent Strength (Euro)    (MPa) : 1.00
48 ULS Equivalent Strength (Euro)    (MPa) : 0.50
49
50
51 NOTES:
52 Concrete Aggregate Type:
53     1. Carbonate
54     2. Silicious
55
56 Concrete Fracture Energy:
57     Input 0 for program generated default value.
58
59
60 Time Stepping Factor for Heat Flow Analysis:
61     0.500 : Crank-Nicolson Scheme (Accurate)
62     0.667 : Galerkin Scheme (Stable)
63
64 Shear Analysis Mode:
65     0. Out-of-Plane Shear Strains Neglected
66     1. Multi-Layer Analysis - Uniform Shear Strain

```

```
67           2. Multi-Layer Analysis - Parabolic Shear Strain
68
69
70 Dynamic Analysis Parameters
71 -----
72
73 Dynamic Analysis Mode:
74     1. Impact
75     2. Ground Acceleration
76     3. Impulse
77
78 Newmark Beta Factor:
79     0.25: Constant Acceleration
80     1/6: Linear Acceleration
81
82 Modal Factors   : Vibration modes to be considered for Rayleigh Damping
83
84 Damping Factors : Corresponding damping ratios for the above vibration modes
85
86 Ground Acceleration directions:
87     1: Acceleration applied in that direction
88     0: Acceleration not applied in that direction
89
90
91 Steel Fibre Reinforced Concrete
92 -----
93
94 Matrix type:
95     1. Concrete
96     2. Mortar
97
98 Fiber type:
99     1. Hooked
100    2. Straight
101
```

Input Files

**Slab AM04 (Sagasetta et al. 2014)**

```

1          - - - - -
2          -   V e c T o r   -
3          -   J O B   D A T A   -
4          - - - - -
5
6 Job Title          (30 char max) : VT4SLAB
7 Job File Name     (8 char max)  : VT4SLAB
8 Date              (30 char max) :
9
10 STRUCTURE DATA
11 -----
12 Structure Type    : 4
13 File Name        (8 char max)  : STRUCT
14
15 LOADING DATA
16 -----
17 No. of Load Stages      : 1000
18 Starting Load Stage No. : 1
19 Load Series ID         (5 char max) : I
20
21 Load File Name          Factors
22 Case (8 char max) | Initial   Final   Inc   Typ  Rep  C-Inc|
23 1      LOAD1          1.00000 1.00000 0.00000 1 1 1.00000
24 2      LOAD2          0.05600 160.00000 0.25000 1 1 1.00000
25 3      LOAD3          1.00000 1.00000 0.00000 1 1 1.00000
26 4      NULL           0.00000 0.00000 0.00000 1 1 0.00000
27 5      NULL           0.00000 0.00000 0.00000 1 1 0.00000
28
29 ANALYSIS PARAMETERS
30 -----
31 Analysis Mode              (1-2) : 1
32 Seed File Name            (8 char max) : NULL
33 Convergence Limit         (>1.0) : 1.000005
34 Averaging Factor          (<1.0) : 0.40
35 Maximum No. of Iterations : 80
36 Convergence Criteria      (1-3) : 2
37 Results File Type         (1-4) : 2
38 Result Output Format       (1-3) : 4
39
40 MATERIAL BEHAVIOUR MODELS
41 -----
42 Concrete Compression Base Curve (0-3) : 1
43 Concrete Compression Post-Peak (0-3) : 1
44 Concrete Compression Softening (0-8) : 1
45 Concrete Tension Stiffening (0-5) : 1
46 Concrete Tension Softening (0-8) : 1
47 Concrete Tension Splitting (1-2) : 1
48 Concrete Confined Strength (0-2) : 1
49 Concrete Dilatation (0-5) : 1
50 Concrete Cracking Criterion (0-4) : 1
51 Concrete Crack Slip Check (0-2) : 1
52 Concrete Crack Width Check (0-2) : 1
53 Concrete Bond or Adhesion (0-4) : 1
54 Concrete Creep and Relaxation (0-1) : 1
55 Concrete Hysteresis (0-3) : 2
56 Reinforcement Hysteresis (0-3) : 1
57 Reinforcement Dowel Action (0-1) : 1
58 Reinforcement Buckling (0-1) : 1
59 Element Strain Histories (0-1) : 1
60 Element Slip Distortions (0-4) : 1
61 Strain Rate Effects (0-1) : 1
62 Structural Damping (0-1) : 1
63 Geometric Nonlinearity (0-1) : 1
64 Crack Allocation Process (0-1) : 1
65
66

```

```

67
68 ANALYSIS PARAMETERS:
69 -----
70 1. INTEGRATION SCHEME:
71     1. Selective (Bending - 3 ; Shear - 2)
72     2. Full      (Bending - 3 ; Shear - 3)
73     3. Reduced   (Bending - 2 ; Shear - 2)
74
75 2. CONVERGENCE CRITERIA:
76     1. Displacements - Weighted Average
77     2. Displacements - Maximum Value
78     3. Secant Moduli - RMS
79
80 3. RESULTS FILE TYPE:
81     1. ASCII and Binary Files
82     2. ASCII Files Only
83     3. Binary Files Only
84     4. Last Load Stage Only
85
86 4. RESULTS OUTPUT FORMAT
87     Print concrete strains and stresses of:
88     1. All layers at all gauss points
89     2. Top and bottom layers at all gauss points
90     3. All layers for central gauss point only
91
92 MATERIAL BEHAVIOUR MODELS:
93 -----
94 1. OUT-OF-PLANE SHEAR:
95     0. Shear Not Considered
96     1. Considered - Uniform Shear Strain
97
98 2. GEOMETRIC NONLINEARITY:
99     0. Neglect Effect
100    1. Consider Effect
101
102 3. LOAD HISTORY:
103     0. Neglect Previous Loading Effects
104     1. Consider Previous Loading Effects
105
106 4. CONCRETE COMPRESSION BASE CURVE:
107     0. Linear Elastic
108     1. Normal (Parabolic)
109     2. High Strength
110
111 5. CONCRETE COMPRESSION SOFTENING:
112     0. Neglect Effect
113     1. Vecchio-Collins 1982 Model
114     2. Vecchio-Collins 1986 Model
115     3. Vecchio 1992-A Model
116     4. Vecchio 1992-B Model
117
118 6. CONCRETE TENSION STIFFENING:
119     0. Neglect Effect
120     1. Vecchio-Collins 1982 Model
121     2. Collins-Mitchell Model
122     3. Izumo, Maekawa et al Model
123
124 7. CONCRETE TENSION SOFTENING:
125     0. Neglect Effect
126     1. Linear Softening
127     2. Linear Softening + 10% Residual Stress
128     3. 10% Residual Stress Only
129     4. Yamamoto Model (Base Curve Only)
130     5. Yamamoto Model (Strain Hardening Considered)
131
132 8. CONCRETE STRENGTH ENHANCEMENT:

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133           0. Biaxial Effects Neglected  
134           1. Biaxial Effects Considered  
135  
136    9. CONCRETE PLASTIC STRAINS:  
137           0. Neglect Effects  
138           1. Consider Effects  
139  
140   10. CONCRETE CRACK SLIP CHECK:  
141           0. Omit Check  
142           1. Perform Check  
143  
144   11. REINFORCEMENT STRESS RESPONSE:  
145           0. Linear Elastic  
146           1. Elastic-Plastic  
147           2. Strain Haredening Considered  
148           3. Bauschinger Effects Considered  
149  
150   12. SPLITTING FAILURE CRITERIA:  
151           0. Neglect Effects  
152           1. Consider Effects  
153  
154   NOTES:  
155   -----  
156   1. This program uses metric units only.  
157  
158   2. Do not insert or delete any line.  
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\*           V e c T o r 4           \*  
\*   S T R U C T U R E   D A T A   \*  
\* \* \* \* \*

STRUCTURAL PARAMETERS  
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Job Title                           : VT4SLAB  
Structure File Name               : STRUCT  
No. Of Conc. Material Types       : 2  
No. Of Steel Material Types       : 0  
No. Of Nodal Points               : 1073  
No. Of Shell Elements              : 251  
No. Of Truss Elements              : 0  
No. Of Restrained Nodes           : 94

MATERIAL SPECIFICATIONS  
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GENERAL  
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MAT	Conc	Rein	THICK	RHO-Z	DIA	FY	Esz	AGG	CLR	SCX
TYP	Lyrs	Lyrs	mm	%	mm	MPa	MPa	mm	mm	mm
mm	mm	mm								
1	20	4	250.0	0.000	8.0	580.0	200000.	16.0	0.0	0.0
	250.0									
2	20	4	250.0	10.000	8.0	580.0	200000.	16.0	0.0	0.0
	250.0									

CONCRETE  
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MAT	f'c	f't	Ec	e'c	MU	Cc	Kc	DENSITY
TYP	MPa	MPa	MPa	mm/m		/C	mm2/hr	kg/m3
1	44.0	2.189	41315.	2.130	0.150	0.12E-04	4320.0	2400.0
2	88.0	3.096	71545.	2.460	0.150	0.12E-04	4320.0	2400.0

REINFORCEMENT COMPONENTS  
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MAT	REF	ORIENT.	D	DIA.	As	Fy	Fu
TYP		deg	mm	mm	mm^2/m	MPa	MPa
1	1	0.0	28.0	16.00	1608.	516.0	619.2
1	1	90.0	44.0	16.00	1608.	516.0	619.2
1	1	90.0	208.0	12.00	905.	526.0	631.2
1	1	0.0	220.0	12.00	905.	526.0	631.2
2	1	0.0	28.0	16.00	1608.	516.0	619.2
2	1	90.0	44.0	16.00	1604.	516.0	619.2
2	1	90.0	208.0	12.00	905.	526.0	631.2
2	1	0.0	220.0	12.00	905.	526.0	631.2

MAT	REF	ORIENT.	Es	Esh	Eu	Cs	PS
TYP		deg	MPa	mm/m	mm/m	/C	mm/m

63											
64	1	1	0.0	200000.	40.00	100.00	0.00E+00	0.000			
65	1	1	90.0	200000.	40.00	100.00	0.00E+00	0.000			
66	1	1	90.0	200000.	40.00	100.00	0.00E+00	0.000			
67	1	1	0.0	200000.	40.00	100.00	0.00E+00	0.000			
68	2	1	0.0	200000.	40.00	100.00	0.00E+00	0.000			
69	2	1	90.0	200000.	40.00	100.00	0.00E+00	0.000			
70	2	1	90.0	200000.	40.00	100.00	0.00E+00	0.000			
71	2	1	0.0	200000.	40.00	100.00	0.00E+00	0.000			

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ELEMENT INFORMATION  
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HETEROSIS SHELL ELEMENTS

80	-----										
81	ELMT	INC1	INC2	INC3	INC4	INC5	INC6	INC7	INC8	<INC9>	MAT.
82											
83	1	994	981	970	954	937	955	972	983	969	1
84	2	970	956	946	925	904	920	937	954	939	1
85	3	946	930	915	892	871	884	904	925	908	1
86	4	1036	1040	1048	1041	1038	1031	1023	1030	1034	1
87	5	1038	1032	1026	1018	1008	1016	1023	1031	1024	1
88	6	948	961	972	955	937	922	905	927	943	1
89	7	1026	1020	1015	999	980	996	1008	1018	1009	1
90	8	916	932	948	927	905	886	874	894	909	1
91	9	1015	1007	997	974	950	966	980	999	989	1
92	10	1021	1029	1036	1030	1023	1014	1003	1013	1022	1
93	11	887	899	916	894	874	855	837	861	877	1
94	12	997	982	968	942	911	929	950	974	958	1
95	13	968	951	934	903	876	893	911	942	923	1
96	14	858	875	887	861	837	817	801	829	846	1
97	15	934	913	897	868	838	857	876	903	883	1
98	16	826	840	858	829	801	781	763	794	812	1
99	17	998	1012	1021	1013	1003	990	975	986	1001	1
100	18	967	985	998	986	975	959	944	953	971	1
101	19	940	952	967	953	944	926	906	924	936	1
102	20	915	928	940	924	906	885	867	889	907	1
103	21	897	879	860	834	799	818	838	868	851	1
104	22	797	810	826	794	763	741	723	761	776	1
105	23	860	844	827	792	760	778	799	834	813	1
106	24	685	639	592	594	599	643	691	688	641	1
107	25	6	3	1	2	5	7	9	8	4	1
108	26	591	638	686	689	692	644	600	595	642	1
109	27	592	556	517	518	521	559	599	594	557	1
110	28	17	11	6	8	9	15	22	19	13	1
111	29	516	555	591	595	600	560	523	519	558	1
112	30	517	483	448	449	452	486	521	518	484	1
113	31	35	26	17	19	22	30	40	37	28	1
114	32	5	10	16	18	21	14	9	7	12	1
115	33	447	482	516	519	523	488	454	450	485	1
116	34	448	415	383	382	386	417	452	449	413	1
117	35	60	46	35	37	40	52	64	62	49	1
118	36	16	25	34	36	38	29	21	18	27	1
119	37	384	414	447	450	454	419	387	385	416	1
120	38	383	349	319	316	320	352	386	382	348	1
121	39	91	73	60	62	64	79	95	92	76	1
122	40	34	45	59	61	63	51	38	36	47	1
123	41	318	350	384	385	387	356	323	321	353	1
124	42	319	290	261	265	271	295	320	316	291	2
125	43	127	107	91	92	95	112	132	128	109	1
126	44	59	72	90	89	93	78	63	61	74	1
127	45	260	289	318	321	323	296	270	264	294	2
128	46	261	238	216	212	219	242	271	265	239	2



129	47	167	147	127	128	132	152	172	169	148	1
130	48	216	190	167	169	172	195	219	212	191	1
131	49	90	106	126	125	129	110	93	89	105	1
132	50	215	237	260	264	270	245	221	218	240	2
133	51	126	146	166	165	171	150	129	125	145	1
134	52	166	189	215	218	221	194	171	165	188	1
135	53	827	811	795	757	722	737	760	792	775	1
136	54	703	695	691	643	599	603	610	652	646	1
137	55	795	779	766	727	677	697	722	757	742	1
138	56	718	710	703	652	610	616	626	669	662	1
139	57	766	750	738	693	648	665	677	727	709	1
140	58	738	731	718	669	626	631	648	693	679	1
141	59	767	780	797	761	723	701	680	728	743	1
142	60	692	696	704	653	612	604	600	644	647	1
143	61	739	752	767	728	680	666	649	694	714	1
144	62	704	711	719	670	627	617	612	653	663	1
145	63	719	732	739	694	649	632	627	670	681	1
146	64	915	889	867	850	831	852	871	892	873	1
147	65	937	920	904	880	863	881	905	922	900	1
148	66	904	884	871	849	825	845	863	880	865	1
149	67	874	886	905	881	863	842	822	848	864	1
150	68	837	855	874	848	822	807	788	814	832	1
151	69	1023	1016	1008	995	977	992	1003	1014	1004	1
152	70	801	817	837	814	788	768	745	772	791	1
153	71	1008	996	980	963	935	957	977	995	978	1
154	72	980	966	950	918	895	914	935	963	941	1
155	73	950	929	911	888	862	878	895	918	902	1
156	74	911	893	876	853	823	843	862	888	869	1
157	75	975	990	1003	992	977	962	945	960	976	1
158	76	944	959	975	960	945	933	921	931	947	1
159	77	906	926	944	931	921	901	882	896	912	1
160	78	867	885	906	896	882	854	819	841	872	1
161	79	876	857	838	809	784	805	823	853	833	1
162	80	763	781	801	772	745	716	687	729	748	1
163	81	610	603	599	559	521	524	531	568	563	1
164	82	626	616	610	568	531	536	544	583	574	1
165	83	648	631	626	583	544	552	569	608	589	1
166	84	677	665	648	608	569	581	596	634	622	1
167	85	722	697	677	634	596	618	633	674	656	1
168	86	760	737	722	674	633	661	683	726	700	1
169	87	799	778	760	726	683	713	736	769	747	1
170	88	838	818	799	769	736	759	784	809	789	1
171	89	600	604	612	570	532	525	523	560	564	1
172	90	612	617	627	584	546	537	532	570	575	1
173	91	627	632	649	609	571	554	546	584	590	1
174	92	454	488	523	525	532	498	462	458	491	1
175	93	521	486	452	457	460	496	531	524	490	1
176	94	649	666	680	637	598	582	571	609	623	1
177	95	723	741	763	729	687	664	636	676	705	1
178	96	680	701	723	676	636	619	598	637	657	1
179	97	9	14	21	23	31	24	22	15	20	1
180	98	387	419	454	458	462	430	398	393	424	1
181	99	323	356	387	393	398	366	334	326	361	1
182	100	21	29	38	42	48	39	31	23	32	1
183	101	40	30	22	24	31	41	50	43	33	1
184	102	64	52	40	43	50	58	71	69	54	1
185	103	38	51	63	66	70	57	48	42	53	1
186	104	63	78	93	97	101	84	70	66	82	1
187	105	93	110	129	134	137	119	101	97	115	1
188	106	129	150	171	176	180	157	137	134	153	1
189	107	171	194	221	224	226	203	180	176	199	1
190	108	221	245	270	272	276	251	226	224	247	2
191	109	270	296	323	326	334	302	276	272	299	2
192	110	95	79	64	69	71	86	103	98	83	1
193	111	132	112	95	98	103	121	139	136	117	1
194	112	172	152	132	136	139	161	182	177	155	1

195	113	219	195	172	177	182	201	217	214	197	1
196	114	271	242	219	214	217	235	255	259	236	2
197	115	320	295	271	259	255	284	324	322	285	2
198	116	386	352	320	322	324	359	396	389	354	1
199	117	452	417	386	389	396	427	460	457	421	1
200	118	871	852	831	816	803	815	825	849	835	1
201	119	863	845	825	796	765	793	822	842	820	1
202	120	831	850	867	841	819	798	773	802	821	1
203	121	882	901	921	933	945	919	898	891	910	1
204	122	977	957	935	917	898	919	945	962	938	1
205	123	935	914	895	866	839	870	898	917	890	1
206	124	882	891	898	870	839	828	819	854	859	1
207	125	788	807	822	793	765	755	749	770	783	1
208	126	745	768	788	770	749	724	690	721	746	1
209	127	895	878	862	847	830	836	839	866	856	1
210	128	862	843	823	806	785	808	830	847	824	1
211	129	823	805	784	754	734	758	785	806	782	1
212	130	687	716	745	721	690	651	615	650	682	1
213	131	784	759	736	702	667	698	734	754	733	1
214	132	50	41	31	39	48	55	65	56	44	1
215	133	736	713	683	645	613	635	667	702	672	1
216	134	636	664	687	650	615	587	566	601	625	1
217	135	462	498	532	537	546	508	474	470	503	1
218	136	398	430	462	470	474	442	410	403	437	1
219	137	334	366	398	403	410	378	346	339	371	1
220	138	546	554	571	535	501	489	474	508	522	1
221	139	571	582	598	562	530	512	501	535	547	1
222	140	598	619	636	601	566	543	530	562	580	1
223	141	683	661	633	597	565	585	613	645	621	1
224	142	633	618	596	561	529	542	565	597	579	1
225	143	544	536	531	496	460	467	472	507	502	1
226	144	276	302	334	339	346	315	292	281	310	1
227	145	71	58	50	56	65	77	88	81	68	1
228	146	48	57	70	80	87	75	65	55	67	1
229	147	596	581	569	534	499	511	529	561	545	1
230	148	569	552	544	507	472	487	499	534	520	1
231	149	70	84	101	108	118	102	87	80	94	1
232	150	101	119	137	143	154	135	118	108	122	1
233	151	137	157	180	185	198	173	154	143	164	1
234	152	226	251	276	281	292	266	244	233	258	1
235	153	180	203	226	233	244	222	198	185	208	1
236	154	103	86	71	81	88	104	120	111	96	1
237	155	139	121	103	111	120	138	159	149	131	1
238	156	182	161	139	149	159	181	204	187	168	1
239	157	217	201	182	187	204	228	255	235	211	1
240	158	324	284	255	267	280	309	342	333	298	1
241	159	803	816	831	802	773	764	751	777	790	1
242	160	65	75	87	99	113	100	88	77	85	1
243	161	87	102	118	130	141	123	113	99	114	1
244	162	120	104	88	100	113	124	142	133	116	1
245	163	159	138	120	133	142	162	183	170	151	1
246	164	118	135	154	163	179	160	141	130	144	1
247	165	474	489	501	466	436	422	410	442	456	1
248	166	501	512	530	497	463	446	436	466	476	1
249	167	530	543	566	533	500	477	463	497	510	1
250	168	690	724	749	755	765	715	659	673	717	1
251	169	346	378	410	422	436	405	375	363	394	1
252	170	204	181	159	170	183	206	232	220	193	1
253	171	255	228	204	220	232	256	280	267	241	1
254	172	342	309	280	297	311	340	369	357	325	1
255	173	154	173	198	205	223	200	179	163	184	1
256	174	566	587	615	578	538	515	500	533	551	1
257	175	615	651	690	673	659	593	538	578	624	1
258	176	292	315	346	363	375	344	314	303	332	1
259	177	198	222	244	253	262	243	223	205	230	1
260	178	244	266	292	303	314	287	262	253	277	1

261	179	472	467	460	427	396	399	408	440	432	1
262	180	396	359	324	333	342	376	408	399	367	1
263	181	499	487	472	440	408	420	433	465	455	1
264	182	408	376	342	357	369	400	433	420	388	1
265	183	529	511	499	465	433	444	461	493	475	1
266	184	565	542	529	493	461	473	494	528	506	1
267	185	613	585	565	528	494	514	540	576	549	1
268	186	667	635	613	576	540	573	606	630	605	1
269	187	734	698	667	630	606	640	678	707	668	1
270	188	785	758	734	707	678	725	762	771	740	1
271	189	830	808	785	771	762	800	839	836	804	1
272	190	819	828	839	800	762	744	730	774	787	1
273	191	773	798	819	774	730	706	684	735	753	1
274	192	751	764	773	735	684	671	660	708	720	1
275	193	765	756	751	708	660	658	659	715	712	1
276	194	311	330	345	370	397	380	369	340	358	1
277	195	345	330	311	288	273	301	337	341	313	1
278	196	311	297	280	256	232	252	273	288	274	1
279	197	433	400	369	380	397	429	461	444	412	1
280	198	113	123	141	156	174	158	142	124	140	1
281	199	762	725	678	655	628	675	730	744	699	1
282	200	183	162	142	158	174	196	213	202	178	1
283	201	232	206	183	202	213	246	273	252	225	1
284	202	141	160	179	192	207	186	174	156	175	1
285	203	179	200	223	234	250	229	207	192	210	1
286	204	223	243	262	279	300	275	250	234	257	1
287	205	262	287	314	338	360	327	300	279	306	1
288	206	684	706	730	675	628	611	586	629	654	1
289	207	678	640	606	577	550	588	628	655	614	1
290	208	436	446	463	435	407	391	375	405	418	1
291	209	314	344	375	391	407	379	360	338	365	1
292	210	606	573	540	509	479	513	550	577	539	1
293	211	494	473	461	429	397	401	411	453	438	1
294	212	540	514	494	453	411	443	479	509	478	1
295	213	397	370	345	341	337	374	411	401	372	1
296	214	463	477	500	468	439	423	407	435	451	1
297	215	538	593	659	658	660	607	553	548	602	1
298	216	660	671	684	629	586	572	553	607	620	1
299	217	628	588	550	527	504	541	586	611	567	1
300	218	213	196	174	186	207	227	248	231	209	1
301	219	411	374	337	335	331	351	373	395	364	1
302	220	439	468	500	515	538	480	426	431	471	1
303	221	407	423	439	431	426	392	360	379	406	1
304	222	207	229	250	268	283	263	248	227	249	1
305	223	250	275	300	317	343	312	283	268	293	1
306	224	300	327	360	392	426	381	343	317	355	1
307	225	550	513	479	459	434	469	504	527	492	1
308	226	479	443	411	395	373	402	434	459	425	1
309	227	273	246	213	231	248	269	286	278	254	1
310	228	553	572	586	541	504	481	464	505	526	1
311	229	538	548	553	505	464	441	426	480	495	1
312	230	331	308	286	307	328	347	373	351	329	1
313	231	286	269	248	263	283	305	328	307	282	1
314	232	283	312	343	368	390	362	328	305	336	1
315	233	343	381	426	441	464	428	390	368	404	1
316	234	464	481	504	469	434	409	390	428	445	1
317	235	328	362	390	409	434	402	373	347	377	1
318	236	273	278	286	308	331	335	337	301	304	1
319	237	765	796	825	815	803	777	751	756	786	1
320	238	1057	1053	1048	1040	1036	1039	1047	1051	1046	1
321	239	1073	1072	1070	1067	1060	1063	1066	1071	1069	1
322	240	1065	1061	1057	1051	1047	1052	1058	1062	1056	1
323	241	1070	1068	1065	1062	1058	1059	1060	1067	1064	1
324	242	915	930	946	965	984	964	940	928	949	1
325	243	970	981	994	1002	1011	1000	991	979	993	1
326	244	946	956	970	979	991	988	984	965	973	1

327	245	967	952	940	964	984	1010	1027	1005	987	1
328	246	1027	1010	984	988	991	1000	1011	1019	1006	1
329	247	1036	1029	1021	1033	1042	1044	1047	1039	1037	1
330	248	1058	1052	1047	1044	1042	1049	1060	1059	1050	1
331	249	1066	1063	1060	1049	1042	1043	1045	1055	1054	1
332	250	1042	1033	1021	1012	998	1025	1045	1043	1028	1
333	251	967	1005	1027	1035	1045	1025	998	985	1017	1

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JOINT COORDINATES  
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NODE	X	Y	Z	NODE	X	Y	Z	
	mm	mm	mm		mm	mm	mm	
340								
341								
342								
343	1	1500.00	1500.00	125.00	2	1450.00	1500.00	125.00
344		1500.00	1500.00	-125.00		1450.00	1500.00	-125.00
345	3	1500.00	1450.00	125.00	4	1450.68	1450.39	125.00
346		1500.00	1450.00	-125.00		1450.68	1450.39	-125.00
347	5	1400.00	1500.00	125.00	6	1500.00	1400.00	125.00
348		1400.00	1500.00	-125.00		1500.00	1400.00	-125.00
349	7	1401.36	1450.78	125.00	8	1451.36	1400.78	125.00
350		1401.36	1450.78	-125.00		1451.36	1400.78	-125.00
351	9	1402.71	1401.57	125.00	10	1350.00	1500.00	125.00
352		1402.71	1401.57	-125.00		1350.00	1500.00	-125.00
353	11	1500.00	1350.00	125.00	12	1351.79	1450.86	125.00
354		1500.00	1350.00	-125.00		1351.79	1450.86	-125.00
355	13	1451.61	1350.81	125.00	14	1353.58	1401.72	125.00
356		1451.61	1350.81	-125.00		1353.58	1401.72	-125.00
357	15	1403.22	1351.62	125.00	16	1300.00	1500.00	125.00
358		1403.22	1351.62	-125.00		1300.00	1500.00	-125.00
359	17	1500.00	1300.00	125.00	18	1302.23	1450.93	125.00
360		1500.00	1300.00	-125.00		1302.23	1450.93	-125.00
361	19	1451.87	1300.83	125.00	20	1354.34	1351.69	125.00
362		1451.87	1300.83	-125.00		1354.34	1351.69	-125.00
363	21	1304.46	1401.87	125.00	22	1403.74	1301.67	125.00
364		1304.46	1401.87	-125.00		1403.74	1301.67	-125.00
365	23	1305.45	1351.76	125.00	24	1355.10	1301.65	125.00
366		1305.45	1351.76	-125.00		1355.10	1301.65	-125.00
367	25	1250.00	1500.00	125.00	26	1500.00	1250.00	125.00
368		1250.00	1500.00	-125.00		1500.00	1250.00	-125.00
369	27	1252.35	1450.79	125.00	28	1452.11	1250.68	125.00
370		1252.35	1450.79	-125.00		1452.11	1250.68	-125.00
371	29	1254.70	1401.58	125.00	30	1404.22	1251.37	125.00
372		1254.70	1401.58	-125.00		1404.22	1251.37	-125.00
373	31	1306.45	1301.64	125.00	32	1256.13	1351.57	125.00
374		1306.45	1301.64	-125.00		1256.13	1351.57	-125.00
375	33	1355.95	1251.48	125.00	34	1200.00	1500.00	125.00
376		1355.95	1251.48	-125.00		1200.00	1500.00	-125.00
377	35	1500.00	1200.00	125.00	36	1202.47	1450.64	125.00
378		1500.00	1200.00	-125.00		1202.47	1450.64	-125.00
379	37	1452.35	1200.53	125.00	38	1204.94	1401.28	125.00
380		1452.35	1200.53	-125.00		1204.94	1401.28	-125.00
381	39	1257.57	1301.56	125.00	40	1404.70	1201.06	125.00
382		1257.57	1301.56	-125.00		1404.70	1201.06	-125.00
383	41	1307.69	1251.60	125.00	42	1206.82	1351.38	125.00
384		1307.69	1251.60	-125.00		1206.82	1351.38	-125.00
385	43	1356.81	1201.31	125.00	44	1258.98	1251.18	125.00
386		1356.81	1201.31	-125.00		1258.98	1251.18	-125.00
387	45	1150.00	1500.00	125.00	46	1500.00	1150.00	125.00
388		1150.00	1500.00	-125.00		1500.00	1150.00	-125.00
389	47	1152.59	1450.45	125.00	48	1208.69	1301.47	125.00
390		1152.59	1450.45	-125.00		1208.69	1301.47	-125.00
391	49	1452.69	1150.21	125.00	50	1308.93	1201.55	125.00
392		1452.69	1150.21	-125.00		1308.93	1201.55	-125.00

393									
394		51	1155.19	1400.90	125.00	52	1405.39	1150.42	125.00
395			1155.19	1400.90	-125.00		1405.39	1150.42	-125.00
396		53	1157.26	1350.88	125.00	54	1357.79	1150.32	125.00
397			1157.26	1350.88	-125.00		1357.79	1150.32	-125.00
398		55	1210.28	1250.76	125.00	56	1260.39	1200.80	125.00
399			1210.28	1250.76	-125.00		1260.39	1200.80	-125.00
400		57	1159.33	1300.87	125.00	58	1310.19	1150.22	125.00
401			1159.33	1300.87	-125.00		1310.19	1150.22	-125.00
402		59	1100.00	1500.00	125.00	60	1500.00	1100.00	125.00
403			1100.00	1500.00	-125.00		1500.00	1100.00	-125.00
404		61	1102.72	1450.26	125.00	62	1453.04	1099.88	125.00
405			1102.72	1450.26	-125.00		1453.04	1099.88	-125.00
406		63	1105.44	1400.53	125.00	64	1406.08	1099.77	125.00
407			1105.44	1400.53	-125.00		1406.08	1099.77	-125.00
408		65	1211.86	1200.04	125.00	66	1107.70	1350.39	125.00
409			1211.86	1200.04	-125.00		1107.70	1350.39	-125.00
410		67	1160.93	1249.74	125.00	68	1261.92	1149.11	125.00
411			1160.93	1249.74	-125.00		1261.92	1149.11	-125.00
412		69	1358.77	1099.33	125.00	70	1109.97	1300.26	125.00
413			1358.77	1099.33	-125.00		1109.97	1300.26	-125.00
414		71	1311.46	1098.89	125.00	72	1050.00	1500.00	125.00
415			1311.46	1098.89	-125.00		1050.00	1500.00	-125.00
416		73	1500.00	1050.00	125.00	74	1052.75	1450.15	125.00
417			1500.00	1050.00	-125.00		1052.75	1450.15	-125.00
418		75	1162.53	1198.61	125.00	76	1453.56	1049.72	125.00
419			1162.53	1198.61	-125.00		1453.56	1049.72	-125.00
420		77	1213.65	1148.01	125.00	78	1055.50	1400.29	125.00
421			1213.65	1148.01	-125.00		1055.50	1400.29	-125.00
422		79	1407.11	1049.44	125.00	80	1111.58	1248.72	125.00
423			1407.11	1049.44	-125.00		1111.58	1248.72	-125.00
424		81	1263.45	1097.43	125.00	82	1057.69	1349.92	125.00
425			1263.45	1097.43	-125.00		1057.69	1349.92	-125.00
426		83	1360.26	1048.70	125.00	84	1059.87	1299.55	125.00
427			1360.26	1048.70	-125.00		1059.87	1299.55	-125.00
428		85	1164.41	1146.31	125.00	86	1313.41	1047.95	125.00
429			1164.41	1146.31	-125.00		1313.41	1047.95	-125.00
430		87	1113.19	1197.19	125.00	88	1215.44	1095.97	125.00
431			1113.19	1197.19	-125.00		1215.44	1095.97	-125.00
432		89	1002.79	1450.03	125.00	90	1000.00	1500.00	125.00
433			1002.79	1450.03	-125.00		1000.00	1500.00	-125.00
434		91	1500.00	1000.00	125.00	92	1454.07	999.56	125.00
435			1500.00	1000.00	-125.00		1454.07	999.56	-125.00
436		93	1005.57	1400.06	125.00	94	1061.47	1247.78	125.00
437			1005.57	1400.06	-125.00		1061.47	1247.78	-125.00
438		95	1408.15	999.11	125.00	96	1265.85	1045.65	125.00
439			1408.15	999.11	-125.00		1265.85	1045.65	-125.00
440		97	1007.67	1349.45	125.00	98	1361.75	998.06	125.00
441			1007.67	1349.45	-125.00		1361.75	998.06	-125.00
442		99	1115.17	1144.61	125.00	100	1166.29	1094.00	125.00
443			1115.17	1144.61	-125.00		1166.29	1094.00	-125.00
444		101	1009.76	1298.84	125.00	102	1063.07	1196.01	125.00
445			1009.76	1298.84	-125.00		1063.07	1196.01	-125.00
446		103	1315.36	997.01	125.00	104	1218.29	1043.36	125.00
447			1315.36	997.01	-125.00		1218.29	1043.36	-125.00
448		105	952.65	1449.91	125.00	106	950.00	1500.00	125.00
449			952.65	1449.91	-125.00		950.00	1500.00	-125.00
450		107	1500.00	950.00	125.00	108	1011.35	1246.84	125.00
451			1500.00	950.00	-125.00		1011.35	1246.84	-125.00
452		109	1454.81	949.38	125.00	110	955.30	1399.82	125.00
453			1454.81	949.38	-125.00		955.30	1399.82	-125.00
454		111	1268.26	993.88	125.00	112	1409.62	948.76	125.00
455			1268.26	993.88	-125.00		1409.62	948.76	-125.00
456		113	1117.14	1092.03	125.00	114	1064.91	1142.91	125.00
457			1117.14	1092.03	-125.00		1064.91	1142.91	-125.00
458		115	957.29	1349.09	125.00	116	1169.22	1040.25	125.00
			957.29	1349.09	-125.00		1169.22	1040.25	-125.00

459					118	1012.93	1194.84	125.00
460		1364.23	946.92	-125.00		1012.93	1194.84	-125.00
461	119	959.28	1298.37	125.00	120	1221.15	990.75	125.00
462		959.28	1298.37	-125.00		1221.15	990.75	-125.00
463	121	1318.84	945.08	125.00	122	960.86	1246.47	125.00
464		1318.84	945.08	-125.00		960.86	1246.47	-125.00
465	123	1066.76	1089.81	125.00	124	1120.15	1037.14	125.00
466		1066.76	1089.81	-125.00		1120.15	1037.14	-125.00
467	125	902.51	1449.79	125.00	126	900.00	1500.00	125.00
468		902.51	1449.79	-125.00		900.00	1500.00	-125.00
469	127	1500.00	900.00	125.00	128	1455.55	899.21	125.00
470		1500.00	900.00	-125.00		1455.55	899.21	-125.00
471	129	905.02	1399.57	125.00	130	1014.66	1141.21	125.00
472		905.02	1399.57	-125.00		1014.66	1141.21	-125.00
473	131	1272.52	940.38	125.00	132	1411.09	898.41	125.00
474		1272.52	940.38	-125.00		1411.09	898.41	-125.00
475	133	1172.16	986.50	125.00	134	906.91	1348.74	125.00
476		1172.16	986.50	-125.00		906.91	1348.74	-125.00
477	135	962.44	1194.58	125.00	136	1366.70	895.78	125.00
478		962.44	1194.58	-125.00		1366.70	895.78	-125.00
479	137	908.80	1297.90	125.00	138	1226.21	935.68	125.00
480		908.80	1297.90	-125.00		1226.21	935.68	-125.00
481	139	1322.31	893.14	125.00	140	1069.42	1034.33	125.00
482		1322.31	893.14	-125.00		1069.42	1034.33	-125.00
483	141	1016.38	1087.59	125.00	142	1123.16	982.25	125.00
484		1016.38	1087.59	-125.00		1123.16	982.25	-125.00
485	143	910.37	1246.11	125.00	144	963.65	1140.40	125.00
486		910.37	1246.11	-125.00		963.65	1140.40	-125.00
487	145	852.42	1449.87	125.00	146	850.00	1500.00	125.00
488		852.42	1449.87	-125.00		850.00	1500.00	-125.00
489	147	1500.00	850.00	125.00	148	1456.34	849.55	125.00
490		1500.00	850.00	-125.00		1456.34	849.55	-125.00
491	149	1276.79	886.88	125.00	150	854.85	1399.75	125.00
492		1276.79	886.88	-125.00		854.85	1399.75	-125.00
493	151	1177.09	930.28	125.00	152	1412.69	849.10	125.00
494		1177.09	930.28	-125.00		1412.69	849.10	-125.00
495	153	856.31	1348.67	125.00	154	911.94	1194.32	125.00
496		856.31	1348.67	-125.00		911.94	1194.32	-125.00
497	155	1370.01	846.56	125.00	156	1018.68	1031.53	125.00
498		1370.01	846.56	-125.00		1018.68	1031.53	-125.00
499	157	857.78	1297.59	125.00	158	1072.08	978.86	125.00
500		857.78	1297.59	-125.00		1072.08	978.86	-125.00
501	159	1231.28	880.61	125.00	160	964.87	1086.23	125.00
502		1231.28	880.61	-125.00		964.87	1086.23	-125.00
503	161	1327.34	844.01	125.00	162	1127.96	924.88	125.00
504		1327.34	844.01	-125.00		1127.96	924.88	-125.00
505	163	912.65	1139.60	125.00	164	858.92	1245.54	125.00
506		912.65	1139.60	-125.00		858.92	1245.54	-125.00
507	165	802.34	1449.96	125.00	166	800.00	1500.00	125.00
508		802.34	1449.96	-125.00		800.00	1500.00	-125.00
509	167	1500.00	800.00	125.00	168	1284.11	833.98	125.00
510		1500.00	800.00	-125.00		1284.11	833.98	-125.00
511	169	1457.14	799.89	125.00	170	1182.02	874.05	125.00
512		1457.14	799.89	-125.00		1182.02	874.05	-125.00
513	171	804.67	1399.92	125.00	172	1414.28	799.79	125.00
514		804.67	1399.92	-125.00		1414.28	799.79	-125.00
515	173	860.07	1193.50	125.00	174	1020.99	975.47	125.00
516		860.07	1193.50	-125.00		1020.99	975.47	-125.00
517	175	966.86	1030.34	125.00	176	805.72	1348.60	125.00
518		966.86	1030.34	-125.00		805.72	1348.60	-125.00
519	177	1373.33	797.33	125.00	178	1076.02	920.06	125.00
520		1373.33	797.33	-125.00		1076.02	920.06	-125.00
521	179	913.37	1084.87	125.00	180	806.76	1297.28	125.00
522		913.37	1084.87	-125.00		806.76	1297.28	-125.00
523	181	1240.89	823.95	125.00	182	1332.37	794.88	125.00
524		1240.89	823.95	-125.00		1332.37	794.88	-125.00

525	183	1132.76	867.50	125.00	184	860.48	1139.00	125.00
526		1132.76	867.50	-125.00		860.48	1139.00	-125.00
527	185	807.48	1244.98	125.00	186	968.85	974.44	125.00
528		807.48	1244.98	-125.00		968.85	974.44	-125.00
529	187	1291.43	781.09	125.00	188	751.81	1450.08	125.00
530		1291.43	781.09	-125.00		751.81	1450.08	-125.00
531	189	750.00	1500.00	125.00	190	1500.00	750.00	125.00
532		750.00	1500.00	-125.00		1500.00	750.00	-125.00
533	191	1457.37	750.85	125.00	192	915.04	1029.14	125.00
534		1457.37	750.85	-125.00		915.04	1029.14	-125.00
535	193	1190.78	815.10	125.00	194	753.61	1400.16	125.00
536		1190.78	815.10	-125.00		753.61	1400.16	-125.00
537	195	1414.75	751.70	125.00	196	1024.08	915.25	125.00
538		1414.75	751.70	-125.00		1024.08	915.25	-125.00
539	197	1377.11	753.25	125.00	198	808.19	1192.68	125.00
540		1377.11	753.25	-125.00		808.19	1192.68	-125.00
541	199	754.54	1348.92	125.00	200	860.90	1084.51	125.00
542		754.54	1348.92	-125.00		860.90	1084.51	-125.00
543	201	1339.48	754.79	125.00	202	1079.97	861.26	125.00
544		1339.48	754.79	-125.00		1079.97	861.26	-125.00
545	203	755.46	1297.69	125.00	204	1250.50	767.30	125.00
546		755.46	1297.69	-125.00		1250.50	767.30	-125.00
547	205	808.31	1138.41	125.00	206	1140.67	806.26	125.00
548		808.31	1138.41	-125.00		1140.67	806.26	-125.00
549	207	916.72	973.41	125.00	208	755.62	1245.10	125.00
550		916.72	973.41	-125.00		755.62	1245.10	-125.00
551	209	971.70	915.86	125.00	210	862.07	1028.53	125.00
552		971.70	915.86	-125.00		862.07	1028.53	-125.00
553	211	1305.58	730.48	125.00	212	1457.61	701.81	125.00
554		1305.58	730.48	-125.00		1457.61	701.81	-125.00
555	213	1027.18	855.02	125.00	214	1380.90	709.16	125.00
556		1027.18	855.02	-125.00		1380.90	709.16	-125.00
557	215	700.00	1500.00	125.00	216	1500.00	700.00	125.00
558		700.00	1500.00	-125.00		1500.00	700.00	-125.00
559	217	1346.59	714.71	125.00	218	701.28	1450.20	125.00
560		1346.59	714.71	-125.00		701.28	1450.20	-125.00
561	219	1415.22	703.62	125.00	220	1199.54	756.15	125.00
562		1415.22	703.62	-125.00		1199.54	756.15	-125.00
563	221	702.55	1400.39	125.00	222	755.77	1192.51	125.00
564		702.55	1400.39	-125.00		755.77	1192.51	-125.00
565	223	808.43	1084.15	125.00	224	703.35	1349.25	125.00
566		808.43	1084.15	-125.00		703.35	1349.25	-125.00
567	225	1085.24	795.81	125.00	226	704.16	1298.11	125.00
568		1085.24	795.81	-125.00		704.16	1298.11	-125.00
569	227	919.31	916.48	125.00	228	1271.69	706.17	125.00
570		919.31	916.48	-125.00		1271.69	706.17	-125.00
571	229	863.24	972.56	125.00	230	755.35	1138.30	125.00
572		863.24	972.56	-125.00		755.35	1138.30	-125.00
573	231	974.54	857.28	125.00	232	1148.58	745.01	125.00
574		974.54	857.28	-125.00		1148.58	745.01	-125.00
575	233	703.75	1245.23	125.00	234	809.09	1027.92	125.00
576		703.75	1245.23	-125.00		809.09	1027.92	-125.00
577	235	1319.74	679.88	125.00	236	1363.67	665.85	125.00
578		1319.74	679.88	-125.00		1363.67	665.85	-125.00
579	237	650.00	1500.00	125.00	238	1500.00	650.00	125.00
580		650.00	1500.00	-125.00		1500.00	650.00	-125.00
581	239	1453.80	650.91	125.00	240	650.64	1450.10	125.00
582		1453.80	650.91	-125.00		650.64	1450.10	-125.00
583	241	1217.56	695.90	125.00	242	1407.61	651.81	125.00
584		1217.56	695.90	-125.00		1407.61	651.81	-125.00
585	243	754.93	1084.10	125.00	244	703.35	1192.34	125.00
586		754.93	1084.10	-125.00		703.35	1192.34	-125.00
587	245	651.28	1400.20	125.00	246	1029.81	785.37	125.00
588		651.28	1400.20	-125.00		1029.81	785.37	-125.00
589	247	651.96	1349.27	125.00	248	921.91	859.55	125.00
590		651.96	1349.27	-125.00		921.91	859.55	-125.00

591					250	809.75	971.71	125.00
592	249	865.60	915.12	-125.00		809.75	971.71	-125.00
593					252	1090.51	730.37	125.00
594	251	652.64	1298.34	-125.00		1090.51	730.37	-125.00
595					254	976.69	794.24	125.00
596	253	702.39	1138.20	-125.00		976.69	794.24	-125.00
597					256	1163.43	685.62	125.00
598	255	1292.88	645.05	-125.00		1163.43	685.62	-125.00
599					258	652.06	1245.89	125.00
600	257	754.09	1027.02	-125.00		652.06	1245.89	-125.00
601					260	600.00	1500.00	125.00
602	259	1346.44	622.53	-125.00		600.00	1500.00	-125.00
603					262	701.44	1084.05	125.00
604	261	1500.00	600.00	-125.00		701.44	1084.05	-125.00
605					264	600.00	1450.00	125.00
606	263	867.95	857.67	-125.00		600.00	1450.00	-125.00
607					266	651.48	1193.44	125.00
608	265	1450.00	600.00	-125.00		651.48	1193.44	-125.00
609					268	811.88	913.75	125.00
610	267	1235.58	635.64	-125.00		811.88	913.75	-125.00
611					270	600.00	1400.00	125.00
612	269	923.58	803.11	-125.00		600.00	1400.00	-125.00
613					272	600.57	1349.28	125.00
614	271	1400.00	600.00	-125.00		600.57	1349.28	-125.00
615					274	1110.22	672.80	125.00
616	273	1032.44	715.72	-125.00		1110.22	672.80	-125.00
617					276	601.13	1298.57	125.00
618	275	753.25	969.95	-125.00		601.13	1298.57	-125.00
619					278	978.85	731.20	125.00
620	277	649.67	1139.32	-125.00		978.85	731.20	-125.00
621					280	1178.28	626.22	125.00
622	279	699.09	1026.12	-125.00		1178.28	626.22	-125.00
623					282	871.89	800.73	125.00
624	281	600.37	1246.55	-125.00		871.89	800.73	-125.00
625					284	1294.10	580.62	125.00
626	283	814.00	855.79	-125.00		1294.10	580.62	-125.00
627					286	925.25	746.68	125.00
628	285	1346.81	566.55	-125.00		925.25	746.68	-125.00
629					288	1057.01	659.98	125.00
630	287	647.87	1085.19	-125.00		1057.01	659.98	-125.00
631					290	1500.00	550.00	125.00
632	289	550.00	1500.00	-125.00		1500.00	550.00	-125.00
633					292	599.60	1194.54	125.00
634	291	1449.76	551.24	-125.00		599.60	1194.54	-125.00
635					294	550.15	1450.21	125.00
636	293	753.64	910.40	-125.00		550.15	1450.21	-125.00
637					296	550.30	1400.41	125.00
638	295	1399.52	552.47	-125.00		550.30	1400.41	-125.00
639					298	1239.30	574.74	125.00
640	297	1129.93	615.22	-125.00		1239.30	574.74	-125.00
641					300	696.75	968.19	125.00
642	299	550.44	1349.89	-125.00		696.75	968.19	-125.00
643					302	550.58	1299.37	125.00
644	301	1001.78	668.61	-125.00		550.58	1299.37	-125.00
645					304	960.80	687.91	125.00
646	303	596.95	1140.43	-125.00		960.80	687.91	-125.00
647					306	643.56	1027.42	125.00
648	305	820.20	798.34	-125.00		643.56	1027.42	-125.00
649					308	919.82	707.21	125.00
650	307	875.82	743.78	-125.00		919.82	707.21	-125.00
651					310	549.63	1247.65	125.00
652	309	1184.51	568.86	-125.00		549.63	1247.65	-125.00
653					312	754.03	850.86	125.00
654	311	1081.57	604.23	-125.00		754.03	850.86	-125.00
655					314	594.31	1086.33	125.00
656	313	1026.50	628.77	-125.00		594.31	1086.33	-125.00



657							
658	315	548.67	1195.93	125.00	316	1449.52	502.47
659		548.67	1195.93	-125.00		1449.52	502.47
660	317	695.40	907.06	125.00	318	500.00	1500.00
661		695.40	907.06	-125.00		500.00	1500.00
662	319	1500.00	500.00	125.00	320	1399.04	504.95
663		1500.00	500.00	-125.00		1399.04	504.95
664	321	500.30	1450.41	125.00	322	1347.18	510.57
665		500.30	1450.41	-125.00		1347.18	510.57
666	323	500.60	1400.83	125.00	324	1295.32	516.20
667		500.60	1400.83	-125.00		1295.32	516.20
668	325	1136.32	560.83	125.00	326	500.32	1350.50
669		1136.32	560.83	-125.00		500.32	1350.50
670	327	639.24	969.64	125.00	328	826.39	740.89
671		639.24	969.64	-125.00		826.39	740.89
672	329	878.21	697.59	125.00	330	1051.23	588.93
673		878.21	697.59	-125.00		1051.23	588.93
674	331	914.39	667.74	125.00	332	546.26	1142.93
675		914.39	667.74	-125.00		546.26	1142.93
676	333	1243.03	513.85	125.00	334	500.04	1300.17
677		1243.03	513.85	-125.00		500.04	1300.17
678	335	942.75	644.61	125.00	336	761.57	790.65
679		942.75	644.61	-125.00		761.57	790.65
680	337	971.12	621.49	125.00	338	588.02	1028.71
681		971.12	621.49	-125.00		588.02	1028.71
682	339	498.89	1248.75	125.00	340	1088.13	552.79
683		498.89	1248.75	-125.00		1088.13	552.79
684	341	996.00	597.55	125.00	342	1190.73	511.50
685		996.00	597.55	-125.00		1190.73	511.50
686	343	694.06	845.92	125.00	344	543.84	1089.92
687		694.06	845.92	-125.00		543.84	1089.92
688	345	1020.88	573.62	125.00	346	497.75	1197.33
689		1020.88	573.62	-125.00		497.75	1197.33
690	347	836.60	687.97	125.00	348	1449.45	452.09
691		836.60	687.97	-125.00		1449.45	452.09
692	349	1500.00	450.00	125.00	350	450.00	1500.00
693		1500.00	450.00	-125.00		450.00	1500.00
694	351	880.60	651.39	125.00	352	1398.89	454.18
695		880.60	651.39	-125.00		1398.89	454.18
696	353	450.19	1450.41	125.00	354	1347.34	457.56
697		450.19	1450.41	-125.00		1347.34	457.56
698	355	629.95	904.86	125.00	356	450.38	1400.83
699		629.95	904.86	-125.00		450.38	1400.83
700	357	1142.71	506.43	125.00	358	1050.15	544.43
701		1142.71	506.43	-125.00		1050.15	544.43
702	359	1295.78	460.94	125.00	360	581.74	971.09
703		1295.78	460.94	-125.00		581.74	971.09
704	361	449.98	1350.54	125.00	362	769.12	730.44
705		449.98	1350.54	-125.00		769.12	730.44
706	363	495.56	1145.42	125.00	364	908.08	612.53
707		495.56	1145.42	-125.00		908.08	612.53
708	365	538.79	1035.58	125.00	366	449.59	1300.25
709		538.79	1035.58	-125.00		449.59	1300.25
710	367	1244.22	459.22	125.00	368	702.95	782.96
711		1244.22	459.22	-125.00		702.95	782.96
712	369	1094.68	501.36	125.00	370	1012.17	536.07
713		1094.68	501.36	-125.00		1012.17	536.07
714	371	448.54	1249.37	125.00	372	973.87	554.87
715		448.54	1249.37	-125.00		973.87	554.87
716	373	846.81	635.04	125.00	374	935.56	573.67
717		846.81	635.04	-125.00		935.56	573.67
718	375	493.37	1093.52	125.00	376	1192.65	457.50
719		493.37	1093.52	-125.00		1192.65	457.50
720	377	780.54	675.00	125.00	378	447.49	1198.48
721		780.54	675.00	-125.00		447.49	1198.48
722	379	533.73	981.25	125.00	380	1049.07	499.94
		533.73	981.25	-125.00		1049.07	499.94

723								
724	381	620.65	840.07	125.00	382	1449.37	401.70	125.00
725		620.65	840.07	-125.00		1449.37	401.70	-125.00
726	383	1500.00	400.00	125.00	384	400.00	1500.00	125.00
727		1500.00	400.00	-125.00		400.00	1500.00	-125.00
728	385	400.07	1450.41	125.00	386	1398.74	403.40	125.00
729		400.07	1450.41	-125.00		1398.74	403.40	-125.00
730	387	400.15	1400.82	125.00	388	1144.11	453.15	125.00
731		400.15	1400.82	-125.00		1144.11	453.15	-125.00
732	389	1347.49	404.55	125.00	390	711.84	720.00	125.00
733		1347.49	404.55	-125.00		711.84	720.00	-125.00
734	391	489.55	1042.46	125.00	392	564.49	902.66	125.00
735		489.55	1042.46	-125.00		564.49	902.66	-125.00
736	393	399.64	1350.58	125.00	394	445.56	1146.60	125.00
737		399.64	1350.58	-125.00		445.56	1146.60	-125.00
738	395	873.41	580.44	125.00	396	1296.24	405.70	125.00
739		873.41	580.44	-125.00		1296.24	405.70	-125.00
740	397	1003.45	498.51	125.00	398	399.14	1300.33	125.00
741		1003.45	498.51	-125.00		399.14	1300.33	-125.00
742	399	1245.41	404.60	125.00	400	1095.57	448.79	125.00
743		1245.41	404.60	-125.00		1095.57	448.79	-125.00
744	401	951.73	512.18	125.00	402	791.97	619.55	125.00
745		951.73	512.18	-125.00		791.97	619.55	-125.00
746	403	398.19	1249.98	125.00	404	634.84	772.49	125.00
747		398.19	1249.98	-125.00		634.84	772.49	-125.00
748	405	443.62	1094.72	125.00	406	522.42	925.44	125.00
749		443.62	1094.72	-125.00		522.42	925.44	-125.00
750	407	485.73	991.40	125.00	408	1194.58	403.51	125.00
751		485.73	991.40	-125.00		1194.58	403.51	-125.00
752	409	724.49	662.03	125.00	410	397.24	1199.64	125.00
753		724.49	662.03	-125.00		397.24	1199.64	-125.00
754	411	900.01	525.84	125.00	412	1048.20	447.33	125.00
755		900.01	525.84	-125.00		1048.20	447.33	-125.00
756	413	1449.38	351.36	125.00	414	350.00	1500.00	125.00
757		1449.38	351.36	-125.00		350.00	1500.00	-125.00
758	415	1500.00	350.00	125.00	416	350.15	1450.44	125.00
759		1500.00	350.00	-125.00		350.15	1450.44	-125.00
760	417	1398.75	352.72	125.00	418	440.81	1043.23	125.00
761		1398.75	352.72	-125.00		440.81	1043.23	-125.00
762	419	350.30	1400.87	125.00	420	1145.51	399.86	125.00
763		350.30	1400.87	-125.00		1145.51	399.86	-125.00
764	421	1347.72	353.54	125.00	422	395.56	1147.79	125.00
765		1347.72	353.54	-125.00		395.56	1147.79	-125.00
766	423	480.36	948.23	125.00	424	349.72	1350.69	125.00
767		480.36	948.23	-125.00		349.72	1350.69	-125.00
768	425	813.10	564.10	125.00	426	547.25	834.22	125.00
769		813.10	564.10	-125.00		547.25	834.22	-125.00
770	427	1296.69	354.36	125.00	428	649.02	704.92	125.00
771		1296.69	354.36	-125.00		649.02	704.92	-125.00
772	429	1000.84	445.86	125.00	430	349.14	1300.52	125.00
773		1000.84	445.86	-125.00		349.14	1300.52	-125.00
774	431	511.11	869.64	125.00	432	1245.72	353.21	125.00
775		511.11	869.64	-125.00		1245.72	353.21	-125.00
776	433	1096.45	396.21	125.00	434	737.13	604.06	125.00
777		1096.45	396.21	-125.00		737.13	604.06	-125.00
778	435	438.00	991.73	125.00	436	393.87	1095.93	125.00
779		438.00	991.73	-125.00		393.87	1095.93	-125.00
780	437	348.08	1250.00	125.00	438	949.03	452.27	125.00
781		348.08	1250.00	-125.00		949.03	452.27	-125.00
782	439	474.98	905.06	125.00	440	1194.74	352.06	125.00
783		474.98	905.06	-125.00		1194.74	352.06	-125.00
784	441	566.72	762.03	125.00	442	347.01	1199.48	125.00
785		566.72	762.03	-125.00		347.01	1199.48	-125.00
786	443	834.23	508.65	125.00	444	1047.34	394.72	125.00
787		834.23	508.65	-125.00		1047.34	394.72	-125.00
788	445	664.15	645.92	125.00	446	392.07	1044.00	125.00
		664.15	645.92	-125.00		392.07	1044.00	-125.00

789							
790	447	300.00	1500.00	125.00	448	1500.00	300.00
791		300.00	1500.00	-125.00		1500.00	300.00
792	449	1449.38	301.02	125.00	450	300.22	1450.46
793		1449.38	301.02	-125.00		300.22	1450.46
794	451	434.76	943.59	125.00	452	1398.77	302.04
795		434.76	943.59	-125.00		1398.77	302.04
796	453	897.21	458.69	125.00	454	300.44	1400.92
797		897.21	458.69	-125.00		300.44	1400.92
798	455	1145.26	349.10	125.00	456	345.42	1147.92
799		1145.26	349.10	-125.00		345.42	1147.92
800	457	1347.95	302.53	125.00	458	299.79	1350.81
801		1347.95	302.53	-125.00		299.79	1350.81
802	459	752.79	547.76	125.00	460	1297.14	303.02
803		752.79	547.76	-125.00		1297.14	303.02
804	461	998.24	393.22	125.00	462	299.14	1300.70
805		998.24	393.22	-125.00		299.14	1300.70
806	463	390.26	992.06	125.00	464	586.20	689.84
807		390.26	992.06	-125.00		586.20	689.84
808	465	1095.78	346.15	125.00	466	343.84	1096.35
809		1095.78	346.15	-125.00		343.84	1096.35
810	467	1246.02	301.82	125.00	468	431.53	895.44
811		1246.02	301.82	-125.00		431.53	895.44
812	469	679.29	586.92	125.00	470	297.96	1250.01
813		679.29	586.92	-125.00		297.96	1250.01
814	471	451.60	845.43	125.00	472	1194.90	300.61
815		451.60	845.43	-125.00		1194.90	300.61
816	473	946.32	392.37	125.00	474	296.79	1199.33
817		946.32	392.37	-125.00		296.79	1199.33
818	475	1046.14	343.97	125.00	476	342.34	1044.17
819		1046.14	343.97	-125.00		342.34	1044.17
820	477	389.17	938.94	125.00	478	836.26	446.62
821		389.17	938.94	-125.00		836.26	446.62
822	479	768.45	491.45	125.00	480	471.67	795.42
823		768.45	491.45	-125.00		471.67	795.42
824	481	603.82	629.80	125.00	482	250.00	1500.00
825		603.82	629.80	-125.00		250.00	1500.00
826	483	1500.00	250.00	125.00	484	1449.49	250.94
827		1500.00	250.00	-125.00		1449.49	250.94
828	485	250.43	1450.25	125.00	486	1398.97	251.88
829		250.43	1450.25	-125.00		1398.97	251.88
830	487	1145.00	298.35	125.00	488	250.85	1400.50
831		1145.00	298.35	-125.00		250.85	1400.50
832	489	295.29	1148.05	125.00	490	1348.15	252.11
833		295.29	1148.05	-125.00		1348.15	252.11
834	491	250.36	1350.23	125.00	492	694.84	531.17
835		250.36	1350.23	-125.00		694.84	531.17
836	493	996.50	341.79	125.00	494	894.41	391.53
837		996.50	341.79	-125.00		894.41	391.53
838	495	498.46	729.01	125.00	496	1297.32	252.34
839		498.46	729.01	-125.00		1297.32	252.34
840	497	340.84	991.98	125.00	498	249.86	1299.97
841		340.84	991.98	-125.00		249.86	1299.97
842	499	1095.11	296.09	125.00	500	388.08	885.82
843		1095.11	296.09	-125.00		388.08	885.82
844	501	293.80	1096.77	125.00	502	1246.37	251.38
845		293.80	1096.77	-125.00		1246.37	251.38
846	503	248.65	1249.41	125.00	504	621.44	569.77
847		248.65	1249.41	-125.00		621.44	569.77
848	505	525.25	662.60	125.00	506	944.98	339.85
849		525.25	662.60	-125.00		944.98	339.85
850	507	1195.41	250.43	125.00	508	247.43	1198.84
851		1195.41	250.43	-125.00		247.43	1198.84
852	509	775.31	434.56	125.00	510	338.92	939.27
853		775.31	434.56	-125.00		338.92	939.27
854	511	1044.93	293.22	125.00	512	292.61	1044.34
		1044.93	293.22	-125.00		292.61	1044.34

855		710.39	475.42	125.00	514	838.29	384.59	125.00
856		710.39	475.42	-125.00		838.29	384.59	-125.00
857	515	392.08	821.22	125.00	516	200.00	1500.00	125.00
858		392.08	821.22	-125.00		200.00	1500.00	-125.00
859	517	1500.00	200.00	125.00	518	1449.59	200.86	125.00
860		1500.00	200.00	-125.00		1449.59	200.86	-125.00
861	519	200.63	1450.04	125.00	520	1145.06	248.53	125.00
862		200.63	1450.04	-125.00		1145.06	248.53	-125.00
863	521	1399.18	201.72	125.00	522	246.13	1147.70	125.00
864		1399.18	201.72	-125.00		246.13	1147.70	-125.00
865	523	201.26	1400.08	125.00	524	1348.34	201.69	125.00
866		201.26	1400.08	-125.00		1348.34	201.69	-125.00
867	525	200.93	1349.66	125.00	526	544.89	605.68	125.00
868		200.93	1349.66	-125.00		544.89	605.68	-125.00
869	527	636.88	514.58	125.00	528	893.47	337.91	125.00
870		636.88	514.58	-125.00		893.47	337.91	-125.00
871	529	994.76	290.36	125.00	530	291.42	991.91	125.00
872		994.76	290.36	-125.00		291.42	991.91	-125.00
873	531	1297.50	201.66	125.00	532	200.59	1299.24	125.00
874		1297.50	201.66	-125.00		200.59	1299.24	-125.00
875	533	337.00	886.56	125.00	534	1094.71	246.63	125.00
876		337.00	886.56	-125.00		1094.71	246.63	-125.00
877	535	244.82	1096.55	125.00	536	1246.71	200.95	125.00
878		244.82	1096.55	-125.00		1246.71	200.95	-125.00
879	537	199.34	1248.80	125.00	538	396.09	756.62	125.00
880		199.34	1248.80	-125.00		396.09	756.62	-125.00
881	539	719.40	421.51	125.00	540	782.17	377.66	125.00
882		719.40	421.51	-125.00		782.17	377.66	-125.00
883	541	564.53	548.76	125.00	542	943.64	287.33	125.00
884		564.53	548.76	-125.00		943.64	287.33	-125.00
885	543	288.67	939.60	125.00	544	1195.92	200.24	125.00
886		288.67	939.60	-125.00		1195.92	200.24	-125.00
887	545	1044.38	244.17	125.00	546	198.08	1198.35	125.00
888		1044.38	244.17	-125.00		198.08	1198.35	-125.00
889	547	243.40	1044.48	125.00	548	430.19	695.99	125.00
890		243.40	1044.48	-125.00		430.19	695.99	-125.00
891	549	839.63	332.21	125.00	550	652.33	459.40	125.00
892		839.63	332.21	-125.00		652.33	459.40	-125.00
893	551	336.07	827.62	125.00	552	1145.12	198.70	125.00
894		336.07	827.62	-125.00		1145.12	198.70	-125.00
895	553	464.29	635.36	125.00	554	196.97	1147.34	125.00
896		464.29	635.36	-125.00		196.97	1147.34	-125.00
897	555	150.00	1500.00	125.00	556	1500.00	150.00	125.00
898		150.00	1500.00	-125.00		1500.00	150.00	-125.00
899	557	1449.63	150.70	125.00	558	150.37	1449.97	125.00
900		1449.63	150.70	-125.00		150.37	1449.97	-125.00
901	559	1399.25	151.40	125.00	560	150.74	1399.93	125.00
902		1399.25	151.40	-125.00		150.74	1399.93	-125.00
903	561	994.05	241.71	125.00	562	241.97	992.40	125.00
904		994.05	241.71	-125.00		241.97	992.40	-125.00
905	563	1348.44	151.53	125.00	564	150.56	1349.31	125.00
906		1348.44	151.53	-125.00		150.56	1349.31	-125.00
907	565	892.52	284.30	125.00	566	285.93	887.30	125.00
908		892.52	284.30	-125.00		285.93	887.30	-125.00
909	567	580.86	495.57	125.00	568	1297.62	151.66	125.00
910		580.86	495.57	-125.00		1297.62	151.66	-125.00
911	569	1094.31	197.16	125.00	570	150.38	1298.69	125.00
912		1094.31	197.16	-125.00		150.38	1298.69	-125.00
913	571	195.85	1096.33	125.00	572	485.95	581.55	125.00
914		195.85	1096.33	-125.00		485.95	581.55	-125.00
915	573	728.41	367.59	125.00	574	1246.97	150.98	125.00
916		728.41	367.59	-125.00		1246.97	150.98	-125.00
917	575	149.69	1248.12	125.00	576	785.79	326.50	125.00
918		149.69	1248.12	-125.00		785.79	326.50	-125.00
919	577	663.48	408.46	125.00	578	335.15	768.67	125.00
920		663.48	408.46	-125.00		335.15	768.67	-125.00

921								
922	579	943.34	238.97	125.00	580	239.22	940.71	125.00
923		943.34	238.97	-125.00		239.22	940.71	-125.00
924	581	1043.83	195.11	125.00	582	194.19	1044.61	125.00
925		1043.83	195.11	-125.00		194.19	1044.61	-125.00
926	583	1196.33	150.31	125.00	584	148.99	1197.55	125.00
927		1196.33	150.31	-125.00		148.99	1197.55	-125.00
928	585	840.96	279.82	125.00	586	507.62	527.75	125.00
929		840.96	279.82	-125.00		507.62	527.75	-125.00
930	587	280.07	834.01	125.00	588	597.20	442.38	125.00
931		280.07	834.01	-125.00		597.20	442.38	-125.00
932	589	1145.57	149.08	125.00	590	147.93	1146.56	125.00
933		1145.57	149.08	-125.00		147.93	1146.56	-125.00
934	591	100.00	1500.00	125.00	592	1500.00	100.00	125.00
935		100.00	1500.00	-125.00		1500.00	100.00	-125.00
936	593	350.28	700.89	125.00	594	1449.66	100.54	125.00
937		350.28	700.89	-125.00		1449.66	100.54	-125.00
938	595	100.11	1449.90	125.00	596	993.34	193.06	125.00
939		100.11	1449.90	-125.00		993.34	193.06	-125.00
940	597	892.63	236.24	125.00	598	192.52	992.90	125.00
941		892.63	236.24	-125.00		192.52	992.90	-125.00
942	599	1399.32	101.09	125.00	600	100.22	1399.79	125.00
943		1399.32	101.09	-125.00		100.22	1399.79	-125.00
944	601	236.47	889.01	125.00	602	382.03	651.35	125.00
945		236.47	889.01	-125.00		382.03	651.35	-125.00
946	603	1348.53	101.37	125.00	604	100.20	1348.97	125.00
947		1348.53	101.37	-125.00		100.20	1348.97	-125.00
948	605	734.30	318.23	125.00	606	674.64	357.52	125.00
949		734.30	318.23	-125.00		674.64	357.52	-125.00
950	607	413.78	601.80	125.00	608	1094.82	147.85	125.00
951		413.78	601.80	-125.00		1094.82	147.85	-125.00
952	609	146.87	1095.58	125.00	610	1297.75	101.66	125.00
953		146.87	1095.58	-125.00		1297.75	101.66	-125.00
954	611	524.84	476.55	125.00	612	100.18	1298.14	125.00
955		524.84	476.55	-125.00		100.18	1298.14	-125.00
956	613	789.40	275.33	125.00	614	610.52	393.23	125.00
957		789.40	275.33	-125.00		610.52	393.23	-125.00
958	615	274.21	780.72	125.00	616	1247.24	101.02	125.00
959		274.21	780.72	-125.00		1247.24	101.02	-125.00
960	617	100.04	1247.44	125.00	618	943.04	190.62	125.00
961		100.04	1247.44	-125.00		943.04	190.62	-125.00
962	619	189.76	941.81	125.00	620	434.82	553.21	125.00
963		189.76	941.81	-125.00		434.82	553.21	-125.00
964	621	841.89	232.46	125.00	622	1044.26	146.33	125.00
965		841.89	232.46	-125.00		1044.26	146.33	-125.00
966	623	145.51	1044.17	125.00	624	302.28	718.04	125.00
967		145.51	1044.17	-125.00		302.28	718.04	-125.00
968	625	230.98	837.96	125.00	626	1196.73	100.38	125.00
969		230.98	837.96	-125.00		1196.73	100.38	-125.00
970	627	99.90	1196.74	125.00	628	542.07	425.36	125.00
971		99.90	1196.74	-125.00		542.07	425.36	-125.00
972	629	455.87	504.62	125.00	630	682.81	309.95	125.00
973		455.87	504.62	-125.00		682.81	309.95	-125.00
974	631	1146.03	99.45	125.00	632	98.89	1145.78	125.00
975		1146.03	99.45	-125.00		98.89	1145.78	-125.00
976	633	892.74	188.18	125.00	634	993.69	144.82	125.00
977		892.74	188.18	-125.00		993.69	144.82	-125.00
978	635	740.19	268.86	125.00	636	187.01	890.73	125.00
979		740.19	268.86	-125.00		187.01	890.73	-125.00
980	637	144.15	992.76	125.00	638	50.00	1500.00	125.00
981		144.15	992.76	-125.00		50.00	1500.00	-125.00
982	639	1500.00	50.00	125.00	640	623.85	344.08	125.00
983		1500.00	50.00	-125.00		623.85	344.08	-125.00
984	641	1449.60	50.27	125.00	642	50.06	1449.55	125.00
985		1449.60	50.27	-125.00		50.06	1449.55	-125.00
986	643	1399.19	50.54	125.00	644	50.11	1399.09	125.00
		1399.19	50.54	-125.00		50.11	1399.09	-125.00

987	645	791.14	228.68	125.00	646	1348.57	50.69	125.00
988		791.14	228.68	-125.00		1348.57	50.69	-125.00
989	647	50.10	1348.28	125.00	648	1095.34	98.53	125.00
990		50.10	1348.28	-125.00		1095.34	98.53	-125.00
991	649	97.89	1094.82	125.00	650	225.49	786.90	125.00
992		97.89	1094.82	-125.00		225.49	786.90	-125.00
993	651	254.29	735.19	125.00	652	1297.94	50.83	125.00
994		254.29	735.19	-125.00		1297.94	50.83	-125.00
995	653	50.09	1297.47	125.00	654	472.56	455.47	125.00
996		50.09	1297.47	-125.00		472.56	455.47	-125.00
997	655	557.57	378.00	125.00	656	943.31	143.07	125.00
998		557.57	378.00	-125.00		943.31	143.07	-125.00
999	657	141.93	942.35	125.00	658	333.87	606.71	125.00
1000		141.93	942.35	-125.00		333.87	606.71	-125.00
1001	659	304.48	645.17	125.00	660	363.27	568.25	125.00
1002		304.48	645.17	-125.00		363.27	568.25	-125.00
1003	661	842.81	185.10	125.00	662	1247.45	50.51	125.00
1004		842.81	185.10	-125.00		1247.45	50.51	-125.00
1005	663	50.02	1246.72	125.00	664	181.90	841.90	125.00
1006		50.02	1246.72	-125.00		181.90	841.90	-125.00
1007	665	1044.68	97.56	125.00	666	96.84	1043.72	125.00
1008		1044.68	97.56	-125.00		96.84	1043.72	-125.00
1009	667	690.98	262.39	125.00	668	634.20	299.38	125.00
1010		690.98	262.39	-125.00		634.20	299.38	-125.00
1011	669	1196.97	50.19	125.00	670	49.95	1195.96	125.00
1012		1196.97	50.19	-125.00		49.95	1195.96	-125.00
1013	671	383.69	524.88	125.00	672	743.16	223.51	125.00
1014		383.69	524.88	-125.00		743.16	223.51	-125.00
1015	673	269.42	667.41	125.00	674	892.93	141.33	125.00
1016		269.42	667.41	-125.00		892.93	141.33	-125.00
1017	675	489.25	406.31	125.00	676	139.71	891.94	125.00
1018		489.25	406.31	-125.00		139.71	891.94	-125.00
1019	677	994.03	96.59	125.00	678	573.07	330.64	125.00
1020		994.03	96.59	-125.00		573.07	330.64	-125.00
1021	679	1146.38	49.73	125.00	680	95.79	992.63	125.00
1022		1146.38	49.73	-125.00		95.79	992.63	-125.00
1023	681	49.45	1145.08	125.00	682	210.96	742.16	125.00
1024		49.45	1145.08	-125.00		210.96	742.16	-125.00
1025	683	792.88	182.02	125.00	684	404.12	481.50	125.00
1026		792.88	182.02	-125.00		404.12	481.50	-125.00
1027	685	1500.00	0.00	125.00	686	0.00	1500.00	125.00
1028		1500.00	0.00	-125.00		0.00	1500.00	-125.00
1029	687	176.78	793.08	125.00	688	1449.53	0.00	125.00
1030		176.78	793.08	-125.00		1449.53	0.00	-125.00
1031	689	0.00	1449.20	125.00	690	234.37	689.65	125.00
1032		0.00	1449.20	-125.00		234.37	689.65	-125.00
1033	691	1399.07	0.00	125.00	692	0.00	1398.40	125.00
1034		1399.07	0.00	-125.00		0.00	1398.40	-125.00
1035	693	1095.80	49.27	125.00	694	48.94	1094.20	125.00
1036		1095.80	49.27	-125.00		48.94	1094.20	-125.00
1037	695	1348.60	0.00	125.00	696	0.00	1347.59	125.00
1038		1348.60	0.00	-125.00		0.00	1347.59	-125.00
1039	697	943.58	95.53	125.00	698	644.55	254.69	125.00
1040		943.58	95.53	-125.00		644.55	254.69	-125.00
1041	699	507.62	360.44	125.00	700	843.46	138.87	125.00
1042		507.62	360.44	-125.00		843.46	138.87	-125.00
1043	701	94.09	942.89	125.00	702	695.18	218.33	125.00
1044		94.09	942.89	-125.00		695.18	218.33	-125.00
1045	703	1298.13	0.00	125.00	704	0.00	1296.79	125.00
1046		1298.13	0.00	-125.00		0.00	1296.79	-125.00
1047	705	135.75	843.82	125.00	706	420.27	434.38	125.00
1048		135.75	843.82	-125.00		420.27	434.38	-125.00
1049	707	585.59	288.81	125.00	708	322.13	541.47	125.00
1050		585.59	288.81	-125.00		322.13	541.47	-125.00
1051	709	1045.24	48.78	125.00	710	1247.67	0.00	125.00
1052		1045.24	48.78	-125.00		1247.67	0.00	-125.00

1053	711	0.00	1245.99	125.00	712	292.58	574.12	125.00
1054		0.00	1245.99	-125.00		292.58	574.12	-125.00
1055	713	746.13	178.15	125.00	714	48.42	1043.25	125.00
1056		746.13	178.15	-125.00		48.42	1043.25	-125.00
1057	715	263.02	606.76	125.00	716	167.64	749.12	125.00
1058		263.02	606.76	-125.00		167.64	749.12	-125.00
1059	717	240.18	632.68	125.00	718	1197.20	0.00	125.00
1060		240.18	632.68	-125.00		1197.20	0.00	-125.00
1061	719	0.00	1195.19	125.00	720	339.38	501.80	125.00
1062		0.00	1195.19	-125.00		339.38	501.80	-125.00
1063	721	196.43	697.41	125.00	722	893.13	94.47	125.00
1064		196.43	697.41	-125.00		893.13	94.47	-125.00
1065	723	92.40	893.15	125.00	724	217.33	658.60	125.00
1066		92.40	893.15	-125.00		217.33	658.60	-125.00
1067	725	525.99	314.57	125.00	726	793.99	136.41	125.00
1068		525.99	314.57	-125.00		793.99	136.41	-125.00
1069	727	994.68	48.29	125.00	728	47.90	992.30	125.00
1070		994.68	48.29	-125.00		47.90	992.30	-125.00
1071	729	131.78	795.70	125.00	730	436.43	387.26	125.00
1072		131.78	795.70	-125.00		436.43	387.26	-125.00
1073	731	1146.74	0.00	125.00	732	0.00	1144.39	125.00
1074		1146.74	0.00	-125.00		0.00	1144.39	-125.00
1075	733	649.86	212.36	125.00	734	598.11	246.99	125.00
1076		649.86	212.36	-125.00		598.11	246.99	-125.00
1077	735	356.63	462.13	125.00	736	699.37	174.28	125.00
1078		356.63	462.13	-125.00		699.37	174.28	-125.00
1079	737	844.11	92.64	125.00	738	1096.27	0.00	125.00
1080		844.11	92.64	-125.00		1096.27	0.00	-125.00
1081	739	0.00	1093.58	125.00	740	541.87	276.31	125.00
1082		0.00	1093.58	-125.00		541.87	276.31	-125.00
1083	741	89.59	845.74	125.00	742	944.23	47.76	125.00
1084		89.59	845.74	-125.00		944.23	47.76	-125.00
1085	743	47.05	942.17	125.00	744	457.67	342.88	125.00
1086		47.05	942.17	-125.00		457.67	342.88	-125.00
1087	745	158.49	705.17	125.00	746	183.94	663.66	125.00
1088		158.49	705.17	-125.00		183.94	663.66	-125.00
1089	747	747.06	133.46	125.00	748	125.35	751.99	125.00
1090		747.06	133.46	-125.00		125.35	751.99	-125.00
1091	749	200.30	627.55	125.00	750	1045.80	0.00	125.00
1092		200.30	627.55	-125.00		1045.80	0.00	-125.00
1093	751	281.00	514.68	125.00	752	0.00	1042.78	125.00
1094		281.00	514.68	-125.00		0.00	1042.78	-125.00
1095	753	368.46	414.33	125.00	754	604.55	206.39	125.00
1096		368.46	414.33	-125.00		604.55	206.39	-125.00
1097	755	210.94	597.95	125.00	756	251.29	541.52	125.00
1098		210.94	597.95	-125.00		251.29	541.52	-125.00
1099	757	893.77	47.24	125.00	758	557.76	238.06	125.00
1100		893.77	47.24	-125.00		557.76	238.06	-125.00
1101	759	655.18	170.04	125.00	760	795.09	90.81	125.00
1102		655.18	170.04	-125.00		795.09	90.81	-125.00
1103	761	46.20	892.03	125.00	762	478.91	298.50	125.00
1104		46.20	892.03	-125.00		478.91	298.50	-125.00
1105	763	86.79	798.32	125.00	764	295.07	478.72	125.00
1106		86.79	798.32	-125.00		295.07	478.72	-125.00
1107	765	221.57	568.36	125.00	766	995.34	0.00	125.00
1108		221.57	568.36	-125.00		995.34	0.00	-125.00
1109	767	0.00	991.98	125.00	768	150.54	668.73	125.00
1110		0.00	991.98	-125.00		150.54	668.73	-125.00
1111	769	700.13	130.51	125.00	770	171.45	629.92	125.00
1112		700.13	130.51	-125.00		171.45	629.92	-125.00
1113	771	498.16	263.81	125.00	772	118.92	708.27	125.00
1114		498.16	263.81	-125.00		118.92	708.27	-125.00
1115	773	309.14	442.75	125.00	774	380.29	366.53	125.00
1116		309.14	442.75	-125.00		380.29	366.53	-125.00
1117	775	844.03	46.32	125.00	776	44.80	844.89	125.00
1118		844.03	46.32	-125.00		44.80	844.89	-125.00

1119	777	256.17	497.55	125.00	778	747.99	88.77	125.00
1120		256.17	497.55	-125.00		747.99	88.77	-125.00
1121	779	944.87	0.00	125.00	780	0.00	941.45	125.00
1122		944.87	0.00	-125.00		0.00	941.45	-125.00
1123	781	83.07	754.85	125.00	782	564.58	199.99	125.00
1124		83.07	754.85	-125.00		564.58	199.99	-125.00
1125	783	175.79	597.85	125.00	784	610.99	165.79	125.00
1126		175.79	597.85	-125.00		610.99	165.79	-125.00
1127	785	517.41	229.13	125.00	786	229.37	514.66	125.00
1128		517.41	229.13	-125.00		229.37	514.66	-125.00
1129	787	407.72	319.79	125.00	788	142.59	632.29	125.00
1130		407.72	319.79	-125.00		142.59	632.29	-125.00
1131	789	656.11	127.53	125.00	790	262.74	467.30	125.00
1132		656.11	127.53	-125.00		262.74	467.30	-125.00
1133	791	113.34	670.52	125.00	792	794.28	45.40	125.00
1134		113.34	670.52	-125.00		794.28	45.40	-125.00
1135	793	180.13	565.78	125.00	794	43.40	797.74	125.00
1136		180.13	565.78	-125.00		43.40	797.74	-125.00
1137	795	894.40	0.00	125.00	796	202.57	531.77	125.00
1138		894.40	0.00	-125.00		202.57	531.77	-125.00
1139	797	0.00	890.92	125.00	798	316.64	394.28	125.00
1140		0.00	890.92	-125.00		316.64	394.28	-125.00
1141	799	700.88	86.73	125.00	800	435.15	273.05	125.00
1142		700.88	86.73	-125.00		435.15	273.05	-125.00
1143	801	79.35	711.38	125.00	802	269.30	437.06	125.00
1144		79.35	711.38	-125.00		269.30	437.06	-125.00
1145	803	231.34	480.41	125.00	804	460.86	246.18	125.00
1146		231.34	480.41	-125.00		460.86	246.18	-125.00
1147	805	571.40	161.93	125.00	806	524.61	193.60	125.00
1148		571.40	161.93	-125.00		524.61	193.60	-125.00
1149	807	140.64	597.75	125.00	808	486.57	219.31	125.00
1150		140.64	597.75	-125.00		486.57	219.31	-125.00
1151	809	612.09	124.55	125.00	810	0.00	844.04	125.00
1152		612.09	124.55	-125.00		0.00	844.04	-125.00
1153	811	843.94	0.00	125.00	812	41.53	754.38	125.00
1154		843.94	0.00	-125.00		41.53	754.38	-125.00
1155	813	746.64	44.39	125.00	814	107.75	632.77	125.00
1156		746.64	44.39	-125.00		107.75	632.77	-125.00
1157	815	207.46	487.79	125.00	816	230.40	455.88	125.00
1158		207.46	487.79	-125.00		230.40	455.88	-125.00
1159	817	76.13	672.31	125.00	818	657.03	85.02	125.00
1160		76.13	672.31	-125.00		657.03	85.02	-125.00
1161	819	324.15	345.81	125.00	820	166.36	531.08	125.00
1162		324.15	345.81	-125.00		166.36	531.08	-125.00
1163	821	271.03	396.97	125.00	822	138.68	563.21	125.00
1164		271.03	396.97	-125.00		138.68	563.21	-125.00
1165	823	531.81	158.07	125.00	824	490.83	187.12	125.00
1166		531.81	158.07	-125.00		490.83	187.12	-125.00
1167	825	183.57	495.18	125.00	826	0.00	797.16	125.00
1168		183.57	495.18	-125.00		0.00	797.16	-125.00
1169	827	793.47	0.00	125.00	828	357.76	296.70	125.00
1170		793.47	0.00	-125.00		357.76	296.70	-125.00
1171	829	39.67	711.03	125.00	830	455.72	209.50	125.00
1172		39.67	711.03	-125.00		455.72	209.50	-125.00
1173	831	229.47	431.36	125.00	832	105.62	597.60	125.00
1174		229.47	431.36	-125.00		105.62	597.60	-125.00
1175	833	572.01	121.94	125.00	834	699.00	43.37	125.00
1176		572.01	121.94	-125.00		699.00	43.37	-125.00
1177	835	201.37	460.59	125.00	836	423.55	228.55	125.00
1178		201.37	460.59	-125.00		423.55	228.55	-125.00
1179	837	72.91	633.25	125.00	838	613.18	83.31	125.00
1180		72.91	633.25	-125.00		613.18	83.31	-125.00
1181	839	391.38	247.59	125.00	840	0.00	753.92	125.00
1182		391.38	247.59	-125.00		0.00	753.92	-125.00
1183	841	272.76	356.89	125.00	842	130.14	530.39	125.00
1184		272.76	356.89	-125.00		130.14	530.39	-125.00



1185	843	495.09	154.93	125.00	844	745.29	0.00	125.00
1186		495.09	154.93	-125.00		745.29	0.00	-125.00
1187	845	152.59	496.38	125.00	846	38.06	671.67	125.00
1188		152.59	496.38	-125.00		38.06	671.67	-125.00
1189	847	457.05	180.64	125.00	848	103.49	562.42	125.00
1190		457.05	180.64	-125.00		103.49	562.42	-125.00
1191	849	172.33	465.29	125.00	850	225.42	399.67	125.00
1192		172.33	465.29	-125.00		225.42	399.67	-125.00
1193	851	654.46	42.51	125.00	852	195.28	433.38	125.00
1194		654.46	42.51	-125.00		195.28	433.38	-125.00
1195	853	531.93	119.32	125.00	854	295.75	315.31	125.00
1196		531.93	119.32	-125.00		295.75	315.31	-125.00
1197	855	70.61	597.44	125.00	856	423.48	191.85	125.00
1198		70.61	597.44	-125.00		423.48	191.85	-125.00
1199	857	572.62	81.94	125.00	858	0.00	710.68	125.00
1200		572.62	81.94	-125.00		0.00	710.68	-125.00
1201	859	322.24	275.22	125.00	860	697.11	0.00	125.00
1202		322.24	275.22	-125.00		697.11	0.00	-125.00
1203	861	36.45	632.30	125.00	862	458.38	151.79	125.00
1204		36.45	632.30	-125.00		458.38	151.79	-125.00
1205	863	121.61	497.57	125.00	864	97.22	529.69	125.00
1206		121.61	497.57	-125.00		97.22	529.69	-125.00
1207	865	142.72	466.25	125.00	866	389.92	203.06	125.00
1208		142.72	466.25	-125.00		389.92	203.06	-125.00
1209	867	221.38	367.97	125.00	868	609.93	41.66	125.00
1210		221.38	367.97	-125.00		609.93	41.66	-125.00
1211	869	494.27	117.25	125.00	870	348.72	235.14	125.00
1212		494.27	117.25	-125.00		348.72	235.14	-125.00
1213	871	161.09	435.40	125.00	872	253.70	328.32	125.00
1214		161.09	435.40	-125.00		253.70	328.32	-125.00
1215	873	185.48	403.68	125.00	874	68.31	561.64	125.00
1216		185.48	403.68	-125.00		68.31	561.64	-125.00
1217	875	0.00	671.02	125.00	876	532.06	80.57	125.00
1218		0.00	671.02	-125.00		532.06	80.57	-125.00
1219	877	35.30	596.30	125.00	878	423.42	155.16	125.00
1220		35.30	596.30	-125.00		423.42	155.16	-125.00
1221	879	651.89	0.00	125.00	880	113.12	467.21	125.00
1222		651.89	0.00	-125.00		113.12	467.21	-125.00
1223	881	90.95	496.96	125.00	882	267.36	284.80	125.00
1224		90.95	496.96	-125.00		267.36	284.80	-125.00
1225	883	568.52	40.97	125.00	884	132.86	436.12	125.00
1226		568.52	40.97	-125.00		132.86	436.12	-125.00
1227	885	211.65	341.34	125.00	886	64.31	528.99	125.00
1228		211.65	341.34	-125.00		64.31	528.99	-125.00
1229	887	0.00	631.36	125.00	888	456.60	115.17	125.00
1230		0.00	631.36	-125.00		456.60	115.17	-125.00
1231	889	175.69	373.99	125.00	890	350.67	194.77	125.00
1232		175.69	373.99	-125.00		350.67	194.77	-125.00
1233	891	286.71	253.74	125.00	892	145.55	407.70	125.00
1234		286.71	253.74	-125.00		145.55	407.70	-125.00
1235	893	493.44	79.56	125.00	894	34.15	560.30	125.00
1236		493.44	79.56	-125.00		34.15	560.30	-125.00
1237	895	388.46	158.53	125.00	896	234.64	299.76	125.00
1238		388.46	158.53	-125.00		234.64	299.76	-125.00
1239	897	606.68	0.00	125.00	898	306.06	222.68	125.00
1240		606.68	0.00	-125.00		306.06	222.68	-125.00
1241	899	0.00	595.16	125.00	900	84.47	466.75	125.00
1242		0.00	595.16	-125.00		84.47	466.75	-125.00
1243	901	251.53	268.97	125.00	902	421.17	116.96	125.00
1244		251.53	268.97	-125.00		421.17	116.96	-125.00
1245	903	527.10	40.28	125.00	904	104.63	436.84	125.00
1246		527.10	40.28	-125.00		104.63	436.84	-125.00
1247	905	60.31	496.35	125.00	906	201.92	314.72	125.00
1248		60.31	496.35	-125.00		201.92	314.72	-125.00
1249	907	170.83	349.41	125.00	908	120.60	408.06	125.00
1250		170.83	349.41	-125.00		120.60	408.06	-125.00

1251					910	264.01	241.53	125.00
1252	909	32.15	527.53	125.00		264.01	241.53	-125.00
1253		32.15	527.53	-125.00	912	223.81	279.31	125.00
1254	911	454.83	78.56	125.00		223.81	279.31	-125.00
1255		454.83	78.56	-125.00	914	352.62	154.40	125.00
1256	913	564.41	0.00	125.00		352.62	154.40	-125.00
1257		564.41	0.00	-125.00	916	0.00	558.96	125.00
1258	915	130.00	380.00	125.00		0.00	558.96	-125.00
1259		130.00	380.00	-125.00	918	385.73	118.74	125.00
1260	917	311.42	186.47	125.00		385.73	118.74	-125.00
1261		311.42	186.47	-125.00	920	77.99	436.54	125.00
1262	919	276.49	214.09	125.00		77.99	436.54	-125.00
1263		276.49	214.09	-125.00	922	55.82	466.30	125.00
1264	921	235.71	253.14	125.00		55.82	466.30	-125.00
1265		235.71	253.14	-125.00	924	165.96	324.83	125.00
1266	923	488.11	39.78	125.00		165.96	324.83	-125.00
1267		488.11	39.78	-125.00	926	196.08	289.66	125.00
1268	925	95.65	408.42	125.00		196.08	289.66	-125.00
1269		95.65	408.42	-125.00	928	130.00	357.47	125.00
1270	927	30.15	494.76	125.00		130.00	357.47	-125.00
1271		30.15	494.76	-125.00	930	108.33	380.00	125.00
1272	929	418.92	78.75	125.00		108.33	380.00	-125.00
1273		418.92	78.75	-125.00	932	0.00	526.07	125.00
1274	931	212.97	258.87	125.00		0.00	526.07	-125.00
1275		212.97	258.87	-125.00	934	522.15	0.00	125.00
1276	933	241.32	229.32	125.00		522.15	0.00	-125.00
1277		241.32	229.32	-125.00	936	163.04	299.00	125.00
1278	935	316.77	150.26	125.00		163.04	299.00	-125.00
1279		316.77	150.26	-125.00	938	280.27	179.44	125.00
1280	937	51.34	436.25	125.00		280.27	179.44	-125.00
1281		51.34	436.25	-125.00	940	130.00	334.94	125.00
1282	939	71.49	408.27	125.00		130.00	334.94	-125.00
1283		71.49	408.27	-125.00	942	449.12	39.28	125.00
1284	941	350.69	115.55	125.00		449.12	39.28	-125.00
1285		350.69	115.55	-125.00	944	190.24	264.60	125.00
1286	943	27.91	464.86	125.00		190.24	264.60	-125.00
1287		27.91	464.86	-125.00	946	86.67	380.00	125.00
1288	945	246.92	205.49	125.00		86.67	380.00	-125.00
1289		246.92	205.49	-125.00	948	0.00	493.17	125.00
1290	947	215.82	231.75	125.00		0.00	493.17	-125.00
1291		215.82	231.75	-125.00	950	383.00	78.94	125.00
1292	949	102.42	354.67	125.00		383.00	78.94	-125.00
1293		102.42	354.67	-125.00	952	130.00	308.34	125.00
1294	951	482.78	0.00	125.00		130.00	308.34	-125.00
1295		482.78	0.00	-125.00	954	47.34	408.12	125.00
1296	953	160.12	273.17	125.00		47.34	408.12	-125.00
1297		160.12	273.17	-125.00	956	65.00	380.00	125.00
1298	955	25.67	434.95	125.00		65.00	380.00	-125.00
1299		25.67	434.95	-125.00	958	412.89	39.38	125.00
1300	957	284.04	144.80	125.00		412.89	39.38	-125.00
1301		284.04	144.80	-125.00	960	218.66	204.63	125.00
1302	959	190.31	234.19	125.00		218.66	204.63	-125.00
1303		190.31	234.19	-125.00	962	249.11	172.42	125.00
1304	961	0.00	463.41	125.00		249.11	172.42	-125.00
1305		0.00	463.41	-125.00	964	96.50	329.34	125.00
1306	963	315.66	112.37	125.00		96.50	329.34	-125.00
1307		315.66	112.37	-125.00	966	348.77	76.71	125.00
1308	965	74.84	351.87	125.00		348.77	76.71	-125.00
1309		74.84	351.87	-125.00	968	443.41	0.00	125.00
1310	967	130.00	281.73	125.00		443.41	0.00	-125.00
1311		130.00	281.73	-125.00	970	43.33	380.00	125.00
1312	969	23.67	407.47	125.00		43.33	380.00	-125.00
1313		23.67	407.47	-125.00	972	0.00	433.65	125.00
1314	971	160.16	240.24	125.00		0.00	433.65	-125.00
1315		160.16	240.24	-125.00	974	376.66	39.47	125.00
1316	973	57.09	356.14	125.00		376.66	39.47	-125.00
		57.09	356.14	-125.00				

1317								
1318	975	190.39	203.78	125.00	976	220.03	170.27	125.00
1319		190.39	203.78	-125.00		220.03	170.27	-125.00
1320	977	251.30	139.34	125.00	978	283.16	108.31	125.00
1321		251.30	139.34	-125.00		283.16	108.31	-125.00
1322	979	39.34	360.40	125.00	980	314.55	74.48	125.00
1323		39.34	360.40	-125.00		314.55	74.48	-125.00
1324	981	21.67	380.00	125.00	982	406.86	0.00	125.00
1325		21.67	380.00	-125.00		406.86	0.00	-125.00
1326	983	0.00	406.83	125.00	984	63.01	323.74	125.00
1327		0.00	406.83	-125.00		63.01	323.74	-125.00
1328	985	130.00	246.28	125.00	986	160.19	207.31	125.00
1329		130.00	246.28	-125.00		160.19	207.31	-125.00
1330	987	80.75	294.90	125.00	988	49.18	332.27	125.00
1331		80.75	294.90	-125.00		49.18	332.27	-125.00
1332	989	342.63	38.36	125.00	990	190.94	168.13	125.00
1333		342.63	38.36	-125.00		190.94	168.13	-125.00
1334	991	35.35	340.81	125.00	992	221.40	135.91	125.00
1335		35.35	340.81	-125.00		221.40	135.91	-125.00
1336	993	19.67	355.11	125.00	994	0.00	380.00	125.00
1337		19.67	355.11	-125.00		0.00	380.00	-125.00
1338	995	250.66	104.24	125.00	996	282.29	71.81	125.00
1339		250.66	104.24	-125.00		282.29	71.81	-125.00
1340	997	370.31	0.00	125.00	998	130.00	210.84	125.00
1341		370.31	0.00	-125.00		130.00	210.84	-125.00
1342	999	308.60	37.24	125.00	1000	17.68	330.22	125.00
1343		308.60	37.24	-125.00		17.68	330.22	-125.00
1344	1001	160.47	167.36	125.00	1002	0.00	349.82	125.00
1345		160.47	167.36	-125.00		0.00	349.82	-125.00
1346	1003	191.50	132.48	125.00	1004	220.59	101.06	125.00
1347		191.50	132.48	-125.00		220.59	101.06	-125.00
1348	1005	65.00	260.47	125.00	1006	24.59	305.84	125.00
1349		65.00	260.47	-125.00		24.59	305.84	-125.00
1350	1007	336.49	0.00	125.00	1008	250.02	69.14	125.00
1351		336.49	0.00	-125.00		250.02	69.14	-125.00
1352	1009	276.86	35.90	125.00	1010	31.50	281.47	125.00
1353		276.86	35.90	-125.00		31.50	281.47	-125.00
1354	1011	0.00	319.63	125.00	1012	130.00	166.60	125.00
1355		0.00	319.63	-125.00		130.00	166.60	-125.00
1356	1013	160.75	127.42	125.00	1014	190.51	97.87	125.00
1357		160.75	127.42	-125.00		190.51	97.87	-125.00
1358	1015	302.66	0.00	125.00	1016	219.78	66.20	125.00
1359		302.66	0.00	-125.00		219.78	66.20	-125.00
1360	1017	65.00	217.65	125.00	1018	245.12	34.57	125.00
1361		65.00	217.65	-125.00		245.12	34.57	-125.00
1362	1019	0.00	279.42	125.00	1020	271.44	0.00	125.00
1363		0.00	279.42	-125.00		271.44	0.00	-125.00
1364	1021	130.00	122.36	125.00	1022	160.26	92.68	125.00
1365		130.00	122.36	-125.00		160.26	92.68	-125.00
1366	1023	189.53	63.26	125.00	1024	215.64	33.10	125.00
1367		189.53	63.26	-125.00		215.64	33.10	-125.00
1368	1025	65.00	174.83	125.00	1026	240.23	0.00	125.00
1369		65.00	174.83	-125.00		240.23	0.00	-125.00
1370	1027	0.00	239.20	125.00	1028	81.38	139.54	125.00
1371		0.00	239.20	-125.00		81.38	139.54	-125.00
1372	1029	130.00	87.48	125.00	1030	159.77	57.93	125.00
1373		130.00	87.48	-125.00		159.77	57.93	-125.00
1374	1031	186.15	31.63	125.00	1032	211.49	0.00	125.00
1375		186.15	31.63	-125.00		211.49	0.00	-125.00
1376	1033	97.76	104.24	125.00	1034	158.07	28.97	125.00
1377		97.76	104.24	-125.00		158.07	28.97	-125.00
1378	1035	0.00	189.01	125.00	1036	130.00	52.61	125.00
1379		0.00	189.01	-125.00		130.00	52.61	-125.00
1380	1037	103.80	75.68	125.00	1038	182.76	0.00	125.00
1381		103.80	75.68	-125.00		182.76	0.00	-125.00
1382	1039	109.84	47.12	125.00	1040	130.00	26.30	125.00
		109.84	47.12	-125.00		130.00	26.30	-125.00

1383									
1384	1041	156.38	0.00	125.00	1042	65.53	86.13	125.00	
1385		156.38	0.00	-125.00		65.53	86.13	-125.00	
1386	1043	32.76	112.47	125.00	1044	77.60	63.88	125.00	
1387		32.76	112.47	-125.00		77.60	63.88	-125.00	
1388	1045	0.00	138.82	125.00	1046	111.80	23.56	125.00	
1389		0.00	138.82	-125.00		111.80	23.56	-125.00	
1390	1047	89.68	41.63	125.00	1048	130.00	0.00	125.00	
1391		89.68	41.63	-125.00		130.00	0.00	-125.00	
1392	1049	53.23	64.76	125.00	1050	65.34	49.87	125.00	
1393		53.23	64.76	-125.00		65.34	49.87	-125.00	
1394	1051	93.59	20.81	125.00	1052	77.44	34.98	125.00	
1395		93.59	20.81	-125.00		77.44	34.98	-125.00	
1396	1053	113.75	0.00	125.00	1054	26.61	82.01	125.00	
1397		113.75	0.00	-125.00		26.61	82.01	-125.00	
1398	1055	0.00	99.25	125.00	1056	79.35	17.49	125.00	
1399		0.00	99.25	-125.00		79.35	17.49	-125.00	
1400	1057	97.50	0.00	125.00	1058	65.20	28.34	125.00	
1401		97.50	0.00	-125.00		65.20	28.34	-125.00	
1402	1059	53.07	35.87	125.00	1060	40.93	43.40	125.00	
1403		53.07	35.87	-125.00		40.93	43.40	-125.00	
1404	1061	81.25	0.00	125.00	1062	65.10	14.17	125.00	
1405		81.25	0.00	-125.00		65.10	14.17	-125.00	
1406	1063	20.47	51.54	125.00	1064	50.91	17.93	125.00	
1407		20.47	51.54	-125.00		50.91	17.93	-125.00	
1408	1065	65.00	0.00	125.00	1066	0.00	59.68	125.00	
1409		65.00	0.00	-125.00		0.00	59.68	-125.00	
1410	1067	36.72	21.70	125.00	1068	48.75	0.00	125.00	
1411		36.72	21.70	-125.00		48.75	0.00	-125.00	
1412	1069	18.36	25.77	125.00	1070	32.50	0.00	125.00	
1413		18.36	25.77	-125.00		32.50	0.00	-125.00	
1414	1071	0.00	29.84	125.00	1072	16.25	0.00	125.00	
1415		0.00	29.84	-125.00		16.25	0.00	-125.00	
1416	1073	0.00	0.00	125.00					
1417		0.00	0.00	-125.00					
1418									
1419									
1420									
1421									
1422									

SUPPORT RESTRAINTS

\*\*\*\*\*

NODE	RESTRAINED D.O.F.	(UNITS= MM, DEGREES)
	DX DY DZ R1 R2	
1423		
1424		
1425		
1426	685	0 1 0 0 1
1427	686	1 0 0 1 0
1428	688	0 1 0 0 1
1429	689	1 0 0 1 0
1430	691	0 1 0 0 1
1431	692	1 0 0 1 0
1432	695	0 1 0 0 1
1433	696	1 0 0 1 0
1434	703	0 1 0 0 1
1435	704	1 0 0 1 0
1436	710	0 1 0 0 1
1437	711	1 0 0 1 0
1438	718	0 1 0 0 1
1439	719	1 0 0 1 0
1440	731	0 1 0 0 1
1441	732	1 0 0 1 0
1442	738	0 1 0 0 1
1443	739	1 0 0 1 0
1444	750	0 1 0 0 1
1445	752	1 0 0 1 0
1446	766	0 1 0 0 1
1447	767	1 0 0 1 0
1448	779	0 1 0 0 1

1449	780	1	0	0	1	0
1450	795	0	1	0	0	1
1451	797	1	0	0	1	0
1452	810	1	0	0	1	0
1453	811	0	1	0	0	1
1454	826	1	0	0	1	0
1455	827	0	1	0	0	1
1456	840	1	0	0	1	0
1457	844	0	1	0	0	1
1458	858	1	0	0	1	0
1459	860	0	1	0	0	1
1460	875	1	0	0	1	0
1461	879	0	1	0	0	1
1462	887	1	0	0	1	0
1463	897	0	1	0	0	1
1464	899	1	0	0	1	0
1465	913	0	1	0	0	1
1466	915	0	0	1	0	0
1467	916	1	0	0	1	0
1468	928	0	0	1	0	0
1469	930	0	0	1	0	0
1470	932	1	0	0	1	0
1471	934	0	1	0	0	1
1472	940	0	0	1	0	0
1473	946	0	0	1	0	0
1474	948	1	0	0	1	0
1475	951	0	1	0	0	1
1476	952	0	0	1	0	0
1477	956	0	0	1	0	0
1478	961	1	0	0	1	0
1479	967	0	0	1	0	0
1480	968	0	1	0	0	1
1481	970	0	0	1	0	0
1482	972	1	0	0	1	0
1483	981	0	0	1	0	0
1484	982	0	1	0	0	1
1485	983	1	0	0	1	0
1486	985	0	0	1	0	0
1487	994	1	0	1	1	0
1488	997	0	1	0	0	1
1489	998	0	0	1	0	0
1490	1002	1	0	0	1	0
1491	1007	0	1	0	0	1
1492	1011	1	0	0	1	0
1493	1012	0	0	1	0	0
1494	1015	0	1	0	0	1
1495	1019	1	0	0	1	0
1496	1020	0	1	0	0	1
1497	1021	0	0	1	0	0
1498	1026	0	1	0	0	1
1499	1027	1	0	0	1	0
1500	1029	0	0	1	0	0
1501	1032	0	1	0	0	1
1502	1035	1	0	0	1	0
1503	1036	0	0	1	0	0
1504	1038	0	1	0	0	1
1505	1040	0	0	1	0	0
1506	1041	0	1	0	0	1
1507	1045	1	0	0	1	0
1508	1048	0	1	1	0	1
1509	1053	0	1	0	0	1
1510	1055	1	0	0	1	0
1511	1057	0	1	0	0	1
1512	1061	0	1	0	0	1
1513	1065	0	1	0	0	1
1514	1066	1	0	0	1	0

1515	1068	0	1	0	0	1
1516	1070	0	1	0	0	1
1517	1071	1	0	0	1	0
1518	1072	0	1	0	0	1
1519	1073	1	1	0	1	1
1520						

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1          - - - - -
2          -   L O A D   C A S E   -
3          -           D A T A     -
4          -           Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title          (30 char. max.) : SLAB
11         Load case title          (30 char. max.) : Self Weight
12         Load case file name      (8 char. max.) : LOAD1
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 0
18         No. of nodes with imposed displacements : 0
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 251
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51         PRESCRIBED NODE DISPLACEMENTS
52         -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         /
57
58         CONCRETE PRESTRAINS
59         -----
60         <NOTE:> UNITS: me
61         <<<<< FORMAT >>>>>
62         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
63         /
64
65         GRAVITATIONAL LOADS
66         -----

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67 <<<<< FORMAT >>>>>
68 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
69      1      0.00000      0.00000      -1.00000      0.00000      251  1/
70 /
71
72              ADDITIONAL LUMPED MASSES
73              -----
74 <NOTE:> UNITS:  kg, m/s, m/s2
75 <<<<< FORMAT >>>>>
76 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
d(NODE) ] /
77 /
78
79              IMPULSE, BLAST AND IMPACT FORCES
80              -----
81 <NOTE:> UNITS:  Sec, kN
82 <<<<< FORMAT >>>>>
83 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
84 /
85
86              GROUND ACCELERATION
87              -----
88 <NOTE:> UNITS:  Sec, G
89 <<<<< FORMAT >>>>>
90 TIME  ACC-X  ACC-Y  ACC-Z /
91 /
92

```



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1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : Disp. MASTER
12         Load case file name  (8 char. max.) : LOAD2
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 0
18         No. of nodes with imposed displacements : 1
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25          UNIFORMLY DISTRIBUTED LOADS
26          -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31          HYDROSTATIC LOADS
32          -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37          TEMPERATURE LOADS
38          -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44          CONCENTRATED LOADS
45          -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51          PRESCRIBED NODE DISPLACEMENTS
52          -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF     DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         270           3           -1.00000/
57         /
58
59          CONCRETE PRESTRAINS
60          -----
61         <NOTE:> UNITS: me
62         <<<<< FORMAT >>>>>
63         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
64         /
65
66          GRAVITATIONAL LOADS

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```

67
68 <<<<< FORMAT >>>>>
69 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
70 /
71
72                ADDITIONAL LUMPED MASSES
73                -----
74 <NOTE:> UNITS:  kg, m/s, m/s2
75 <<<<< FORMAT >>>>>
76 NODE  DOF-X  DOF-Y  DOF-Z  MASS   Vo-X  Vo-Y  Vo-Z   Acc-X  Acc-Y  Acc-Z   [ #NODE
d(NODE) ] /
77 /
78
79                IMPULSE, BLAST AND IMPACT FORCES
80                -----
81 <NOTE:> UNITS:  Sec, kN
82 <<<<< FORMAT >>>>>
83 NODE  DOF  T1   F1   T2   F2   T3   F3   T4   F4   [ #NODE d(NODE) ] /
84 /
85
86                GROUND ACCELERATION
87                -----
88 <NOTE:> UNITS:  Sec, G
89 <<<<< FORMAT >>>>>
90 TIME  ACC-X  ACC-Y  ACC-Z /
91 /
92

```

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : Disp. SLAVE
12         Load case file name   (8 char. max.) : LOAD3
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 0
18         No. of nodes with imposed displacements : 1
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT  LOAD MAG.(kPa)  [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT  LOAD MAG.(MPa)  Z(mm)  [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT  FINAL BOT.  INIT. BOT  FINAL TOP  INIT. TOP  ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.      TEMP.      TEMP.      TEMP.      TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE  FX  FY  FZ  MXZ  MYZ  [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51         PRESCRIBED NODE DISPLACEMENTS
52         -----
53         <<<<< FORMAT >>>>>
54         NODE  DOF  DISPL  [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         271          -3          270/
57         /
58
59         CONCRETE PRESTRAINS
60         -----
61         <NOTE:> UNITS: me
62         <<<<< FORMAT >>>>>
63         ELMT  STRAIN  [ #ELMT d(ELMT) d(STRAIN) ] x2 /
64         /
65
66         GRAVITATIONAL LOADS

```

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67                                     -----
68 <<<<< FORMAT >>>>>
69 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
70 /
71
72                                     ADDITIONAL LUMPED MASSES
73                                     -----
74 <NOTE:> UNITS:  kg, m/s, m/s2
75 <<<<< FORMAT >>>>>
76 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
77 d(NODE) ] /
78 /
79                                     IMPULSE, BLAST AND IMPACT FORCES
80                                     -----
81 <NOTE:> UNITS:  Sec, kN
82 <<<<< FORMAT >>>>>
83 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
84 /
85
86                                     GROUND ACCELERATION
87                                     -----
88 <NOTE:> UNITS:  Sec, G
89 <<<<< FORMAT >>>>>
90 TIME  ACC-X  ACC-Y  ACC-Z /
91 /
92

```

```

1
2          - - - - -
3          -   V e c T o r 4   -
4          -   A u x i l i a r y   D a t a   -
5          - - - - -
6
7  Stiffness Matrix Solver          (1-2) : 2
8  Number of Parallel Threads      : 2
9
10 Shear Analysis Mode              (1-3) : 2
11
12 Concrete Aggregate Type          (1-2) : 1
13 Concrete Conductivity            : 2.19
14 Concrete Fracture Energy         (kN/m) : 0.00
15 Prestressing Friction Coefficient (/r) : 0.30
16 Prestressing Wobble Coefficient (/m) : 0.00250
17
18 Thermal Time Stepping Factor      : 0.6666667
19
20 Time Integration Method          (1-3) : 3
21
22 1st Mode to Assign Damping        : 1
23 2nd Mode to Assign Damping        : 2
24 Damping Ratio Assignment #1       : 0.00
25 Damping Ratio Assignment #2       : 2.00
26 Ground Acceleration in x-direction : 0.0
27 Ground Acceleration in y-direction : 0.0
28 Ground Acceleration in z-direction : 0.0
29 Mass Factor due to Self-Weight    : 1.0
30
31 Tension Softening Pt 1: Strain    (me) : 0.20
32 Tension Softening Pt 1: Stress    (MPa) : 3.00
33 Tension Softening Pt 2: Strain    (me) : 0.50
34 Tension Softening Pt 2: Stress    (MPa) : 2.00
35 Tension Softening Pt 3: Strain    (me) : 1.00
36 Tension Softening Pt 3: Stress    (MPa) : 1.00
37 Tension Softening Pt 4: Strain    (me) : 2.00
38 Tension Softening Pt 4: Stress    (MPa) : 0.10
39
40 Matrix Type                      : 1
41 Fibre Type                        : 1
42 Volumetric Fraction of Fibres     (%) : 0.0
43 Fibre Length                      (mm) : 50.0
44 Fibre Diameter                    (mm) : 0.60
45 Tensile Strength of Fibre         (MPa) : 1050.0
46 Mean fibre-Matrix Bond Stress     (MPa) : 0.00
47 SLS Equivalent Strength (Euro)    (MPa) : 1.00
48 ULS Equivalent Strength (Euro)    (MPa) : 0.50
49
50
51 NOTES:
52 Concrete Aggregate Type:
53     1. Carbonate
54     2. Silicious
55
56 Concrete Fracture Energy:
57     Input 0 for program generated default value.
58
59
60 Time Stepping Factor for Heat Flow Analysis:
61     0.500 : Crank-Nicolson Scheme (Accurate)
62     0.667 : Galerkin Scheme (Stable)
63
64 Shear Analysis Mode:
65     0. Out-of-Plane Shear Strains Neglected
66     1. Multi-Layer Analysis - Uniform Shear Strain

```

```
67           2. Multi-Layer Analysis - Parabolic Shear Strain
68
69
70 Dynamic Analysis Parameters
71 -----
72
73 Dynamic Analysis Mode:
74     1. Impact
75     2. Ground Acceleration
76     3. Impulse
77
78 Newmark Beta Factor:
79     0.25: Constant Acceleration
80     1/6: Linear Acceleration
81
82 Modal Factors : Vibration modes to be considered for Rayleigh Damping
83
84 Damping Factors : Corresponding damping ratios for the above vibration modes
85
86 Ground Acceleration directions:
87     1: Acceleration applied in that direction
88     0: Acceleration not applied in that direction
89
90
91 Steel Fibre Reinforced Concrete
92 -----
93
94 Matrix type:
95     1. Concrete
96     2. Mortar
97
98 Fiber type:
99     1. Hooked
100    2. Straight
101
```

Input Files

**Slab L0.5 (Tian et al. 2008)**

Constant Gravity and Increasing Cyclic  
Lateral Loading

```

1          - - - - -
2          -   V e c T o r   -
3          -   J O B   D A T A   -
4          - - - - -
5
6 Job Title          (30 char max) : VT4SLAB
7 Job File Name     (8 char max)  : VT4SLAB
8 Date              (30 char max) :
9
10 STRUCTURE DATA
11 -----
12 Structure Type    : 4
13 File Name        (8 char max)  : STRUCT
14
15 LOADING DATA
16 -----
17 No. of Load Stages      : 20000
18 Starting Load Stage No. : 1
19 Load Series ID         (5 char max) : I
20
21 Load File Name          Factors
22 Case (8 char max) | Initial   Final   Inc   Typ  Rep  C-Inc|
23 1      LOAD5          | 1.00000 1.000000 0.00000 1   1   1.00000
24 2      LOAD4          | 1.00000 1.000000 0.00000 1   1   1.00000
25 3      LOAD3          | 0.00000 6.00000  1.0000 3   1   6.00000
26 4      NULL           | 0.00000 0.000000 0.00000 1   1   0.00000
27 5      NULL           | 0.00000 0.000000 0.00000 1   1   0.00000
28
29 ANALYSIS PARAMETERS
30 -----
31 Analysis Mode              (1-2) : 1
32 Seed File Name            (8 char max) : NULL
33 Convergence Limit         (>1.0) : 1.000005
34 Averaging Factor          (<1.0) : 0.40
35 Maximum No. of Iterations : 80
36 Convergence Criteria      (1-3) : 2
37 Results File Type         (1-4) : 2
38 Result Output Format       (1-3) : 4
39
40 MATERIAL BEHAVIOUR MODELS
41 -----
42 Concrete Compression Base Curve (0-3) : 1
43 Concrete Compression Post-Peak (0-3) : 1
44 Concrete Compression Softening (0-8) : 1
45 Concrete Tension Stiffening (0-5) : 1
46 Concrete Tension Softening (0-8) : 1
47 Concrete Tension Splitting (1-2) : 1
48 Concrete Confined Strength (0-2) : 1
49 Concrete Dilatation (0-5) : 1
50 Concrete Cracking Criterion (0-4) : 1
51 Concrete Crack Slip Check (0-2) : 1
52 Concrete Crack Width Check (0-2) : 1
53 Concrete Bond or Adhesion (0-4) : 1
54 Concrete Creep and Relaxation (0-1) : 1
55 Concrete Hysteresis (0-3) : 2
56 Reinforcement Hysteresis (0-3) : 1
57 Reinforcement Dowel Action (0-1) : 1
58 Reinforcement Buckling (0-1) : 1
59 Element Strain Histories (0-1) : 1
60 Element Slip Distortions (0-4) : 1
61 Strain Rate Effects (0-1) : 1
62 Structural Damping (0-1) : 1
63 Geometric Nonlinearity (0-1) : 1
64 Crack Allocation Process (0-1) : 1
65
66

```



```

67
68 ANALYSIS PARAMETERS:
69 -----
70 1. INTEGRATION SCHEME:
71     1. Selective (Bending - 3 ; Shear - 2)
72     2. Full      (Bending - 3 ; Shear - 3)
73     3. Reduced  (Bending - 2 ; Shear - 2)
74
75 2. CONVERGENCE CRITERIA:
76     1. Displacements - Weighted Average
77     2. Displacements - Maximum Value
78     3. Secant Moduli - RMS
79
80 3. RESULTS FILE TYPE:
81     1. ASCII and Binary Files
82     2. ASCII Files Only
83     3. Binary Files Only
84     4. Last Load Stage Only
85
86 4. RESULTS OUTPUT FORMAT
87     Print concrete strains and stresses of:
88     1. All layers at all gauss points
89     2. Top and bottom layers at all gauss points
90     3. All layers for central gauss point only
91
92 MATERIAL BEHAVIOUR MODELS:
93 -----
94 1. OUT-OF-PLANE SHEAR:
95     0. Shear Not Considered
96     1. Considered - Uniform Shear Strain
97
98 2. GEOMETRIC NONLINEARITY:
99     0. Neglect Effect
100    1. Consider Effect
101
102 3. LOAD HISTORY:
103     0. Neglect Previous Loading Effects
104     1. Consider Previous Loading Effects
105
106 4. CONCRETE COMPRESSION BASE CURVE:
107     0. Linear Elastic
108     1. Normal (Parabolic)
109     2. High Strength
110
111 5. CONCRETE COMPRESSION SOFTENING:
112     0. Neglect Effect
113     1. Vecchio-Collins 1982 Model
114     2. Vecchio-Collins 1986 Model
115     3. Vecchio 1992-A Model
116     4. Vecchio 1992-B Model
117
118 6. CONCRETE TENSION STIFFENING:
119     0. Neglect Effect
120     1. Vecchio-Collins 1982 Model
121     2. Collins-Mitchell Model
122     3. Izumo, Maekawa et al Model
123
124 7. CONCRETE TENSION SOFTENING:
125     0. Neglect Effect
126     1. Linear Softening
127     2. Linear Softening + 10% Residual Stress
128     3. 10% Residual Stress Only
129     4. Yamamoto Model (Base Curve Only)
130     5. Yamamoto Model (Strain Hardening Considered)
131
132 8. CONCRETE STRENGTH ENHANCEMENT:

```

133           0. Biaxial Effects Neglected  
134           1. Biaxial Effects Considered  
135  
136    9. CONCRETE PLASTIC STRAINS:  
137           0. Neglect Effects  
138           1. Consider Effects  
139  
140   10. CONCRETE CRACK SLIP CHECK:  
141           0. Omit Check  
142           1. Perform Check  
143  
144   11. REINFORCEMENT STRESS RESPONSE:  
145           0. Linear Elastic  
146           1. Elastic-Plastic  
147           2. Strain Haredening Considered  
148           3. Bauschinger Effects Considered  
149  
150   12. SPLITTING FAILURE CRITERIA:  
151           0. Neglect Effects  
152           1. Consider Effects  
153  
154   NOTES:  
155   -----  
156   1. This program uses metric units only.  
157  
158   2. Do not insert or delete any line.  
159

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- - - - -  
S T R U C T U R E  
- D A T A -  
- Version 1.0 -  
- - - - -

STRUCTURAL PARAMETERS  
-----

```

Structure title (30 char. max.) : SLAB
Structure file name (8 char. max.) : STRUCT
No. of reinforced concrete material types : 9
No. of truss element material types : 0
No. of bond material types : 0
No. of shell elements : 658
No. of solid elements : 0
No. of truss elements : 0
No. of link elements : 0
No. of nodal points : 2751
No. of nodes with prescribed d.o.f. : 93

```

MATERIAL SPECIFICATIONS  
-----

(A) GENERAL

```

----- <-----SHELL-----> SHELL SOLID <-----SHELL SHEAR REINFORCEMENT----->
MAT REF OOP T OS CON REIN REIN DiaZ ROZ Fyz Fuz Esz eshz
euz Agg clrT clrB Sx Sy Sz
TYP TYP SSM (mm) (mm) LYR COMP COMP (mm) (%) (MPa) (MPa) (MPa) (mm/m)
(mm/m) (mm) (mm) (mm) (mm) (mm) (mm)
1 1 0 152 0 20 4 0 8 0 580 680 200000 2.5 54.3 9.50 0 0 0 0 152
2 1 0 152 0 20 4 0 8 0 580 680 200000 2.5 54.3 9.50 0 0 0 0 152
3 1 0 152 0 20 4 0 8 0 580 680 200000 2.5 54.3 9.50 0 0 0 0 152
4 1 0 152 0 20 4 0 8 0 580 680 200000 2.5 54.3 9.50 0 0 0 0 152
5 1 0 404 0 20 7 0 10 0.4 421 655 200000 2.015 100 9.50 0 0 0 0 404
6 1 0 152 0 20 4 0 8 10 580 680 200000 2.5 54.3 9.50 0 0 0 0 152
7 1 0 152 0 20 4 0 8 10 580 680 200000 2.5 54.3 9.50 0 0 0 0 152
8 1 0 152 0 20 4 0 8 10 580 680 200000 2.5 54.3 9.50 0 0 0 0 152
9 1 0 152 0 20 4 0 8 10 580 680 200000 2.5 54.3 9.50 0 0 0 0 152
/

```

(B) CONCRETE

```

-----
MAT f'c f't Ec e'c Mu Cc kc Density
TYP (MPa) (MPa) (MPa) (mm/m) (/C) (mm^2/hr) (kg/m^3)
1 25.6 0 0 0 0 0 0 2400
2 25.6 0 0 0 0 0 0 2400
3 25.6 0 0 0 0 0 0 2400
4 25.6 0 0 0 0 0 0 2400
5 999.0 999.0 0 0 0 0 0 2400
6 51.2 0 0 0 0 0 0 2400
7 51.2 0 0 0 0 0 0 2400
8 999.0 999.0 0 0 0 0 0 2400
9 51.2 0 0 0 0 0 0 2400
/

```

(C) SMEARED REINFORCEMENT FOR SHELLS (Total no of input lines must be the same as the number listed under SHELL REIN COMP)

```

-----
MAT REF DIR d DIA As Fy Fu Es esh eu Cs Dep b/t
TYP (1-6) (deg) (mm) (mm) (mm^2/m) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)
1 1.00 90.00 18.75 10.00 328.70 441.00 634.30 200000.00 2.015 100.00 0.00
0.00 0/
59 1 1.00 0.00 30.25 10.00 328.70 441.00 634.30 200000.00 2.015 100.00 0.00
0.00 0/
60 1 1.00 0.00 124.00 10.00 349.75 441.00 634.30 200000.00 2.015 100.00 0.00
0.00 0/

```

61	1	1.00	90.00	134.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
62	2	1.00	90.00	18.75	13.00	635.47	469.00	620.50	200000.00	1.675	100.00	0.00
		0.00 0/										
63	2	1.00	0.00	30.25	10.00	328.70	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
64	2	1.00	0.00	124.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
65	2	1.00	90.00	134.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
66	3	1.00	90.00	18.75	13.00	635.47	469.00	620.50	200000.00	1.675	100.00	0.00
		0.00 0/										
67	3	1.00	0.00	30.25	13.00	635.47	469.00	620.50	200000.00	1.675	100.00	0.00
		0.00 0/										
68	3	1.00	0.00	124.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
69	3	1.00	90.00	134.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
70	4	1.00	90.00	18.75	10.00	328.70	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
71	4	1.00	0.00	30.25	13.00	635.47	469.00	620.50	200000.00	1.675	100.00	0.00
		0.00 0/										
72	4	1.00	0.00	124.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
73	4	1.00	90.00	134.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
74	5	1.00	0.00	30.1625	10.00	930.87927	469.00	655.00	200000.0	2.945	100.00	0.00
		0.00 0/										
75	5	1.00	90.00	42.0875	28.65	12708.679803	469.00	655.00	200000.0	2.945	100.00	0.00
		0.00 0.00 0/										
76	5	1.00	90.00	148.6958333	28.65	6354.339901	469.00	655.00	200000.0	2.945	100.00	0.00
		0.00 0.00 0/										
77	5	1.00	90.00	255.3041666	28.65	6354.339901	469.00	655.00	200000.0	2.945	100.00	0.00
		0.00 0.00 0/										
78	5	1.00	0.00	267.2291666	10.00	930.87927	469.00	655.00	200000.0	2.945	100.00	0.00
		0.00 0.00 0/										
79	5	1.00	90.00	361.9124999	28.65	12708.679803	469.00	655.00	200000.0	2.945	100.00	0.00
		0.00 0.00 0/										
80	5	1.00	0.00	373.8374999	10.00	930.87927	469.00	655.00	200000.0	2.945	100.00	0.00
		0.00 0.00 0/										
81	6	1.00	90.00	18.75	10.00	328.70	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
82	6	1.00	0.00	30.25	10.00	328.70	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
83	6	1.00	0.00	124.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
84	6	1.00	90.00	134.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
85	7	1.00	90.00	18.75	13.00	635.47	469.00	620.50	200000.00	1.675	100.00	0.00
		0.00 0/										
86	7	1.00	0.00	30.25	10.00	328.70	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
87	7	1.00	0.00	124.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
88	7	1.00	90.00	134.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
89	8	1.00	90.00	18.75	13.00	635.47	469.00	620.50	200000.00	1.675	100.00	0.00
		0.00 0/										
90	8	1.00	0.00	30.25	13.00	635.47	469.00	620.50	200000.00	1.675	100.00	0.00
		0.00 0/										
91	8	1.00	0.00	124.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
92	8	1.00	90.00	134.00	10.00	349.75	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										
93	9	1.00	90.00	18.75	10.00	328.70	441.00	634.30	200000.00	2.015	100.00	0.00
		0.00 0/										

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94  9  1.00   0.00  30.25  13.00  635.47  469.00  620.50  200000.00  1.675  100.00  0.00
    0.00 0/
95  9  1.00   0.00  124.00  10.00  349.75  441.00  634.30  200000.00  2.015  100.00  0.00
    0.00 0/
96  9  1.00  90.00  134.00  10.00  349.75  441.00  634.30  200000.00  2.015  100.00  0.00
    0.00 0/
97  /
98  (D) SMEARED REINFORCEMENT FOR SOLIDS (Total no of input lines must be the same as the
    number listed under SOLID REIN COMP)
99  -----
100 MAT SRF ORIENT.  RHO Db  Fy  Fu [Es  esh eu  Cs  Dep  b/t]
101 TYP TYP k l m  %  mm  MPa  MPa  MPa  me  me  /C  me
102 /
103 (E) STEEL FOR TRUSS ELEMENTS
104 -----
105 <NOTE:> TO BE USED FOR TRUSS ELEMENTS ONLY
106 MAT REF  OS DIA  As  Fy  Fu  Es  esh  eu  Cs  Dep  b/t
107 TYP (1-6) (mm) (mm) (mm2) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)
108 /
109 (F) BOND
110 -----
111 <NOTE:> TO BE USED FOR EXTERIOR/INTERIOR BONDED ELEMENTS
112 MAT REF { Ao U1 U2 U3 S1 S2 S3 }/{ CPF Cmin No. HOOK }
113 TYP TYP mm^2 MPa MPa MPa mm mm mm 0-1 mm LYR 0/1
114 /
115
116 ELEMENT INCIDENCES
117 -----
118 (A) HETEROSIS ELEMENTS
119 -----
120 <<<<< FORMAT >>>>> (counterclockwise direction)
121 ELMT INCL INC2 INC3 INC4 INC5 INC6 INC7 INC8 <INC9> [#ELMT d(ELMT) d(INC1) d(INC4)] x2 /
122 1 1808 1769 1731 1725 1719 1760 1798 1804 1762/
123 2 2490 2528 2569 2570 2572 2531 2491 2488 2529/
124 3 1701 1739 1778 1779 1782 1742 1703 1702 1740/
125 4 2591 2552 2514 2507 2505 2542 2582 2587 2547/
126 5 1887 1849 1808 1804 1798 1838 1878 1882 1843/
127 6 2412 2450 2490 2488 2491 2451 2413 2411 2449/
128 7 1778 1817 1859 1860 1865 1824 1782 1779 1821/
129 8 2514 2473 2434 2430 2424 2464 2505 2507 2469/
130 9 1966 1924 1887 1882 1878 1917 1956 1961 1921/
131 10 2333 2372 2412 2411 2413 2373 2334 2331 2371/
132 11 1859 1897 1938 1939 1942 1902 1865 1860 1900/
133 12 2434 2396 2357 2352 2345 2382 2424 2430 2389/
134 13 2045 2005 1966 1961 1956 1995 2034 2040 2001/
135 14 2254 2292 2333 2331 2334 2294 2257 2255 2293/
136 15 1938 1976 2018 2021 2022 1983 1942 1939 1978/
137 16 2357 2319 2280 2274 2270 2309 2345 2352 2313/
138 17 2122 2084 2045 2040 2034 2076 2114 2119 2080/
139 18 2176 2215 2254 2255 2257 2220 2180 2178 2216/
140 19 2018 2058 2096 2098 2100 2062 2022 2021 2059/
141 20 2096 2136 2176 2178 2180 2141 2100 2098 2138/
142 21 2280 2242 2202 2196 2192 2231 2270 2274 2236/
143 22 2202 2162 2122 2119 2114 2155 2192 2196 2156/
144 23 1719 1713 1710 1750 1791 1794 1798 1760 1755/
145 24 1710 1704 1703 1742 1782 1788 1791 1750 1744/
146 25 2572 2573 2575 2537 2497 2494 2491 2531 2535/
147 26 2575 2578 2582 2542 2505 2500 2497 2537 2539/
148 27 1782 1824 1865 1866 1867 1830 1791 1788 1827/
149 28 1798 1794 1791 1830 1867 1872 1878 1838 1831/
150 29 2505 2464 2424 2418 2416 2457 2497 2500 2461/
151 30 2491 2494 2497 2457 2416 2414 2413 2451 2453/
152 31 1865 1902 1942 1944 1949 1906 1867 1866 1904/
153 32 1878 1872 1867 1906 1949 1955 1956 1917 1914/
154 33 2034 1995 1956 1955 1949 1989 2030 2031 1992/
155 34 1949 1944 1942 1983 2022 2024 2030 1989 1985/

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156 35 2022 2062 2100 2103 2108 2067 2030 2024 2064/  
157 36 2034 2031 2030 2067 2108 2111 2114 2076 2071/  
158 37 2100 2141 2180 2183 2186 2147 2108 2103 2143/  
159 38 2114 2111 2108 2147 2186 2187 2192 2155 2149/  
160 39 2270 2231 2192 2187 2186 2223 2260 2265 2226/  
161 40 2186 2183 2180 2220 2257 2259 2260 2223 2221/  
162 41 2334 2373 2413 2414 2416 2377 2340 2337 2376/  
163 42 2416 2418 2424 2382 2345 2342 2340 2377 2381/  
164 43 2345 2309 2270 2265 2260 2301 2340 2342 2304/  
165 44 2334 2337 2340 2301 2260 2259 2257 2294 2295/  
166 45 1619 1661 1701 1702 1703 1665 1622 1621 1663/  
167 46 1731 1690 1650 1645 1640 1680 1719 1725 1684/  
168 47 1574 1532 1492 1485 1480 1520 1558 1562 1523/  
169 48 1650 1611 1574 1562 1558 1599 1640 1645 1606/  
170 49 1460 1497 1540 1542 1544 1501 1464 1461 1498/  
171 50 1540 1580 1619 1621 1622 1583 1544 1542 1581/  
172 51 1710 1713 1719 1680 1640 1635 1631 1669 1674/  
173 52 1703 1704 1710 1669 1631 1625 1622 1665 1667/  
174 53 1480 1474 1467 1508 1550 1553 1558 1520 1517/  
175 54 1550 1589 1631 1635 1640 1599 1558 1553 1593/  
176 55 1622 1625 1631 1589 1550 1545 1544 1583 1586/  
177 56 1464 1501 1544 1545 1550 1508 1467 1465 1503/  
178 57 1232 1153 1065 1063 1062 1150 1229 1230 1152/  
179 58 1237 1163 1073 1068 1065 1153 1232 1234 1158/  
180 59 1065 969 882 880 879 966 1062 1063 967/  
181 60 1073 977 889 885 882 969 1065 1068 972/  
182 61 1229 1256 1280 1276 1275 1253 1232 1230 1255/  
183 62 826 853 879 880 882 841 803 813 846/  
184 63 769 794 826 813 803 783 755 764 788/  
185 64 1280 1305 1335 1321 1309 1293 1275 1276 1299/  
186 65 699 735 769 764 755 731 705 701 734/  
187 66 619 659 699 701 705 665 624 620 663/  
188 67 1335 1361 1388 1385 1381 1345 1309 1321 1353/  
189 68 1388 1427 1460 1461 1464 1423 1381 1385 1425/  
190 69 1237 1234 1232 1253 1275 1293 1309 1274 1264/  
191 70 882 885 889 821 753 782 803 841 828/  
192 71 1480 1485 1492 1450 1406 1392 1379 1430 1441/  
193 72 785 730 682 669 654 714 774 781 720/  
194 73 1464 1465 1467 1417 1367 1376 1381 1423 1419/  
195 74 1467 1474 1480 1430 1379 1370 1367 1417 1424/  
196 75 893 838 785 781 774 851 926 909 842/  
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778 657 2737 2738 2739 2744 2749 2748 2747 2742 2743/
779 658 2739 2740 2741 2746 2751 2750 2749 2744 2745/
780 /
781 (B1) AUTO GENERATE SOLID ELEMENTS & COORDINATES FOR PRIMARY STRUCTURAL ELEMENT (BEAM OR
SLAB)
782 -----
783 <<<<< FORMAT >>>>> (Xi, Yi, & Zi must be in increasing order)(Total solid elements
generated = Sum of NElemX x Sum of NElemY x Sum of NElemZ)(Total solid nodes generated
= (Sum of NElemX +1) x (Sum of NElemY + 1) x (Sum of NElemZ + 1))
784     Xi     NElemX  Yi     NElemY   Zi     NElemZ/
785 /
786 (B2) AUTO GENERATE SOLID ELEMENTS, COORDINATES & MAT TYPES FOR EXTENSIONS TO BEAM OR
SLAB (EG: LOAD PLATES, COLUMN STUBS OR T-BEAM FLANGES, ETC)
787 -----
788 <<<<< FORMAT >>>>> (Existing coords -> X1,Y1,Z1,X2,Y2,Z2) (Length can be + or - for new
coords)
789     X1     Y1     Z1     X2     Y2     Z2     Length  NElem  Mat/
790 /
791 (B3) SOLID ELEMENTS
792 -----
793 <<<<< FORMAT >>>>> (Note that element no must follow the last shell element no)
794 ELMT INC1 INC2 INC3 INC4 INC5 INC6 INC7 INC8 [#ELMT d(ELMT) d(INC)-Xdir] [#ELMT d(ELMT)
d(INC)-Ydir] [#ELMT d(ELMT) d(INC)-Zdir]/
795 /
796 (C1) AUTO GENERATE TRUSS ELEMENTS & MATERIAL ASSIGNMENTS
797 -----
798 <<<<< FORMAT >>>>> <X2 > X1, or Y2 > Y1, etc>
799 Mat     X1     Y1     Z1     X2     Y2     Z2     NRBarX     SpacX     NRBarY
SpacY     NRBarZ     SpacZ/
800 /
801 (C2) TRUSS ELEMENTS
802 -----
803 <<<<< FORMAT >>>>>
804 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC)] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC)
]/
805 /

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806 (C3) AUTO GENERATE SPRING SUPPORT ELEMENTS, MATERIAL ASSIGNMENTS, COORDINATES, &
      RESTRAINTS
807 -----
      --
808 <<<<< FORMAT >>>>>
809 Mat Length X1      Y1      Z1      X2      Y2      Z2 [ NX      SX      NY      SY
      NZ      SZ] /
810 /
811 (D1) LINK ELEMENTS
812 -----
813 <<<<< FORMAT >>>>>
814 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC) ]/
815 /
816 MATERIAL AND ELEMENT TYPE ASSIGNMENT
817 -----
818
819 <<<<< FORMAT >>>>> (ETYPE=1 for shell, ETYPE=2 for solid, ETYPE=3 for frame or truss)
      Elmt No. MUST be in ascending order
820 ELMT MAT ETYPE [#ELMT d(ELMT)]-Xdir [#ELMT d(ELMT)]-Ydir [#ELMT d(ELMT)]-Zdir/
821 1 2 1/
822 2 2 1/
823 3 2 1/
824 4 2 1/
825 5 2 1/
826 6 2 1/
827 7 2 1/
828 8 2 1/
829 9 2 1/
830 10 2 1/
831 11 2 1/
832 12 2 1/
833 13 2 1/
834 14 2 1/
835 15 2 1/
836 16 2 1/
837 17 2 1/
838 18 2 1/
839 19 2 1/
840 20 2 1/
841 21 2 1/
842 22 2 1/
843 23 2 1/
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846 26 2 1/
847 27 2 1/
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COORDINATES

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1483 <<<<< FORMAT >>>>> (units = mm)
1484 TOP or C/L <BOT>
1485 NODE TYPE X Y Z <X Y Z> [#NODE d(NODE) d(X) d(Y) d(Z)]-Xdir [#NODE
d(NODE) d(X) d(Y) d(Z)]-Ydir [#NODE d(NODE) d(X) d(Y) d(Z)]-Zdir
1486 1 1 0.000 4267.000 76.000 0.000 4267.000 -76.000/
1487 2 1 0.000 4209.273 76.000 0.000 4209.273 -76.000/
1488 3 1 63.750 4267.000 76.000 63.750 4267.000 -76.000/
1489 4 1 63.405 4209.267 76.000 63.405 4209.267 -76.000/
1490 5 1 0.000 4151.545 76.000 0.000 4151.545 -76.000/
1491 6 1 127.500 4267.000 76.000 127.500 4267.000 -76.000/
1492 7 1 63.061 4151.534 76.000 63.061 4151.534 -76.000/
1493 8 1 126.811 4209.261 76.000 126.811 4209.261 -76.000/
1494 9 1 126.122 4151.522 76.000 126.122 4151.522 -76.000/
1495 10 1 0.000 4093.818 76.000 0.000 4093.818 -76.000/
1496 11 1 63.195 4093.733 76.000 63.195 4093.733 -76.000/
1497 12 1 191.250 4267.000 76.000 191.250 4267.000 -76.000/
1498 13 1 190.771 4209.292 76.000 190.771 4209.292 -76.000/
1499 14 1 126.390 4093.648 76.000 126.390 4093.648 -76.000/
1500 15 1 190.292 4151.584 76.000 190.292 4151.584 -76.000/
1501 16 1 0.000 4036.091 76.000 0.000 4036.091 -76.000/
1502 17 1 63.329 4035.932 76.000 63.329 4035.932 -76.000/
1503 18 1 255.000 4267.000 76.000 255.000 4267.000 -76.000/
1504 19 1 190.363 4093.695 76.000 190.363 4093.695 -76.000/
1505 20 1 254.731 4209.323 76.000 254.731 4209.323 -76.000/
1506 21 1 126.658 4035.774 76.000 126.658 4035.774 -76.000/
1507 22 1 254.462 4151.646 76.000 254.462 4151.646 -76.000/
1508 23 1 0.000 3978.364 76.000 0.000 3978.364 -76.000/
1509 24 1 63.239 3978.036 76.000 63.239 3978.036 -76.000/
1510 25 1 190.435 4035.806 76.000 190.435 4035.806 -76.000/
1511 26 1 254.337 4093.743 76.000 254.337 4093.743 -76.000/
1512 27 1 126.478 3977.708 76.000 126.478 3977.708 -76.000/
1513 28 1 318.750 4267.000 76.000 318.750 4267.000 -76.000/
1514 29 1 318.619 4209.467 76.000 318.619 4209.467 -76.000/
1515 30 1 318.489 4151.935 76.000 318.489 4151.935 -76.000/
1516 31 1 254.212 4035.839 76.000 254.212 4035.839 -76.000/
1517 32 1 190.399 3977.734 76.000 190.399 3977.734 -76.000/
1518 33 1 0.000 3920.636 76.000 0.000 3920.636 -76.000/
1519 34 1 63.149 3920.140 76.000 63.149 3920.140 -76.000/
1520 35 1 318.293 4093.913 76.000 318.293 4093.913 -76.000/
1521 36 1 126.299 3919.643 76.000 126.299 3919.643 -76.000/
1522 37 1 382.500 4267.000 76.000 382.500 4267.000 -76.000/
1523 38 1 254.319 3977.759 76.000 254.319 3977.759 -76.000/
1524 39 1 382.508 4209.612 76.000 382.508 4209.612 -76.000/
1525 40 1 318.097 4035.892 76.000 318.097 4035.892 -76.000/
1526 41 1 190.362 3919.661 76.000 190.362 3919.661 -76.000/

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1527	42	1	382.515	4152.223	76.000	382.515	4152.223	-76.000/
1528	43	1	0.000	3862.909	76.000	0.000	3862.909	-76.000/
1529	44	1	63.609	3862.509	76.000	63.609	3862.509	-76.000/
1530	45	1	382.249	4094.084	76.000	382.249	4094.084	-76.000/
1531	46	1	127.218	3862.109	76.000	127.218	3862.109	-76.000/
1532	47	1	318.321	3977.584	76.000	318.321	3977.584	-76.000/
1533	48	1	254.426	3919.679	76.000	254.426	3919.679	-76.000/
1534	49	1	446.250	4267.000	76.000	446.250	4267.000	-76.000/
1535	50	1	381.983	4035.945	76.000	381.983	4035.945	-76.000/
1536	51	1	191.213	3861.877	76.000	191.213	3861.877	-76.000/
1537	52	1	446.254	4209.442	76.000	446.254	4209.442	-76.000/
1538	53	1	446.258	4151.884	76.000	446.258	4151.884	-76.000/
1539	54	1	0.000	3805.182	76.000	0.000	3805.182	-76.000/
1540	55	1	64.069	3804.879	76.000	64.069	3804.879	-76.000/
1541	56	1	318.544	3919.277	76.000	318.544	3919.277	-76.000/
1542	57	1	446.125	4093.951	76.000	446.125	4093.951	-76.000/
1543	58	1	255.207	3861.644	76.000	255.207	3861.644	-76.000/
1544	59	1	382.322	3977.409	76.000	382.322	3977.409	-76.000/
1545	60	1	128.137	3804.575	76.000	128.137	3804.575	-76.000/
1546	61	1	192.063	3804.092	76.000	192.063	3804.092	-76.000/
1547	62	1	445.991	4036.018	76.000	445.991	4036.018	-76.000/
1548	63	1	510.000	4267.000	76.000	510.000	4267.000	-76.000/
1549	64	1	510.000	4209.273	76.000	510.000	4209.273	-76.000/
1550	65	1	319.154	3861.566	76.000	319.154	3861.566	-76.000/
1551	66	1	382.662	3918.874	76.000	382.662	3918.874	-76.000/
1552	67	1	0.000	3747.455	76.000	0.000	3747.455	-76.000/
1553	68	1	510.000	4151.545	76.000	510.000	4151.545	-76.000/
1554	69	1	64.272	3747.231	76.000	64.272	3747.231	-76.000/
1555	70	1	255.988	3803.609	76.000	255.988	3803.609	-76.000/
1556	71	1	446.161	3977.886	76.000	446.161	3977.886	-76.000/
1557	72	1	128.544	3747.008	76.000	128.544	3747.008	-76.000/
1558	73	1	510.000	4093.818	76.000	510.000	4093.818	-76.000/
1559	74	1	192.648	3746.684	76.000	192.648	3746.684	-76.000/
1560	75	1	383.100	3861.487	76.000	383.100	3861.487	-76.000/
1561	76	1	510.000	4036.091	76.000	510.000	4036.091	-76.000/
1562	77	1	319.764	3803.855	76.000	319.764	3803.855	-76.000/
1563	78	1	446.331	3919.755	76.000	446.331	3919.755	-76.000/
1564	79	1	568.917	4267.000	76.000	568.917	4267.000	-76.000/
1565	80	1	568.514	4210.122	76.000	568.514	4210.122	-76.000/
1566	81	1	0.000	3689.727	76.000	0.000	3689.727	-76.000/
1567	82	1	568.111	4153.245	76.000	568.111	4153.245	-76.000/
1568	83	1	256.752	3746.360	76.000	256.752	3746.360	-76.000/
1569	84	1	64.476	3689.584	76.000	64.476	3689.584	-76.000/
1570	85	1	510.000	3978.364	76.000	510.000	3978.364	-76.000/
1571	86	1	128.951	3689.440	76.000	128.951	3689.440	-76.000/
1572	87	1	567.136	4097.659	76.000	567.136	4097.659	-76.000/
1573	88	1	383.539	3804.101	76.000	383.539	3804.101	-76.000/
1574	89	1	446.550	3862.198	76.000	446.550	3862.198	-76.000/
1575	90	1	193.233	3689.275	76.000	193.233	3689.275	-76.000/
1576	91	1	566.160	4042.074	76.000	566.160	4042.074	-76.000/
1577	92	1	320.311	3746.514	76.000	320.311	3746.514	-76.000/
1578	93	1	510.000	3920.636	76.000	510.000	3920.636	-76.000/
1579	94	1	562.955	3991.696	76.000	562.955	3991.696	-76.000/
1580	95	1	627.833	4267.000	76.000	627.833	4267.000	-76.000/
1581	96	1	627.028	4210.972	76.000	627.028	4210.972	-76.000/
1582	97	1	257.515	3689.111	76.000	257.515	3689.111	-76.000/
1583	98	1	0.000	3632.000	76.000	0.000	3632.000	-76.000/
1584	99	1	626.222	4154.944	76.000	626.222	4154.944	-76.000/
1585	100	1	64.776	3631.946	76.000	64.776	3631.946	-76.000/
1586	101	1	446.769	3804.641	76.000	446.769	3804.641	-76.000/
1587	102	1	624.271	4101.501	76.000	624.271	4101.501	-76.000/
1588	103	1	383.871	3746.668	76.000	383.871	3746.668	-76.000/
1589	104	1	559.750	3941.318	76.000	559.750	3941.318	-76.000/
1590	105	1	129.551	3631.893	76.000	129.551	3631.893	-76.000/
1591	106	1	510.000	3862.909	76.000	510.000	3862.909	-76.000/
1592	107	1	622.320	4048.058	76.000	622.320	4048.058	-76.000/

1593	108	1	320.859	3689.173	76.000	320.859	3689.173	-76.000/
1594	109	1	193.731	3631.781	76.000	193.731	3631.781	-76.000/
1595	110	1	615.910	4005.029	76.000	615.910	4005.029	-76.000/
1596	111	1	609.500	3962.000	76.000	609.500	3962.000	-76.000/
1597	112	1	563.018	3876.236	76.000	563.018	3876.236	-76.000/
1598	113	1	446.935	3747.061	76.000	446.935	3747.061	-76.000/
1599	114	1	257.910	3631.670	76.000	257.910	3631.670	-76.000/
1600	115	1	686.750	4267.000	76.000	686.750	4267.000	-76.000/
1601	116	1	510.000	3805.182	76.000	510.000	3805.182	-76.000/
1602	117	1	686.115	4210.529	76.000	686.115	4210.529	-76.000/
1603	118	1	0.000	3574.273	76.000	0.000	3574.273	-76.000/
1604	119	1	384.202	3689.235	76.000	384.202	3689.235	-76.000/
1605	120	1	685.479	4154.057	76.000	685.479	4154.057	-76.000/
1606	121	1	65.076	3574.309	76.000	65.076	3574.309	-76.000/
1607	122	1	683.988	4099.633	76.000	683.988	4099.633	-76.000/
1608	123	1	130.152	3574.346	76.000	130.152	3574.346	-76.000/
1609	124	1	321.444	3631.643	76.000	321.444	3631.643	-76.000/
1610	125	1	682.496	4045.209	76.000	682.496	4045.209	-76.000/
1611	126	1	194.228	3574.287	76.000	194.228	3574.287	-76.000/
1612	127	1	616.035	3889.563	76.000	616.035	3889.563	-76.000/
1613	128	1	566.285	3811.154	76.000	566.285	3811.154	-76.000/
1614	129	1	510.000	3747.455	76.000	510.000	3747.455	-76.000/
1615	130	1	447.101	3689.481	76.000	447.101	3689.481	-76.000/
1616	131	1	678.561	3996.545	76.000	678.561	3996.545	-76.000/
1617	132	1	258.305	3574.228	76.000	258.305	3574.228	-76.000/
1618	133	1	384.979	3631.617	76.000	384.979	3631.617	-76.000/
1619	134	1	745.667	4267.000	76.000	745.667	4267.000	-76.000/
1620	135	1	674.625	3947.880	76.000	674.625	3947.880	-76.000/
1621	136	1	745.202	4210.086	76.000	745.202	4210.086	-76.000/
1622	137	1	0.000	3516.545	76.000	0.000	3516.545	-76.000/
1623	138	1	65.122	3516.687	76.000	65.122	3516.687	-76.000/
1624	139	1	744.736	4153.171	76.000	744.736	4153.171	-76.000/
1625	140	1	130.244	3516.829	76.000	130.244	3516.829	-76.000/
1626	141	1	743.704	4097.766	76.000	743.704	4097.766	-76.000/
1627	142	1	322.030	3574.114	76.000	322.030	3574.114	-76.000/
1628	143	1	567.269	3751.273	76.000	567.269	3751.273	-76.000/
1629	144	1	622.571	3817.127	76.000	622.571	3817.127	-76.000/
1630	145	1	510.000	3689.727	76.000	510.000	3689.727	-76.000/
1631	146	1	194.265	3516.804	76.000	194.265	3516.804	-76.000/
1632	147	1	742.673	4042.361	76.000	742.673	4042.361	-76.000/
1633	148	1	447.490	3631.808	76.000	447.490	3631.808	-76.000/
1634	149	1	678.644	3881.167	76.000	678.644	3881.167	-76.000/
1635	150	1	741.211	3988.061	76.000	741.211	3988.061	-76.000/
1636	151	1	385.756	3573.999	76.000	385.756	3573.999	-76.000/
1637	152	1	258.286	3516.778	76.000	258.286	3516.778	-76.000/
1638	153	1	804.583	4267.000	76.000	804.583	4267.000	-76.000/
1639	154	1	804.351	4209.679	76.000	804.351	4209.679	-76.000/
1640	155	1	624.538	3755.092	76.000	624.538	3755.092	-76.000/
1641	156	1	0.000	3458.818	76.000	0.000	3458.818	-76.000/
1642	157	1	568.252	3691.392	76.000	568.252	3691.392	-76.000/
1643	158	1	65.169	3459.065	76.000	65.169	3459.065	-76.000/
1644	159	1	739.750	3933.760	76.000	739.750	3933.760	-76.000/
1645	160	1	804.118	4152.358	76.000	804.118	4152.358	-76.000/
1646	161	1	510.000	3632.000	76.000	510.000	3632.000	-76.000/
1647	162	1	321.880	3516.657	76.000	321.880	3516.657	-76.000/
1648	163	1	130.337	3459.313	76.000	130.337	3459.313	-76.000/
1649	164	1	682.664	3814.453	76.000	682.664	3814.453	-76.000/
1650	165	1	803.602	4095.792	76.000	803.602	4095.792	-76.000/
1651	166	1	447.878	3574.136	76.000	447.878	3574.136	-76.000/
1652	167	1	194.302	3459.320	76.000	194.302	3459.320	-76.000/
1653	168	1	803.086	4039.226	76.000	803.086	4039.226	-76.000/
1654	169	1	741.253	3872.770	76.000	741.253	3872.770	-76.000/
1655	170	1	385.473	3516.536	76.000	385.473	3516.536	-76.000/
1656	171	1	258.267	3459.328	76.000	258.267	3459.328	-76.000/
1657	172	1	626.505	3693.056	76.000	626.505	3693.056	-76.000/
1658	173	1	802.356	3983.212	76.000	802.356	3983.212	-76.000/

1659	174	1	568.686	3632.844	76.000	568.686	3632.844	-76.000/
1660	175	1	684.260	3753.254	76.000	684.260	3753.254	-76.000/
1661	176	1	510.000	3574.273	76.000	510.000	3574.273	-76.000/
1662	177	1	863.500	4267.000	76.000	863.500	4267.000	-76.000/
1663	178	1	863.500	4209.273	76.000	863.500	4209.273	-76.000/
1664	179	1	0.000	3401.091	76.000	0.000	3401.091	-76.000/
1665	180	1	64.840	3401.662	76.000	64.840	3401.662	-76.000/
1666	181	1	321.729	3459.201	76.000	321.729	3459.201	-76.000/
1667	182	1	801.625	3927.198	76.000	801.625	3927.198	-76.000/
1668	183	1	742.757	3811.780	76.000	742.757	3811.780	-76.000/
1669	184	1	863.500	4151.545	76.000	863.500	4151.545	-76.000/
1670	185	1	447.737	3516.541	76.000	447.737	3516.541	-76.000/
1671	186	1	129.681	3402.234	76.000	129.681	3402.234	-76.000/
1672	187	1	863.500	4093.818	76.000	863.500	4093.818	-76.000/
1673	188	1	193.790	3402.197	76.000	193.790	3402.197	-76.000/
1674	189	1	627.373	3633.688	76.000	627.373	3633.688	-76.000/
1675	190	1	863.500	4036.091	76.000	863.500	4036.091	-76.000/
1676	191	1	685.856	3692.054	76.000	685.856	3692.054	-76.000/
1677	192	1	385.191	3459.074	76.000	385.191	3459.074	-76.000/
1678	193	1	802.377	3867.839	76.000	802.377	3867.839	-76.000/
1679	194	1	569.120	3574.297	76.000	569.120	3574.297	-76.000/
1680	195	1	257.899	3402.161	76.000	257.899	3402.161	-76.000/
1681	196	1	743.983	3751.415	76.000	743.983	3751.415	-76.000/
1682	197	1	510.000	3516.545	76.000	510.000	3516.545	-76.000/
1683	198	1	863.500	3978.364	76.000	863.500	3978.364	-76.000/
1684	199	1	921.227	4267.000	76.000	921.227	4267.000	-76.000/
1685	200	1	921.031	4209.518	76.000	921.031	4209.518	-76.000/
1686	201	1	321.385	3401.895	76.000	321.385	3401.895	-76.000/
1687	202	1	0.000	3343.364	76.000	0.000	3343.364	-76.000/
1688	203	1	447.596	3458.946	76.000	447.596	3458.946	-76.000/
1689	204	1	803.129	3808.481	76.000	803.129	3808.481	-76.000/
1690	205	1	64.512	3344.259	76.000	64.512	3344.259	-76.000/
1691	206	1	920.836	4152.036	76.000	920.836	4152.036	-76.000/
1692	207	1	863.500	3920.636	76.000	863.500	3920.636	-76.000/
1693	208	1	129.024	3345.155	76.000	129.024	3345.155	-76.000/
1694	209	1	686.477	3633.254	76.000	686.477	3633.254	-76.000/
1695	210	1	628.241	3574.321	76.000	628.241	3574.321	-76.000/
1696	211	1	920.678	4094.599	76.000	920.678	4094.599	-76.000/
1697	212	1	745.208	3691.051	76.000	745.208	3691.051	-76.000/
1698	213	1	193.278	3345.074	76.000	193.278	3345.074	-76.000/
1699	214	1	569.300	3516.496	76.000	569.300	3516.496	-76.000/
1700	215	1	384.871	3401.628	76.000	384.871	3401.628	-76.000/
1701	216	1	920.521	4037.163	76.000	920.521	4037.163	-76.000/
1702	217	1	863.500	3862.909	76.000	863.500	3862.909	-76.000/
1703	218	1	510.000	3458.818	76.000	510.000	3458.818	-76.000/
1704	219	1	803.741	3749.435	76.000	803.741	3749.435	-76.000/
1705	220	1	257.531	3344.994	76.000	257.531	3344.994	-76.000/
1706	221	1	920.403	3979.602	76.000	920.403	3979.602	-76.000/
1707	222	1	447.435	3401.359	76.000	447.435	3401.359	-76.000/
1708	223	1	687.098	3574.454	76.000	687.098	3574.454	-76.000/
1709	224	1	321.041	3344.588	76.000	321.041	3344.588	-76.000/
1710	225	1	745.582	3632.819	76.000	745.582	3632.819	-76.000/
1711	226	1	978.955	4267.000	76.000	978.955	4267.000	-76.000/
1712	227	1	628.599	3516.447	76.000	628.599	3516.447	-76.000/
1713	228	1	863.500	3805.182	76.000	863.500	3805.182	-76.000/
1714	229	1	978.563	4209.763	76.000	978.563	4209.763	-76.000/
1715	230	1	0.000	3285.636	76.000	0.000	3285.636	-76.000/
1716	231	1	64.169	3286.438	76.000	64.169	3286.438	-76.000/
1717	232	1	920.285	3922.042	76.000	920.285	3922.042	-76.000/
1718	233	1	978.171	4152.526	76.000	978.171	4152.526	-76.000/
1719	234	1	128.337	3287.240	76.000	128.337	3287.240	-76.000/
1720	235	1	569.479	3458.696	76.000	569.479	3458.696	-76.000/
1721	236	1	804.354	3690.389	76.000	804.354	3690.389	-76.000/
1722	237	1	977.856	4095.380	76.000	977.856	4095.380	-76.000/
1723	238	1	192.297	3287.460	76.000	192.297	3287.460	-76.000/
1724	239	1	384.551	3344.182	76.000	384.551	3344.182	-76.000/

1725	240	1	977.541	4038.235	76.000	977.541	4038.235	-76.000/
1726	241	1	920.269	3864.276	76.000	920.269	3864.276	-76.000/
1727	242	1	510.000	3401.091	76.000	510.000	3401.091	-76.000/
1728	243	1	863.500	3747.455	76.000	863.500	3747.455	-76.000/
1729	244	1	256.257	3287.681	76.000	256.257	3287.681	-76.000/
1730	245	1	687.507	3516.548	76.000	687.507	3516.548	-76.000/
1731	246	1	745.956	3574.588	76.000	745.956	3574.588	-76.000/
1732	247	1	977.305	3980.841	76.000	977.305	3980.841	-76.000/
1733	248	1	628.958	3458.574	76.000	628.958	3458.574	-76.000/
1734	249	1	804.541	3632.410	76.000	804.541	3632.410	-76.000/
1735	250	1	447.275	3343.773	76.000	447.275	3343.773	-76.000/
1736	251	1	920.254	3806.510	76.000	920.254	3806.510	-76.000/
1737	252	1	320.057	3287.215	76.000	320.057	3287.215	-76.000/
1738	253	1	977.069	3923.448	76.000	977.069	3923.448	-76.000/
1739	254	1	569.442	3401.244	76.000	569.442	3401.244	-76.000/
1740	255	1	1036.682	4267.000	76.000	1036.682	4267.000	-76.000/
1741	256	1	1036.056	4209.962	76.000	1036.056	4209.962	-76.000/
1742	257	1	863.500	3689.727	76.000	863.500	3689.727	-76.000/
1743	258	1	0.000	3227.909	76.000	0.000	3227.909	-76.000/
1744	259	1	63.825	3228.617	76.000	63.825	3228.617	-76.000/
1745	260	1	1035.430	4152.924	76.000	1035.430	4152.924	-76.000/
1746	261	1	127.651	3229.326	76.000	127.651	3229.326	-76.000/
1747	262	1	1034.948	4095.971	76.000	1034.948	4095.971	-76.000/
1748	263	1	383.856	3286.749	76.000	383.856	3286.749	-76.000/
1749	264	1	191.317	3229.846	76.000	191.317	3229.846	-76.000/
1750	265	1	510.000	3343.364	76.000	510.000	3343.364	-76.000/
1751	266	1	977.039	3865.643	76.000	977.039	3865.643	-76.000/
1752	267	1	920.453	3748.508	76.000	920.453	3748.508	-76.000/
1753	268	1	746.415	3516.648	76.000	746.415	3516.648	-76.000/
1754	269	1	1034.467	4039.018	76.000	1034.467	4039.018	-76.000/
1755	270	1	687.916	3458.641	76.000	687.916	3458.641	-76.000/
1756	271	1	804.728	3574.430	76.000	804.728	3574.430	-76.000/
1757	272	1	254.984	3230.367	76.000	254.984	3230.367	-76.000/
1758	273	1	628.883	3401.398	76.000	628.883	3401.398	-76.000/
1759	274	1	863.500	3632.000	76.000	863.500	3632.000	-76.000/
1760	275	1	1034.479	3981.301	76.000	1034.479	3981.301	-76.000/
1761	276	1	446.928	3286.193	76.000	446.928	3286.193	-76.000/
1762	277	1	977.008	3807.839	76.000	977.008	3807.839	-76.000/
1763	278	1	569.404	3343.792	76.000	569.404	3343.792	-76.000/
1764	279	1	319.073	3229.841	76.000	319.073	3229.841	-76.000/
1765	280	1	920.652	3690.506	76.000	920.652	3690.506	-76.000/
1766	281	1	1034.491	3923.585	76.000	1034.491	3923.585	-76.000/
1767	282	1	1094.409	4267.000	76.000	1094.409	4267.000	-76.000/
1768	283	1	1093.549	4210.162	76.000	1093.549	4210.162	-76.000/
1769	284	1	0.000	3170.182	76.000	0.000	3170.182	-76.000/
1770	285	1	63.562	3170.891	76.000	63.562	3170.891	-76.000/
1771	286	1	1092.688	4153.323	76.000	1092.688	4153.323	-76.000/
1772	287	1	804.957	3516.597	76.000	804.957	3516.597	-76.000/
1773	288	1	746.874	3458.708	76.000	746.874	3458.708	-76.000/
1774	289	1	127.124	3171.599	76.000	127.124	3171.599	-76.000/
1775	290	1	1092.040	4096.562	76.000	1092.040	4096.562	-76.000/
1776	291	1	687.750	3401.321	76.000	687.750	3401.321	-76.000/
1777	292	1	977.406	3749.561	76.000	977.406	3749.561	-76.000/
1778	293	1	510.000	3285.636	76.000	510.000	3285.636	-76.000/
1779	294	1	383.161	3229.316	76.000	383.161	3229.316	-76.000/
1780	295	1	863.500	3574.273	76.000	863.500	3574.273	-76.000/
1781	296	1	1034.528	3865.752	76.000	1034.528	3865.752	-76.000/
1782	297	1	190.864	3171.891	76.000	190.864	3171.891	-76.000/
1783	298	1	1091.392	4039.801	76.000	1091.392	4039.801	-76.000/
1784	299	1	628.808	3344.221	76.000	628.808	3344.221	-76.000/
1785	300	1	920.899	3632.720	76.000	920.899	3632.720	-76.000/
1786	301	1	254.604	3172.183	76.000	254.604	3172.183	-76.000/
1787	302	1	1091.653	3981.761	76.000	1091.653	3981.761	-76.000/
1788	303	1	446.581	3228.612	76.000	446.581	3228.612	-76.000/
1789	304	1	1034.565	3807.919	76.000	1034.565	3807.919	-76.000/
1790	305	1	569.291	3286.090	76.000	569.291	3286.090	-76.000/

1791	306	1	977.805	3691.284	76.000	977.805	3691.284	-76.000/
1792	307	1	318.593	3171.877	76.000	318.593	3171.877	-76.000/
1793	308	1	805.187	3458.763	76.000	805.187	3458.763	-76.000/
1794	309	1	746.616	3401.244	76.000	746.616	3401.244	-76.000/
1795	310	1	863.500	3516.545	76.000	863.500	3516.545	-76.000/
1796	311	1	1091.913	3923.721	76.000	1091.913	3923.721	-76.000/
1797	312	1	687.583	3344.000	76.000	687.583	3344.000	-76.000/
1798	313	1	1152.136	4267.000	76.000	1152.136	4267.000	-76.000/
1799	314	1	921.147	3574.935	76.000	921.147	3574.935	-76.000/
1800	315	1	1151.123	4210.256	76.000	1151.123	4210.256	-76.000/
1801	316	1	0.000	3112.455	76.000	0.000	3112.455	-76.000/
1802	317	1	63.298	3113.164	76.000	63.298	3113.164	-76.000/
1803	318	1	1150.109	4153.511	76.000	1150.109	4153.511	-76.000/
1804	319	1	1034.999	3749.776	76.000	1034.999	3749.776	-76.000/
1805	320	1	510.000	3227.909	76.000	510.000	3227.909	-76.000/
1806	321	1	126.596	3113.873	76.000	126.596	3113.873	-76.000/
1807	322	1	382.582	3171.571	76.000	382.582	3171.571	-76.000/
1808	323	1	1149.596	4096.547	76.000	1149.596	4096.547	-76.000/
1809	324	1	1092.017	3865.861	76.000	1092.017	3865.861	-76.000/
1810	325	1	628.581	3286.543	76.000	628.581	3286.543	-76.000/
1811	326	1	978.299	3633.441	76.000	978.299	3633.441	-76.000/
1812	327	1	190.410	3113.936	76.000	190.410	3113.936	-76.000/
1813	328	1	1149.082	4039.583	76.000	1149.082	4039.583	-76.000/
1814	329	1	254.225	3113.999	76.000	254.225	3113.999	-76.000/
1815	330	1	805.058	3401.167	76.000	805.058	3401.167	-76.000/
1816	331	1	863.500	3458.818	76.000	863.500	3458.818	-76.000/
1817	332	1	446.291	3170.877	76.000	446.291	3170.877	-76.000/
1818	333	1	1149.287	3981.631	76.000	1149.287	3981.631	-76.000/
1819	334	1	569.177	3228.387	76.000	569.177	3228.387	-76.000/
1820	335	1	1035.433	3691.633	76.000	1035.433	3691.633	-76.000/
1821	336	1	1092.121	3808.000	76.000	1092.121	3808.000	-76.000/
1822	337	1	746.358	3343.779	76.000	746.358	3343.779	-76.000/
1823	338	1	921.250	3517.226	76.000	921.250	3517.226	-76.000/
1824	339	1	318.114	3113.913	76.000	318.114	3113.913	-76.000/
1825	340	1	687.443	3286.423	76.000	687.443	3286.423	-76.000/
1826	341	1	978.793	3575.597	76.000	978.793	3575.597	-76.000/
1827	342	1	1149.492	3923.679	76.000	1149.492	3923.679	-76.000/
1828	343	1	1092.591	3749.991	76.000	1092.591	3749.991	-76.000/
1829	344	1	510.000	3170.182	76.000	510.000	3170.182	-76.000/
1830	345	1	1209.864	4267.000	76.000	1209.864	4267.000	-76.000/
1831	346	1	1208.697	4210.350	76.000	1208.697	4210.350	-76.000/
1832	347	1	0.000	3054.727	76.000	0.000	3054.727	-76.000/
1833	348	1	1207.530	4153.700	76.000	1207.530	4153.700	-76.000/
1834	349	1	628.354	3228.866	76.000	628.354	3228.866	-76.000/
1835	350	1	63.524	3055.082	76.000	63.524	3055.082	-76.000/
1836	351	1	1036.080	3633.870	76.000	1036.080	3633.870	-76.000/
1837	352	1	382.003	3113.827	76.000	382.003	3113.827	-76.000/
1838	353	1	1149.724	3865.639	76.000	1149.724	3865.639	-76.000/
1839	354	1	127.048	3055.436	76.000	127.048	3055.436	-76.000/
1840	355	1	1207.151	4096.532	76.000	1207.151	4096.532	-76.000/
1841	356	1	863.500	3401.091	76.000	863.500	3401.091	-76.000/
1842	357	1	804.929	3343.571	76.000	804.929	3343.571	-76.000/
1843	358	1	921.353	3459.517	76.000	921.353	3459.517	-76.000/
1844	359	1	190.830	3055.468	76.000	190.830	3055.468	-76.000/
1845	360	1	1206.772	4039.365	76.000	1206.772	4039.365	-76.000/
1846	361	1	746.305	3286.302	76.000	746.305	3286.302	-76.000/
1847	362	1	979.000	3517.907	76.000	979.000	3517.907	-76.000/
1848	363	1	1093.062	3691.983	76.000	1093.062	3691.983	-76.000/
1849	364	1	569.112	3170.648	76.000	569.112	3170.648	-76.000/
1850	365	1	446.002	3113.141	76.000	446.002	3113.141	-76.000/
1851	366	1	254.612	3055.500	76.000	254.612	3055.500	-76.000/
1852	367	1	1149.955	3807.598	76.000	1149.955	3807.598	-76.000/
1853	368	1	1206.921	3981.501	76.000	1206.921	3981.501	-76.000/
1854	369	1	687.303	3228.845	76.000	687.303	3228.845	-76.000/
1855	370	1	1036.727	3576.106	76.000	1036.727	3576.106	-76.000/
1856	371	1	318.432	3055.457	76.000	318.432	3055.457	-76.000/

1857	372	1	1207.071	3923.637	76.000	1207.071	3923.637	-76.000/
1858	373	1	1150.517	3749.210	76.000	1150.517	3749.210	-76.000/
1859	374	1	510.000	3112.455	76.000	510.000	3112.455	-76.000/
1860	375	1	628.224	3171.113	76.000	628.224	3171.113	-76.000/
1861	376	1	1093.861	3634.299	76.000	1093.861	3634.299	-76.000/
1862	377	1	921.570	3401.662	76.000	921.570	3401.662	-76.000/
1863	378	1	863.500	3343.364	76.000	863.500	3343.364	-76.000/
1864	379	1	1267.591	4267.000	76.000	1267.591	4267.000	-76.000/
1865	380	1	1266.533	4210.216	76.000	1266.533	4210.216	-76.000/
1866	381	1	979.206	3460.217	76.000	979.206	3460.217	-76.000/
1867	382	1	804.902	3285.969	76.000	804.902	3285.969	-76.000/
1868	383	1	0.000	2997.000	76.000	0.000	2997.000	-76.000/
1869	384	1	382.252	3055.413	76.000	382.252	3055.413	-76.000/
1870	385	1	1265.474	4153.432	76.000	1265.474	4153.432	-76.000/
1871	386	1	63.750	2997.000	76.000	63.750	2997.000	-76.000/
1872	387	1	1207.430	3865.417	76.000	1207.430	3865.417	-76.000/
1873	388	1	127.500	2997.000	76.000	127.500	2997.000	-76.000/
1874	389	1	1265.248	4096.089	76.000	1265.248	4096.089	-76.000/
1875	390	1	746.251	3228.824	76.000	746.251	3228.824	-76.000/
1876	391	1	1037.202	3518.488	76.000	1037.202	3518.488	-76.000/
1877	392	1	191.250	2997.000	76.000	191.250	2997.000	-76.000/
1878	393	1	1265.022	4038.746	76.000	1265.022	4038.746	-76.000/
1879	394	1	569.047	3112.908	76.000	569.047	3112.908	-76.000/
1880	395	1	1151.078	3690.821	76.000	1151.078	3690.821	-76.000/
1881	396	1	446.126	3055.070	76.000	446.126	3055.070	-76.000/
1882	397	1	1207.789	3807.197	76.000	1207.789	3807.197	-76.000/
1883	398	1	687.364	3171.095	76.000	687.364	3171.095	-76.000/
1884	399	1	1094.661	3576.615	76.000	1094.661	3576.615	-76.000/
1885	400	1	255.000	2997.000	76.000	255.000	2997.000	-76.000/
1886	401	1	1265.269	3980.820	76.000	1265.269	3980.820	-76.000/
1887	402	1	921.786	3343.807	76.000	921.786	3343.807	-76.000/
1888	403	1	979.639	3402.233	76.000	979.639	3402.233	-76.000/
1889	404	1	863.500	3285.636	76.000	863.500	3285.636	-76.000/
1890	405	1	318.750	2997.000	76.000	318.750	2997.000	-76.000/
1891	406	1	1265.515	3922.893	76.000	1265.515	3922.893	-76.000/
1892	407	1	628.095	3113.361	76.000	628.095	3113.361	-76.000/
1893	408	1	804.876	3228.367	76.000	804.876	3228.367	-76.000/
1894	409	1	1037.678	3460.870	76.000	1037.678	3460.870	-76.000/
1895	410	1	1151.841	3633.407	76.000	1151.841	3633.407	-76.000/
1896	411	1	1208.442	3748.428	76.000	1208.442	3748.428	-76.000/
1897	412	1	510.000	3054.727	76.000	510.000	3054.727	-76.000/
1898	413	1	1325.318	4267.000	76.000	1325.318	4267.000	-76.000/
1899	414	1	1324.368	4210.082	76.000	1324.368	4210.082	-76.000/
1900	415	1	746.504	3171.077	76.000	746.504	3171.077	-76.000/
1901	416	1	382.500	2997.000	76.000	382.500	2997.000	-76.000/
1902	417	1	1095.405	3519.069	76.000	1095.405	3519.069	-76.000/
1903	418	1	1323.418	4153.164	76.000	1323.418	4153.164	-76.000/
1904	419	1	1266.103	3864.269	76.000	1266.103	3864.269	-76.000/
1905	420	1	0.000	2938.083	76.000	0.000	2938.083	-76.000/
1906	421	1	63.977	2938.034	76.000	63.977	2938.034	-76.000/
1907	422	1	1323.346	4095.646	76.000	1323.346	4095.646	-76.000/
1908	423	1	127.954	2937.985	76.000	127.954	2937.985	-76.000/
1909	424	1	568.982	3054.954	76.000	568.982	3054.954	-76.000/
1910	425	1	1209.095	3689.660	76.000	1209.095	3689.660	-76.000/
1911	426	1	191.738	2938.039	76.000	191.738	2938.039	-76.000/
1912	427	1	1323.273	4038.127	76.000	1323.273	4038.127	-76.000/
1913	428	1	687.425	3113.346	76.000	687.425	3113.346	-76.000/
1914	429	1	1152.604	3575.994	76.000	1152.604	3575.994	-76.000/
1915	430	1	921.563	3286.136	76.000	921.563	3286.136	-76.000/
1916	431	1	980.072	3344.250	76.000	980.072	3344.250	-76.000/
1917	432	1	446.250	2997.000	76.000	446.250	2997.000	-76.000/
1918	433	1	1266.691	3805.645	76.000	1266.691	3805.645	-76.000/
1919	434	1	1037.865	3402.801	76.000	1037.865	3402.801	-76.000/
1920	435	1	863.500	3227.909	76.000	863.500	3227.909	-76.000/
1921	436	1	255.521	2938.094	76.000	255.521	2938.094	-76.000/
1922	437	1	1323.616	3980.138	76.000	1323.616	3980.138	-76.000/



1923	438	1	805.002	3170.630	76.000	805.002	3170.630	-76.000/
1924	439	1	1096.149	3461.522	76.000	1096.149	3461.522	-76.000/
1925	440	1	627.964	3055.180	76.000	627.964	3055.180	-76.000/
1926	441	1	1209.820	3632.516	76.000	1209.820	3632.516	-76.000/
1927	442	1	319.361	2938.122	76.000	319.361	2938.122	-76.000/
1928	443	1	1323.959	3922.149	76.000	1323.959	3922.149	-76.000/
1929	444	1	510.000	2997.000	76.000	510.000	2997.000	-76.000/
1930	445	1	1267.520	3747.359	76.000	1267.520	3747.359	-76.000/
1931	446	1	746.756	3113.331	76.000	746.756	3113.331	-76.000/
1932	447	1	1153.309	3518.423	76.000	1153.309	3518.423	-76.000/
1933	448	1	383.200	2938.149	76.000	383.200	2938.149	-76.000/
1934	449	1	1383.045	4267.000	76.000	1383.045	4267.000	-76.000/
1935	450	1	1382.062	4210.019	76.000	1382.062	4210.019	-76.000/
1936	451	1	1324.776	3863.121	76.000	1324.776	3863.121	-76.000/
1937	452	1	1381.079	4153.038	76.000	1381.079	4153.038	-76.000/
1938	453	1	979.626	3286.636	76.000	979.626	3286.636	-76.000/
1939	454	1	0.000	2879.167	76.000	0.000	2879.167	-76.000/
1940	455	1	921.340	3228.465	76.000	921.340	3228.465	-76.000/
1941	456	1	1038.052	3344.732	76.000	1038.052	3344.732	-76.000/
1942	457	1	64.204	2879.068	76.000	64.204	2879.068	-76.000/
1943	458	1	568.917	2997.000	76.000	568.917	2997.000	-76.000/
1944	459	1	1381.093	4095.509	76.000	1381.093	4095.509	-76.000/
1945	460	1	687.088	3055.173	76.000	687.088	3055.173	-76.000/
1946	461	1	1268.349	3689.073	76.000	1268.349	3689.073	-76.000/
1947	462	1	128.409	2878.970	76.000	128.409	2878.970	-76.000/
1948	463	1	1210.546	3575.372	76.000	1210.546	3575.372	-76.000/
1949	464	1	1096.090	3403.369	76.000	1096.090	3403.369	-76.000/
1950	465	1	863.500	3170.182	76.000	863.500	3170.182	-76.000/
1951	466	1	1381.108	4037.979	76.000	1381.108	4037.979	-76.000/
1952	467	1	192.226	2879.079	76.000	192.226	2879.079	-76.000/
1953	468	1	446.600	2938.116	76.000	446.600	2938.116	-76.000/
1954	469	1	1325.593	3804.093	76.000	1325.593	3804.093	-76.000/
1955	470	1	805.128	3112.893	76.000	805.128	3112.893	-76.000/
1956	471	1	1154.014	3460.852	76.000	1154.014	3460.852	-76.000/
1957	472	1	256.042	2879.187	76.000	256.042	2879.187	-76.000/
1958	473	1	1381.815	3979.983	76.000	1381.815	3979.983	-76.000/
1959	474	1	627.833	2997.000	76.000	627.833	2997.000	-76.000/
1960	475	1	1268.963	3631.709	76.000	1268.963	3631.709	-76.000/
1961	476	1	746.211	3055.165	76.000	746.211	3055.165	-76.000/
1962	477	1	510.000	2938.083	76.000	510.000	2938.083	-76.000/
1963	478	1	319.971	2879.243	76.000	319.971	2879.243	-76.000/
1964	479	1	1211.213	3517.777	76.000	1211.213	3517.777	-76.000/
1965	480	1	1382.522	3921.986	76.000	1382.522	3921.986	-76.000/
1966	481	1	1326.598	3746.289	76.000	1326.598	3746.289	-76.000/
1967	482	1	979.180	3229.022	76.000	979.180	3229.022	-76.000/
1968	483	1	1037.789	3287.152	76.000	1037.789	3287.152	-76.000/
1969	484	1	921.335	3170.622	76.000	921.335	3170.622	-76.000/
1970	485	1	1096.032	3345.215	76.000	1096.032	3345.215	-76.000/
1971	486	1	383.900	2879.299	76.000	383.900	2879.299	-76.000/
1972	487	1	1440.773	4267.000	76.000	1440.773	4267.000	-76.000/
1973	488	1	1439.756	4209.956	76.000	1439.756	4209.956	-76.000/
1974	489	1	1383.790	3862.896	76.000	1383.790	3862.896	-76.000/
1975	490	1	1154.024	3402.971	76.000	1154.024	3402.971	-76.000/
1976	491	1	863.500	3112.455	76.000	863.500	3112.455	-76.000/
1977	492	1	1438.740	4152.912	76.000	1438.740	4152.912	-76.000/
1978	493	1	686.750	2997.000	76.000	686.750	2997.000	-76.000/
1979	494	1	568.838	2938.041	76.000	568.838	2938.041	-76.000/
1980	495	1	1269.578	3574.345	76.000	1269.578	3574.345	-76.000/
1981	496	1	0.000	2820.250	76.000	0.000	2820.250	-76.000/
1982	497	1	1327.603	3688.486	76.000	1327.603	3688.486	-76.000/
1983	498	1	64.437	2820.215	76.000	64.437	2820.215	-76.000/
1984	499	1	1438.841	4095.371	76.000	1438.841	4095.371	-76.000/
1985	500	1	128.873	2820.180	76.000	128.873	2820.180	-76.000/
1986	501	1	804.856	3054.946	76.000	804.856	3054.946	-76.000/
1987	502	1	1211.879	3460.182	76.000	1211.879	3460.182	-76.000/
1988	503	1	1438.942	4037.831	76.000	1438.942	4037.831	-76.000/

1989	504	1	446.950	2879.233	76.000	446.950	2879.233	-76.000/
1990	505	1	192.662	2820.257	76.000	192.662	2820.257	-76.000/
1991	506	1	1385.059	3803.806	76.000	1385.059	3803.806	-76.000/
1992	507	1	1037.526	3229.572	76.000	1037.526	3229.572	-76.000/
1993	508	1	1440.014	3979.827	76.000	1440.014	3979.827	-76.000/
1994	509	1	256.451	2820.333	76.000	256.451	2820.333	-76.000/
1995	510	1	979.170	3171.063	76.000	979.170	3171.063	-76.000/
1996	511	1	1095.952	3287.669	76.000	1095.952	3287.669	-76.000/
1997	512	1	627.676	2937.998	76.000	627.676	2937.998	-76.000/
1998	513	1	1328.107	3630.902	76.000	1328.107	3630.902	-76.000/
1999	514	1	745.667	2997.000	76.000	745.667	2997.000	-76.000/
2000	515	1	1269.955	3516.935	76.000	1269.955	3516.935	-76.000/
2001	516	1	921.330	3112.779	76.000	921.330	3112.779	-76.000/
2002	517	1	1154.034	3345.090	76.000	1154.034	3345.090	-76.000/
2003	518	1	510.000	2879.167	76.000	510.000	2879.167	-76.000/
2004	519	1	1385.832	3745.970	76.000	1385.832	3745.970	-76.000/
2005	520	1	320.029	2820.342	76.000	320.029	2820.342	-76.000/
2006	521	1	1441.085	3921.822	76.000	1441.085	3921.822	-76.000/
2007	522	1	863.500	3054.727	76.000	863.500	3054.727	-76.000/
2008	523	1	1211.957	3402.573	76.000	1211.957	3402.573	-76.000/
2009	524	1	686.518	2937.815	76.000	686.518	2937.815	-76.000/
2010	525	1	383.608	2820.351	76.000	383.608	2820.351	-76.000/
2011	526	1	1442.805	3862.670	76.000	1442.805	3862.670	-76.000/
2012	527	1	1498.500	4267.000	76.000	1498.500	4267.000	-76.000/
2013	528	1	1328.611	3573.318	76.000	1328.611	3573.318	-76.000/
2014	529	1	1497.850	4209.793	76.000	1497.850	4209.793	-76.000/
2015	530	1	568.759	2879.082	76.000	568.759	2879.082	-76.000/
2016	531	1	1497.199	4152.586	76.000	1497.199	4152.586	-76.000/
2017	532	1	1386.605	3688.134	76.000	1386.605	3688.134	-76.000/
2018	533	1	804.583	2997.000	76.000	804.583	2997.000	-76.000/
2019	534	1	1270.333	3459.525	76.000	1270.333	3459.525	-76.000/
2020	535	1	0.000	2761.333	76.000	0.000	2761.333	-76.000/
2021	536	1	64.669	2761.361	76.000	64.669	2761.361	-76.000/
2022	537	1	1497.393	4095.087	76.000	1497.393	4095.087	-76.000/
2023	538	1	1037.305	3171.547	76.000	1037.305	3171.547	-76.000/
2024	539	1	1095.871	3230.122	76.000	1095.871	3230.122	-76.000/
2025	540	1	129.338	2761.389	76.000	129.338	2761.389	-76.000/
2026	541	1	979.160	3113.104	76.000	979.160	3113.104	-76.000/
2027	542	1	1153.932	3287.497	76.000	1153.932	3287.497	-76.000/
2028	543	1	446.804	2820.300	76.000	446.804	2820.300	-76.000/
2029	544	1	1497.586	4037.588	76.000	1497.586	4037.588	-76.000/
2030	545	1	1444.525	3803.518	76.000	1444.525	3803.518	-76.000/
2031	546	1	193.099	2761.434	76.000	193.099	2761.434	-76.000/
2032	547	1	921.279	3054.890	76.000	921.279	3054.890	-76.000/
2033	548	1	1212.036	3344.965	76.000	1212.036	3344.965	-76.000/
2034	549	1	627.518	2878.997	76.000	627.518	2878.997	-76.000/
2035	550	1	745.361	2937.631	76.000	745.361	2937.631	-76.000/
2036	551	1	1498.748	3979.608	76.000	1498.748	3979.608	-76.000/
2037	552	1	1328.698	3516.093	76.000	1328.698	3516.093	-76.000/
2038	553	1	1387.186	3630.315	76.000	1387.186	3630.315	-76.000/
2039	554	1	256.860	2761.480	76.000	256.860	2761.480	-76.000/
2040	555	1	510.000	2820.250	76.000	510.000	2820.250	-76.000/
2041	556	1	863.500	2997.000	76.000	863.500	2997.000	-76.000/
2042	557	1	1445.066	3745.650	76.000	1445.066	3745.650	-76.000/
2043	558	1	1270.197	3402.185	76.000	1270.197	3402.185	-76.000/
2044	559	1	1499.911	3921.627	76.000	1499.911	3921.627	-76.000/
2045	560	1	320.087	2761.441	76.000	320.087	2761.441	-76.000/
2046	561	1	686.287	2878.630	76.000	686.287	2878.630	-76.000/
2047	562	1	1095.439	3172.031	76.000	1095.439	3172.031	-76.000/
2048	563	1	1037.084	3113.522	76.000	1037.084	3113.522	-76.000/
2049	564	1	1153.830	3229.904	76.000	1153.830	3229.904	-76.000/
2050	565	1	1387.767	3572.496	76.000	1387.767	3572.496	-76.000/
2051	566	1	804.431	2937.857	76.000	804.431	2937.857	-76.000/
2052	567	1	383.315	2761.403	76.000	383.315	2761.403	-76.000/
2053	568	1	568.675	2820.263	76.000	568.675	2820.263	-76.000/
2054	569	1	1501.324	3862.829	76.000	1501.324	3862.829	-76.000/

2055	570	1	1328.786	3458.868	76.000	1328.786	3458.868	-76.000/
2056	571	1	1556.227	4267.000	76.000	1556.227	4267.000	-76.000/
2057	572	1	1555.943	4209.631	76.000	1555.943	4209.631	-76.000/
2058	573	1	1445.608	3687.782	76.000	1445.608	3687.782	-76.000/
2059	574	1	979.057	3055.052	76.000	979.057	3055.052	-76.000/
2060	575	1	1211.912	3287.325	76.000	1211.912	3287.325	-76.000/
2061	576	1	1555.658	4152.261	76.000	1555.658	4152.261	-76.000/
2062	577	1	0.000	2702.417	76.000	0.000	2702.417	-76.000/
2063	578	1	1555.944	4094.803	76.000	1555.944	4094.803	-76.000/
2064	579	1	64.209	2702.431	76.000	64.209	2702.431	-76.000/
2065	580	1	921.227	2997.000	76.000	921.227	2997.000	-76.000/
2066	581	1	1270.062	3344.846	76.000	1270.062	3344.846	-76.000/
2067	582	1	128.419	2702.445	76.000	128.419	2702.445	-76.000/
2068	583	1	446.658	2761.368	76.000	446.658	2761.368	-76.000/
2069	584	1	1502.738	3804.031	76.000	1502.738	3804.031	-76.000/
2070	585	1	1556.230	4037.345	76.000	1556.230	4037.345	-76.000/
2071	586	1	745.056	2878.263	76.000	745.056	2878.263	-76.000/
2072	587	1	192.174	2702.467	76.000	192.174	2702.467	-76.000/
2073	588	1	627.350	2820.277	76.000	627.350	2820.277	-76.000/
2074	589	1	1388.024	3515.147	76.000	1388.024	3515.147	-76.000/
2075	590	1	1446.266	3629.729	76.000	1446.266	3629.729	-76.000/
2076	591	1	1557.483	3979.388	76.000	1557.483	3979.388	-76.000/
2077	592	1	863.500	2938.083	76.000	863.500	2938.083	-76.000/
2078	593	1	255.930	2702.490	76.000	255.930	2702.490	-76.000/
2079	594	1	1328.437	3401.797	76.000	1328.437	3401.797	-76.000/
2080	595	1	510.000	2761.333	76.000	510.000	2761.333	-76.000/
2081	596	1	1095.007	3113.939	76.000	1095.007	3113.939	-76.000/
2082	597	1	1153.456	3171.955	76.000	1153.456	3171.955	-76.000/
2083	598	1	1503.191	3746.003	76.000	1503.191	3746.003	-76.000/
2084	599	1	1036.883	3055.261	76.000	1036.883	3055.261	-76.000/
2085	600	1	1211.789	3229.685	76.000	1211.789	3229.685	-76.000/
2086	601	1	1558.736	3921.431	76.000	1558.736	3921.431	-76.000/
2087	602	1	319.419	2702.471	76.000	319.419	2702.471	-76.000/
2088	603	1	686.277	2819.995	76.000	686.277	2819.995	-76.000/
2089	604	1	978.955	2997.000	76.000	978.955	2997.000	-76.000/
2090	605	1	1270.001	3287.239	76.000	1270.001	3287.239	-76.000/
2091	606	1	804.278	2878.715	76.000	804.278	2878.715	-76.000/
2092	607	1	1446.923	3571.675	76.000	1446.923	3571.675	-76.000/
2093	608	1	1388.282	3457.798	76.000	1388.282	3457.798	-76.000/
2094	609	1	568.591	2761.445	76.000	568.591	2761.445	-76.000/
2095	610	1	382.908	2702.451	76.000	382.908	2702.451	-76.000/
2096	611	1	1503.643	3687.975	76.000	1503.643	3687.975	-76.000/
2097	612	1	1559.844	3862.987	76.000	1559.844	3862.987	-76.000/
2098	613	1	1613.955	4267.000	76.000	1613.955	4267.000	-76.000/
2099	614	1	1613.751	4209.512	76.000	1613.751	4209.512	-76.000/
2100	615	1	1328.088	3344.727	76.000	1328.088	3344.727	-76.000/
2101	616	1	921.624	2938.086	76.000	921.624	2938.086	-76.000/
2102	617	1	1613.547	4152.024	76.000	1613.547	4152.024	-76.000/
2103	618	1	1613.917	4094.603	76.000	1613.917	4094.603	-76.000/
2104	619	1	0.000	2643.500	76.000	0.000	2643.500	-76.000/
2105	620	1	63.750	2643.500	76.000	63.750	2643.500	-76.000/
2106	621	1	446.454	2702.434	76.000	446.454	2702.434	-76.000/
2107	622	1	745.204	2819.713	76.000	745.204	2819.713	-76.000/
2108	623	1	1560.952	3804.544	76.000	1560.952	3804.544	-76.000/
2109	624	1	127.500	2643.500	76.000	127.500	2643.500	-76.000/
2110	625	1	1614.288	4037.181	76.000	1614.288	4037.181	-76.000/
2111	626	1	1153.082	3114.007	76.000	1153.082	3114.007	-76.000/
2112	627	1	627.182	2761.557	76.000	627.182	2761.557	-76.000/
2113	628	1	1447.350	3514.202	76.000	1447.350	3514.202	-76.000/
2114	629	1	1094.708	3055.470	76.000	1094.708	3055.470	-76.000/
2115	630	1	1211.473	3171.879	76.000	1211.473	3171.879	-76.000/
2116	631	1	1504.255	3629.825	76.000	1504.255	3629.825	-76.000/
2117	632	1	863.500	2879.167	76.000	863.500	2879.167	-76.000/
2118	633	1	191.250	2643.500	76.000	191.250	2643.500	-76.000/
2119	634	1	1387.494	3400.690	76.000	1387.494	3400.690	-76.000/
2120	635	1	1036.682	2997.000	76.000	1036.682	2997.000	-76.000/

2121	636	1	1269.940	3229.633	76.000	1269.940	3229.633	-76.000/
2122	637	1	1615.644	3979.634	76.000	1615.644	3979.634	-76.000/
2123	638	1	255.000	2643.500	76.000	255.000	2643.500	-76.000/
2124	639	1	510.000	2702.417	76.000	510.000	2702.417	-76.000/
2125	640	1	1561.315	3746.356	76.000	1561.315	3746.356	-76.000/
2126	641	1	1328.089	3287.154	76.000	1328.089	3287.154	-76.000/
2127	642	1	979.747	2938.088	76.000	979.747	2938.088	-76.000/
2128	643	1	1616.999	3922.086	76.000	1616.999	3922.086	-76.000/
2129	644	1	318.750	2643.500	76.000	318.750	2643.500	-76.000/
2130	645	1	686.267	2761.360	76.000	686.267	2761.360	-76.000/
2131	646	1	804.352	2819.982	76.000	804.352	2819.982	-76.000/
2132	647	1	1504.866	3571.675	76.000	1504.866	3571.675	-76.000/
2133	648	1	1447.778	3456.728	76.000	1447.778	3456.728	-76.000/
2134	649	1	568.754	2702.472	76.000	568.754	2702.472	-76.000/
2135	650	1	1561.679	3688.168	76.000	1561.679	3688.168	-76.000/
2136	651	1	1386.706	3343.581	76.000	1386.706	3343.581	-76.000/
2137	652	1	922.020	2879.172	76.000	922.020	2879.172	-76.000/
2138	653	1	1618.029	3863.623	76.000	1618.029	3863.623	-76.000/
2139	654	1	382.500	2643.500	76.000	382.500	2643.500	-76.000/
2140	655	1	1671.682	4267.000	76.000	1671.682	4267.000	-76.000/
2141	656	1	1211.157	3114.074	76.000	1211.157	3114.074	-76.000/
2142	657	1	1152.609	3055.503	76.000	1152.609	3055.503	-76.000/
2143	658	1	1671.559	4209.394	76.000	1671.559	4209.394	-76.000/
2144	659	1	0.000	2591.959	76.000	0.000	2591.959	-76.000/
2145	660	1	1671.436	4151.788	76.000	1671.436	4151.788	-76.000/
2146	661	1	1094.409	2997.000	76.000	1094.409	2997.000	-76.000/
2147	662	1	1269.474	3171.586	76.000	1269.474	3171.586	-76.000/
2148	663	1	56.390	2591.155	76.000	56.390	2591.155	-76.000/
2149	664	1	745.351	2761.163	76.000	745.351	2761.163	-76.000/
2150	665	1	112.780	2590.351	76.000	112.780	2590.351	-76.000/
2151	666	1	1671.891	4094.402	76.000	1671.891	4094.402	-76.000/
2152	667	1	1505.119	3514.002	76.000	1505.119	3514.002	-76.000/
2153	668	1	1619.059	3805.159	76.000	1619.059	3805.159	-76.000/
2154	669	1	446.250	2643.500	76.000	446.250	2643.500	-76.000/
2155	670	1	863.500	2820.250	76.000	863.500	2820.250	-76.000/
2156	671	1	1328.091	3229.580	76.000	1328.091	3229.580	-76.000/
2157	672	1	627.508	2702.528	76.000	627.508	2702.528	-76.000/
2158	673	1	1037.459	2938.235	76.000	1037.459	2938.235	-76.000/
2159	674	1	1446.550	3399.582	76.000	1446.550	3399.582	-76.000/
2160	675	1	1562.244	3629.922	76.000	1562.244	3629.922	-76.000/
2161	676	1	1672.345	4037.017	76.000	1672.345	4037.017	-76.000/
2162	677	1	170.932	2577.863	76.000	170.932	2577.863	-76.000/
2163	678	1	1673.804	3979.879	76.000	1673.804	3979.879	-76.000/
2164	679	1	1386.324	3286.009	76.000	1386.324	3286.009	-76.000/
2165	680	1	980.540	2879.177	76.000	980.540	2879.177	-76.000/
2166	681	1	1619.286	3746.789	76.000	1619.286	3746.789	-76.000/
2167	682	1	510.000	2643.500	76.000	510.000	2643.500	-76.000/
2168	683	1	804.426	2761.248	76.000	804.426	2761.248	-76.000/
2169	684	1	686.508	2702.430	76.000	686.508	2702.430	-76.000/
2170	685	1	1505.372	3456.328	76.000	1505.372	3456.328	-76.000/
2171	686	1	1675.262	3922.742	76.000	1675.262	3922.742	-76.000/
2172	687	1	1562.809	3571.675	76.000	1562.809	3571.675	-76.000/
2173	688	1	1210.510	3055.537	76.000	1210.510	3055.537	-76.000/
2174	689	1	1152.136	2997.000	76.000	1152.136	2997.000	-76.000/
2175	690	1	1269.008	3113.539	76.000	1269.008	3113.539	-76.000/
2176	691	1	921.812	2820.235	76.000	921.812	2820.235	-76.000/
2177	692	1	1445.323	3342.435	76.000	1445.323	3342.435	-76.000/
2178	693	1	229.084	2565.375	76.000	229.084	2565.375	-76.000/
2179	694	1	1619.513	3688.419	76.000	1619.513	3688.419	-76.000/
2180	695	1	568.917	2643.500	76.000	568.917	2643.500	-76.000/
2181	696	1	1327.475	3171.292	76.000	1327.475	3171.292	-76.000/
2182	697	1	1095.170	2938.382	76.000	1095.170	2938.382	-76.000/
2183	698	1	1676.214	3864.258	76.000	1676.214	3864.258	-76.000/
2184	699	1	0.000	2540.419	76.000	0.000	2540.419	-76.000/
2185	700	1	302.025	2566.672	76.000	302.025	2566.672	-76.000/
2186	701	1	49.030	2538.810	76.000	49.030	2538.810	-76.000/

2187	702	1	1729.409	4267.000	76.000	1729.409	4267.000	-76.000/
2188	703	1	1729.479	4209.221	76.000	1729.479	4209.221	-76.000/
2189	704	1	1385.943	3228.436	76.000	1385.943	3228.436	-76.000/
2190	705	1	98.060	2537.202	76.000	98.060	2537.202	-76.000/
2191	706	1	1038.235	2879.470	76.000	1038.235	2879.470	-76.000/
2192	707	1	745.509	2702.332	76.000	745.509	2702.332	-76.000/
2193	708	1	1729.549	4151.441	76.000	1729.549	4151.441	-76.000/
2194	709	1	1562.887	3513.802	76.000	1562.887	3513.802	-76.000/
2195	710	1	863.500	2761.333	76.000	863.500	2761.333	-76.000/
2196	711	1	1504.425	3399.021	76.000	1504.425	3399.021	-76.000/
2197	712	1	1729.986	4094.190	76.000	1729.986	4094.190	-76.000/
2198	713	1	1677.166	3805.775	76.000	1677.166	3805.775	-76.000/
2199	714	1	374.966	2567.968	76.000	374.966	2567.968	-76.000/
2200	715	1	627.833	2643.500	76.000	627.833	2643.500	-76.000/
2201	716	1	1619.950	3630.040	76.000	1619.950	3630.040	-76.000/
2202	717	1	1730.423	4036.939	76.000	1730.423	4036.939	-76.000/
2203	718	1	1444.559	3284.864	76.000	1444.559	3284.864	-76.000/
2204	719	1	980.125	2820.221	76.000	980.125	2820.221	-76.000/
2205	720	1	442.483	2573.859	76.000	442.483	2573.859	-76.000/
2206	721	1	1209.864	2997.000	76.000	1209.864	2997.000	-76.000/
2207	722	1	1268.300	3055.269	76.000	1268.300	3055.269	-76.000/
2208	723	1	1731.822	3979.970	76.000	1731.822	3979.970	-76.000/
2209	724	1	1677.256	3747.222	76.000	1677.256	3747.222	-76.000/
2210	725	1	1326.859	3113.004	76.000	1326.859	3113.004	-76.000/
2211	726	1	1152.855	2938.323	76.000	1152.855	2938.323	-76.000/
2212	727	1	804.504	2702.374	76.000	804.504	2702.374	-76.000/
2213	728	1	1562.966	3455.928	76.000	1562.966	3455.928	-76.000/
2214	729	1	150.615	2512.227	76.000	150.615	2512.227	-76.000/
2215	730	1	510.000	2579.750	76.000	510.000	2579.750	-76.000/
2216	731	1	80.633	2506.123	76.000	80.633	2506.123	-76.000/
2217	732	1	686.750	2643.500	76.000	686.750	2643.500	-76.000/
2218	733	1	1620.388	3571.662	76.000	1620.388	3571.662	-76.000/
2219	734	1	40.317	2504.000	76.000	40.317	2504.000	-76.000/
2220	735	1	0.000	2501.877	76.000	0.000	2501.877	-76.000/
2221	736	1	921.605	2761.299	76.000	921.605	2761.299	-76.000/
2222	737	1	1503.478	3341.714	76.000	1503.478	3341.714	-76.000/
2223	738	1	1385.404	3170.310	76.000	1385.404	3170.310	-76.000/
2224	739	1	1733.220	3923.000	76.000	1733.220	3923.000	-76.000/
2225	740	1	1095.931	2879.763	76.000	1095.931	2879.763	-76.000/
2226	741	1	1677.347	3688.670	76.000	1677.347	3688.670	-76.000/
2227	742	1	1443.796	3227.293	76.000	1443.796	3227.293	-76.000/
2228	743	1	1733.662	3864.659	76.000	1733.662	3864.659	-76.000/
2229	744	1	568.889	2579.958	76.000	568.889	2579.958	-76.000/
2230	745	1	1038.090	2820.208	76.000	1038.090	2820.208	-76.000/
2231	746	1	745.667	2643.500	76.000	745.667	2643.500	-76.000/
2232	747	1	1620.311	3513.605	76.000	1620.311	3513.605	-76.000/
2233	748	1	863.500	2702.417	76.000	863.500	2702.417	-76.000/
2234	749	1	1787.136	4267.000	76.000	1787.136	4267.000	-76.000/
2235	750	1	1562.299	3398.461	76.000	1562.299	3398.461	-76.000/
2236	751	1	1787.399	4209.047	76.000	1787.399	4209.047	-76.000/
2237	752	1	113.999	2481.023	76.000	113.999	2481.023	-76.000/
2238	753	1	203.169	2487.251	76.000	203.169	2487.251	-76.000/
2239	754	1	1787.661	4151.095	76.000	1787.661	4151.095	-76.000/
2240	755	1	63.207	2475.044	76.000	63.207	2475.044	-76.000/
2241	756	1	1734.104	3806.318	76.000	1734.104	3806.318	-76.000/
2242	757	1	1267.591	2997.000	76.000	1267.591	2997.000	-76.000/
2243	758	1	1677.657	3630.159	76.000	1677.657	3630.159	-76.000/
2244	759	1	1502.409	3283.985	76.000	1502.409	3283.985	-76.000/
2245	760	1	979.710	2761.265	76.000	979.710	2761.265	-76.000/
2246	761	1	1788.081	4093.978	76.000	1788.081	4093.978	-76.000/
2247	762	1	1326.089	3055.002	76.000	1326.089	3055.002	-76.000/
2248	763	1	1210.540	2938.264	76.000	1210.540	2938.264	-76.000/
2249	764	1	31.603	2469.190	76.000	31.603	2469.190	-76.000/
2250	765	1	627.778	2580.165	76.000	627.778	2580.165	-76.000/
2251	766	1	285.300	2489.843	76.000	285.300	2489.843	-76.000/
2252	767	1	1384.865	3112.184	76.000	1384.865	3112.184	-76.000/

2253	768	1	1788.502	4036.861	76.000	1788.502	4036.861	-76.000/
2254	769	1	0.000	2463.335	76.000	0.000	2463.335	-76.000/
2255	770	1	1153.574	2879.646	76.000	1153.574	2879.646	-76.000/
2256	771	1	1734.108	3747.778	76.000	1734.108	3747.778	-76.000/
2257	772	1	804.583	2643.500	76.000	804.583	2643.500	-76.000/
2258	773	1	1620.235	3455.548	76.000	1620.235	3455.548	-76.000/
2259	774	1	367.431	2492.435	76.000	367.431	2492.435	-76.000/
2260	775	1	1789.840	3980.060	76.000	1789.840	3980.060	-76.000/
2261	776	1	1443.333	3169.328	76.000	1443.333	3169.328	-76.000/
2262	777	1	1096.055	2820.196	76.000	1096.055	2820.196	-76.000/
2263	778	1	1561.633	3340.993	76.000	1561.633	3340.993	-76.000/
2264	779	1	921.416	2702.400	76.000	921.416	2702.400	-76.000/
2265	780	1	1677.966	3571.649	76.000	1677.966	3571.649	-76.000/
2266	781	1	438.716	2504.218	76.000	438.716	2504.218	-76.000/
2267	782	1	147.365	2455.922	76.000	147.365	2455.922	-76.000/
2268	783	1	77.383	2449.819	76.000	77.383	2449.819	-76.000/
2269	784	1	686.705	2580.323	76.000	686.705	2580.323	-76.000/
2270	785	1	510.000	2516.000	76.000	510.000	2516.000	-76.000/
2271	786	1	1791.177	3923.259	76.000	1791.177	3923.259	-76.000/
2272	787	1	1501.341	3226.257	76.000	1501.341	3226.257	-76.000/
2273	788	1	38.692	2439.989	76.000	38.692	2439.989	-76.000/
2274	789	1	1734.111	3689.238	76.000	1734.111	3689.238	-76.000/
2275	790	1	1037.945	2760.947	76.000	1037.945	2760.947	-76.000/
2276	791	1	1325.318	2997.000	76.000	1325.318	2997.000	-76.000/
2277	792	1	1791.110	3865.060	76.000	1791.110	3865.060	-76.000/
2278	793	1	1268.089	2938.269	76.000	1268.089	2938.269	-76.000/
2279	794	1	0.000	2430.160	76.000	0.000	2430.160	-76.000/
2280	795	1	1619.257	3398.047	76.000	1619.257	3398.047	-76.000/
2281	796	1	863.500	2643.500	76.000	863.500	2643.500	-76.000/
2282	797	1	1677.735	3513.409	76.000	1677.735	3513.409	-76.000/
2283	798	1	1383.955	3054.592	76.000	1383.955	3054.592	-76.000/
2284	799	1	568.861	2516.415	76.000	568.861	2516.415	-76.000/
2285	800	1	1211.216	2879.529	76.000	1211.216	2879.529	-76.000/
2286	801	1	745.632	2580.481	76.000	745.632	2580.481	-76.000/
2287	802	1	1560.259	3283.107	76.000	1560.259	3283.107	-76.000/
2288	803	1	91.560	2424.594	76.000	91.560	2424.594	-76.000/
2289	804	1	1844.864	4267.000	76.000	1844.864	4267.000	-76.000/
2290	805	1	979.332	2702.382	76.000	979.332	2702.382	-76.000/
2291	806	1	1845.061	4209.009	76.000	1845.061	4209.009	-76.000/
2292	807	1	1734.127	3630.610	76.000	1734.127	3630.610	-76.000/
2293	808	1	1442.871	3111.363	76.000	1442.871	3111.363	-76.000/
2294	809	1	1845.259	4151.019	76.000	1845.259	4151.019	-76.000/
2295	810	1	1791.042	3806.861	76.000	1791.042	3806.861	-76.000/
2296	811	1	1153.752	2820.355	76.000	1153.752	2820.355	-76.000/
2297	812	1	1845.840	4093.984	76.000	1845.840	4093.984	-76.000/
2298	813	1	45.780	2410.789	76.000	45.780	2410.789	-76.000/
2299	814	1	627.722	2516.830	76.000	627.722	2516.830	-76.000/
2300	815	1	1500.720	3168.442	76.000	1500.720	3168.442	-76.000/
2301	816	1	1846.421	4036.949	76.000	1846.421	4036.949	-76.000/
2302	817	1	1096.180	2760.629	76.000	1096.180	2760.629	-76.000/
2303	818	1	1677.504	3455.168	76.000	1677.504	3455.168	-76.000/
2304	819	1	1790.959	3748.334	76.000	1790.959	3748.334	-76.000/
2305	820	1	1618.280	3340.546	76.000	1618.280	3340.546	-76.000/
2306	821	1	203.084	2411.875	76.000	203.084	2411.875	-76.000/
2307	822	1	921.227	2643.500	76.000	921.227	2643.500	-76.000/
2308	823	1	1734.144	3571.983	76.000	1734.144	3571.983	-76.000/
2309	824	1	804.566	2580.116	76.000	804.566	2580.116	-76.000/
2310	825	1	1847.249	3980.252	76.000	1847.249	3980.252	-76.000/
2311	826	1	0.000	2396.985	76.000	0.000	2396.985	-76.000/
2312	827	1	1558.886	3225.220	76.000	1558.886	3225.220	-76.000/
2313	828	1	149.807	2396.211	76.000	149.807	2396.211	-76.000/
2314	829	1	1325.638	2938.274	76.000	1325.638	2938.274	-76.000/
2315	830	1	1037.313	2702.223	76.000	1037.313	2702.223	-76.000/
2316	831	1	1383.045	2997.000	76.000	1383.045	2997.000	-76.000/
2317	832	1	1848.077	3923.555	76.000	1848.077	3923.555	-76.000/
2318	833	1	686.659	2517.146	76.000	686.659	2517.146	-76.000/

2319	834	1	1268.587	2879.538	76.000	1268.587	2879.538	-76.000/
2320	835	1	286.761	2408.923	76.000	286.761	2408.923	-76.000/
2321	836	1	1790.876	3689.806	76.000	1790.876	3689.806	-76.000/
2322	837	1	1441.822	3054.181	76.000	1441.822	3054.181	-76.000/
2323	838	1	510.000	2452.250	76.000	510.000	2452.250	-76.000/
2324	839	1	1211.448	2820.513	76.000	1211.448	2820.513	-76.000/
2325	840	1	1676.216	3397.634	76.000	1676.216	3397.634	-76.000/
2326	841	1	96.530	2380.547	76.000	96.530	2380.547	-76.000/
2327	842	1	440.219	2429.110	76.000	440.219	2429.110	-76.000/
2328	843	1	1733.829	3513.866	76.000	1733.829	3513.866	-76.000/
2329	844	1	1848.036	3865.645	76.000	1848.036	3865.645	-76.000/
2330	845	1	1617.082	3282.637	76.000	1617.082	3282.637	-76.000/
2331	846	1	48.265	2373.645	76.000	48.265	2373.645	-76.000/
2332	847	1	1500.099	3110.627	76.000	1500.099	3110.627	-76.000/
2333	848	1	863.500	2579.750	76.000	863.500	2579.750	-76.000/
2334	849	1	978.955	2643.500	76.000	978.955	2643.500	-76.000/
2335	850	1	1153.930	2761.063	76.000	1153.930	2761.063	-76.000/
2336	851	1	370.438	2405.970	76.000	370.438	2405.970	-76.000/
2337	852	1	1790.598	3631.061	76.000	1790.598	3631.061	-76.000/
2338	853	1	0.000	2366.742	76.000	0.000	2366.742	-76.000/
2339	854	1	568.796	2452.922	76.000	568.796	2452.922	-76.000/
2340	855	1	745.597	2517.462	76.000	745.597	2517.462	-76.000/
2341	856	1	1902.591	4267.000	76.000	1902.591	4267.000	-76.000/
2342	857	1	1902.724	4208.972	76.000	1902.724	4208.972	-76.000/
2343	858	1	1847.996	3807.734	76.000	1847.996	3807.734	-76.000/
2344	859	1	1902.857	4150.943	76.000	1902.857	4150.943	-76.000/
2345	860	1	1558.106	3167.555	76.000	1558.106	3167.555	-76.000/
2346	861	1	1095.294	2702.064	76.000	1095.294	2702.064	-76.000/
2347	862	1	1903.599	4093.990	76.000	1903.599	4093.990	-76.000/
2348	863	1	1733.515	3455.748	76.000	1733.515	3455.748	-76.000/
2349	864	1	1674.927	3340.100	76.000	1674.927	3340.100	-76.000/
2350	865	1	1904.341	4037.036	76.000	1904.341	4037.036	-76.000/
2351	866	1	1383.372	2938.114	76.000	1383.372	2938.114	-76.000/
2352	867	1	627.591	2453.595	76.000	627.591	2453.595	-76.000/
2353	868	1	1847.823	3749.257	76.000	1847.823	3749.257	-76.000/
2354	869	1	1325.957	2879.547	76.000	1325.957	2879.547	-76.000/
2355	870	1	1790.321	3572.317	76.000	1790.321	3572.317	-76.000/
2356	871	1	1440.773	2997.000	76.000	1440.773	2997.000	-76.000/
2357	872	1	921.421	2579.617	76.000	921.421	2579.617	-76.000/
2358	873	1	1615.885	3224.727	76.000	1615.885	3224.727	-76.000/
2359	874	1	1268.495	2820.417	76.000	1268.495	2820.417	-76.000/
2360	875	1	1904.659	3980.444	76.000	1904.659	3980.444	-76.000/
2361	876	1	1036.682	2643.500	76.000	1036.682	2643.500	-76.000/
2362	877	1	804.548	2516.731	76.000	804.548	2516.731	-76.000/
2363	878	1	1499.299	3053.813	76.000	1499.299	3053.813	-76.000/
2364	879	1	0.000	2336.500	76.000	0.000	2336.500	-76.000/
2365	880	1	50.750	2336.500	76.000	50.750	2336.500	-76.000/
2366	881	1	1211.680	2761.497	76.000	1211.680	2761.497	-76.000/
2367	882	1	101.500	2336.500	76.000	101.500	2336.500	-76.000/
2368	883	1	1847.650	3690.781	76.000	1847.650	3690.781	-76.000/
2369	884	1	1904.976	3923.852	76.000	1904.976	3923.852	-76.000/
2370	885	1	152.250	2336.500	76.000	152.250	2336.500	-76.000/
2371	886	1	1732.411	3397.900	76.000	1732.411	3397.900	-76.000/
2372	887	1	686.538	2453.598	76.000	686.538	2453.598	-76.000/
2373	888	1	1557.327	3109.890	76.000	1557.327	3109.890	-76.000/
2374	889	1	203.000	2336.500	76.000	203.000	2336.500	-76.000/
2375	890	1	1789.924	3514.323	76.000	1789.924	3514.323	-76.000/
2376	891	1	1673.905	3282.167	76.000	1673.905	3282.167	-76.000/
2377	892	1	1153.033	2702.282	76.000	1153.033	2702.282	-76.000/
2378	893	1	510.000	2388.500	76.000	510.000	2388.500	-76.000/
2379	894	1	1904.963	3866.229	76.000	1904.963	3866.229	-76.000/
2380	895	1	979.341	2579.485	76.000	979.341	2579.485	-76.000/
2381	896	1	863.500	2516.000	76.000	863.500	2516.000	-76.000/
2382	897	1	1847.347	3632.036	76.000	1847.347	3632.036	-76.000/
2383	898	1	1615.282	3167.354	76.000	1615.282	3167.354	-76.000/
2384	899	1	1094.409	2643.500	76.000	1094.409	2643.500	-76.000/

2385	900	1	1904.950	3808.607	76.000	1904.950	3808.607	-76.000/
2386	901	1	1383.699	2879.228	76.000	1383.699	2879.228	-76.000/
2387	902	1	288.222	2328.002	76.000	288.222	2328.002	-76.000/
2388	903	1	1960.318	4267.000	76.000	1960.318	4267.000	-76.000/
2389	904	1	1441.107	2937.955	76.000	1441.107	2937.955	-76.000/
2390	905	1	745.485	2453.600	76.000	745.485	2453.600	-76.000/
2391	906	1	1960.412	4209.154	76.000	1960.412	4209.154	-76.000/
2392	907	1	568.730	2389.429	76.000	568.730	2389.429	-76.000/
2393	908	1	1325.542	2820.321	76.000	1325.542	2820.321	-76.000/
2394	909	1	441.722	2354.002	76.000	441.722	2354.002	-76.000/
2395	910	1	1731.307	3340.051	76.000	1731.307	3340.051	-76.000/
2396	911	1	1960.506	4151.308	76.000	1960.506	4151.308	-76.000/
2397	912	1	1498.500	2997.000	76.000	1498.500	2997.000	-76.000/
2398	913	1	1789.526	3456.328	76.000	1789.526	3456.328	-76.000/
2399	914	1	1960.894	4094.213	76.000	1960.894	4094.213	-76.000/
2400	915	1	1268.403	2761.296	76.000	1268.403	2761.296	-76.000/
2401	916	1	1672.884	3224.234	76.000	1672.884	3224.234	-76.000/
2402	917	1	1847.044	3573.292	76.000	1847.044	3573.292	-76.000/
2403	918	1	1904.688	3750.181	76.000	1904.688	3750.181	-76.000/
2404	919	1	1556.777	3053.445	76.000	1556.777	3053.445	-76.000/
2405	920	1	1961.281	4037.118	76.000	1961.281	4037.118	-76.000/
2406	921	1	1210.772	2702.499	76.000	1210.772	2702.499	-76.000/
2407	922	1	627.460	2390.359	76.000	627.460	2390.359	-76.000/
2408	923	1	921.614	2515.735	76.000	921.614	2515.735	-76.000/
2409	924	1	1037.189	2579.596	76.000	1037.189	2579.596	-76.000/
2410	925	1	1961.514	3980.120	76.000	1961.514	3980.120	-76.000/
2411	926	1	373.445	2319.505	76.000	373.445	2319.505	-76.000/
2412	927	1	804.493	2452.925	76.000	804.493	2452.925	-76.000/
2413	928	1	1614.678	3109.980	76.000	1614.678	3109.980	-76.000/
2414	929	1	1788.607	3398.166	76.000	1788.607	3398.166	-76.000/
2415	930	1	1904.425	3691.756	76.000	1904.425	3691.756	-76.000/
2416	931	1	1152.136	2643.500	76.000	1152.136	2643.500	-76.000/
2417	932	1	1730.680	3282.327	76.000	1730.680	3282.327	-76.000/
2418	933	1	1961.747	3923.123	76.000	1961.747	3923.123	-76.000/
2419	934	1	1846.552	3515.184	76.000	1846.552	3515.184	-76.000/
2420	935	1	686.417	2390.049	76.000	686.417	2390.049	-76.000/
2421	936	1	1441.440	2878.909	76.000	1441.440	2878.909	-76.000/
2422	937	1	1672.457	3167.152	76.000	1672.457	3167.152	-76.000/
2423	938	1	1383.351	2820.122	76.000	1383.351	2820.122	-76.000/
2424	939	1	1961.726	3865.464	76.000	1961.726	3865.464	-76.000/
2425	940	1	1499.148	2937.765	76.000	1499.148	2937.765	-76.000/
2426	941	1	1325.126	2761.094	76.000	1325.126	2761.094	-76.000/
2427	942	1	1904.097	3633.011	76.000	1904.097	3633.011	-76.000/
2428	943	1	979.728	2515.469	76.000	979.728	2515.469	-76.000/
2429	944	1	510.000	2324.750	76.000	510.000	2324.750	-76.000/
2430	945	1	1556.227	2997.000	76.000	1556.227	2997.000	-76.000/
2431	946	1	863.500	2452.250	76.000	863.500	2452.250	-76.000/
2432	947	1	1095.037	2579.708	76.000	1095.037	2579.708	-76.000/
2433	948	1	1787.687	3340.003	76.000	1787.687	3340.003	-76.000/
2434	949	1	1267.997	2702.398	76.000	1267.997	2702.398	-76.000/
2435	950	1	1961.704	3807.806	76.000	1961.704	3807.806	-76.000/
2436	951	1	1846.060	3457.077	76.000	1846.060	3457.077	-76.000/
2437	952	1	458.211	2302.163	76.000	458.211	2302.163	-76.000/
2438	953	1	2018.045	4267.000	76.000	2018.045	4267.000	-76.000/
2439	954	1	2018.101	4209.336	76.000	2018.101	4209.336	-76.000/
2440	955	1	1614.316	3053.490	76.000	1614.316	3053.490	-76.000/
2441	956	1	1730.052	3224.603	76.000	1730.052	3224.603	-76.000/
2442	957	1	745.374	2389.738	76.000	745.374	2389.738	-76.000/
2443	958	1	2018.156	4151.672	76.000	2018.156	4151.672	-76.000/
2444	959	1	568.594	2325.521	76.000	568.594	2325.521	-76.000/
2445	960	1	1209.864	2643.500	76.000	1209.864	2643.500	-76.000/
2446	961	1	2018.188	4094.436	76.000	2018.188	4094.436	-76.000/
2447	962	1	1903.768	3574.267	76.000	1903.768	3574.267	-76.000/
2448	963	1	1961.490	3749.749	76.000	1961.490	3749.749	-76.000/
2449	964	1	406.422	2279.576	76.000	406.422	2279.576	-76.000/
2450	965	1	2018.221	4037.200	76.000	2018.221	4037.200	-76.000/



2451	966	1	0.000	2134.000	76.000	0.000	2336.000	-76.000/
2452	967	1	50.750	2134.000	76.000	50.750	2336.000	-76.000/
2453	968	1	1672.030	3110.071	76.000	1672.030	3110.071	-76.000/
2454	969	1	101.500	2134.000	76.000	101.500	2336.000	-76.000/
2455	970	1	1037.696	2515.693	76.000	1037.696	2515.693	-76.000/
2456	971	1	921.610	2451.808	76.000	921.610	2451.808	-76.000/
2457	972	1	152.250	2134.000	76.000	152.250	2336.000	-76.000/
2458	973	1	2018.370	3979.797	76.000	2018.370	3979.797	-76.000/
2459	974	1	1845.452	3398.818	76.000	1845.452	3398.818	-76.000/
2460	975	1	627.189	2326.292	76.000	627.189	2326.292	-76.000/
2461	976	1	1787.454	3282.487	76.000	1787.454	3282.487	-76.000/
2462	977	1	203.000	2134.000	76.000	203.000	2336.000	-76.000/
2463	978	1	1441.161	2819.924	76.000	1441.161	2819.924	-76.000/
2464	979	1	804.437	2389.119	76.000	804.437	2389.119	-76.000/
2465	980	1	1152.472	2580.100	76.000	1152.472	2580.100	-76.000/
2466	981	1	1499.796	2878.530	76.000	1499.796	2878.530	-76.000/
2467	982	1	1961.276	3691.691	76.000	1961.276	3691.691	-76.000/
2468	983	1	1383.003	2761.016	76.000	1383.003	2761.016	-76.000/
2469	984	1	1903.181	3516.046	76.000	1903.181	3516.046	-76.000/
2470	985	1	1557.189	2937.575	76.000	1557.189	2937.575	-76.000/
2471	986	1	2018.519	3922.393	76.000	2018.519	3922.393	-76.000/
2472	987	1	1729.724	3167.419	76.000	1729.724	3167.419	-76.000/
2473	988	1	1325.222	2702.297	76.000	1325.222	2702.297	-76.000/
2474	989	1	1613.955	2997.000	76.000	1613.955	2997.000	-76.000/
2475	990	1	281.596	2231.546	76.000	281.596	2231.546	-76.000/
2476	991	1	2018.489	3864.699	76.000	2018.489	3864.699	-76.000/
2477	992	1	686.173	2326.238	76.000	686.173	2326.238	-76.000/
2478	993	1	1267.591	2643.500	76.000	1267.591	2643.500	-76.000/
2479	994	1	1961.012	3633.204	76.000	1961.012	3633.204	-76.000/
2480	995	1	979.721	2451.366	76.000	979.721	2451.366	-76.000/
2481	996	1	1844.845	3340.558	76.000	1844.845	3340.558	-76.000/
2482	997	1	1095.664	2515.916	76.000	1095.664	2515.916	-76.000/
2483	998	1	1671.856	3053.535	76.000	1671.856	3053.535	-76.000/
2484	999	1	863.500	2388.500	76.000	863.500	2388.500	-76.000/
2485	1000	1	1902.593	3457.825	76.000	1902.593	3457.825	-76.000/
2486	1001	1	1787.221	3224.972	76.000	1787.221	3224.972	-76.000/
2487	1002	1	510.000	2261.000	76.000	510.000	2261.000	-76.000/
2488	1003	1	2018.459	3807.006	76.000	2018.459	3807.006	-76.000/
2489	1004	1	360.193	2228.093	76.000	360.193	2228.093	-76.000/
2490	1005	1	474.699	2250.323	76.000	474.699	2250.323	-76.000/
2491	1006	1	439.398	2239.647	76.000	439.398	2239.647	-76.000/
2492	1007	1	1209.908	2580.491	76.000	1209.908	2580.491	-76.000/
2493	1008	1	2075.773	4267.000	76.000	2075.773	4267.000	-76.000/
2494	1009	1	2075.800	4209.304	76.000	2075.800	4209.304	-76.000/
2495	1010	1	745.158	2326.185	76.000	745.158	2326.185	-76.000/
2496	1011	1	2075.828	4151.609	76.000	2075.828	4151.609	-76.000/
2497	1012	1	1960.749	3574.718	76.000	1960.749	3574.718	-76.000/
2498	1013	1	1729.396	3110.235	76.000	1729.396	3110.235	-76.000/
2499	1014	1	2075.844	4094.127	76.000	2075.844	4094.127	-76.000/
2500	1015	1	2018.292	3749.316	76.000	2018.292	3749.316	-76.000/
2501	1016	1	1440.881	2760.939	76.000	1440.881	2760.939	-76.000/
2502	1017	1	568.459	2261.613	76.000	568.459	2261.613	-76.000/
2503	1018	1	1499.904	2819.450	76.000	1499.904	2819.450	-76.000/
2504	1019	1	1558.151	2878.150	76.000	1558.151	2878.150	-76.000/
2505	1020	1	1383.024	2702.258	76.000	1383.024	2702.258	-76.000/
2506	1021	1	2075.860	4036.645	76.000	2075.860	4036.645	-76.000/
2507	1022	1	1844.615	3282.834	76.000	1844.615	3282.834	-76.000/
2508	1023	1	1902.298	3399.469	76.000	1902.298	3399.469	-76.000/
2509	1024	1	1037.603	2451.469	76.000	1037.603	2451.469	-76.000/
2510	1025	1	921.607	2387.882	76.000	921.607	2387.882	-76.000/
2511	1026	1	1616.130	2937.055	76.000	1616.130	2937.055	-76.000/
2512	1027	1	1325.318	2643.500	76.000	1325.318	2643.500	-76.000/
2513	1028	1	2075.935	3979.080	76.000	2075.935	3979.080	-76.000/
2514	1029	1	1152.808	2516.699	76.000	1152.808	2516.699	-76.000/
2515	1030	1	398.634	2208.567	76.000	398.634	2208.567	-76.000/
2516	1031	1	1786.992	3167.686	76.000	1786.992	3167.686	-76.000/

2517	1032	1	2018.126	3691.626	76.000	2018.126	3691.626	-76.000/
2518	1033	1	1960.398	3516.390	76.000	1960.398	3516.390	-76.000/
2519	1034	1	1671.682	2997.000	76.000	1671.682	2997.000	-76.000/
2520	1035	1	626.918	2262.225	76.000	626.918	2262.225	-76.000/
2521	1036	1	804.329	2325.467	76.000	804.329	2325.467	-76.000/
2522	1037	1	2076.009	3921.515	76.000	2076.009	3921.515	-76.000/
2523	1038	1	1267.606	2581.156	76.000	1267.606	2581.156	-76.000/
2524	1039	1	1729.403	3053.618	76.000	1729.403	3053.618	-76.000/
2525	1040	1	2075.994	3863.804	76.000	2075.994	3863.804	-76.000/
2526	1041	1	2017.928	3633.398	76.000	2017.928	3633.398	-76.000/
2527	1042	1	1902.002	3341.114	76.000	1902.002	3341.114	-76.000/
2528	1043	1	1844.385	3225.110	76.000	1844.385	3225.110	-76.000/
2529	1044	1	685.930	2262.428	76.000	685.930	2262.428	-76.000/
2530	1045	1	979.713	2387.263	76.000	979.713	2387.263	-76.000/
2531	1046	1	1095.484	2451.571	76.000	1095.484	2451.571	-76.000/
2532	1047	1	1960.047	3458.061	76.000	1960.047	3458.061	-76.000/
2533	1048	1	437.075	2189.041	76.000	437.075	2189.041	-76.000/
2534	1049	1	863.500	2324.750	76.000	863.500	2324.750	-76.000/
2535	1050	1	1500.013	2760.371	76.000	1500.013	2760.371	-76.000/
2536	1051	1	2075.980	3806.094	76.000	2075.980	3806.094	-76.000/
2537	1052	1	1440.827	2702.220	76.000	1440.827	2702.220	-76.000/
2538	1053	1	1209.952	2517.483	76.000	1209.952	2517.483	-76.000/
2539	1054	1	473.537	2193.146	76.000	473.537	2193.146	-76.000/
2540	1055	1	1558.648	2818.977	76.000	1558.648	2818.977	-76.000/
2541	1056	1	1786.763	3110.400	76.000	1786.763	3110.400	-76.000/
2542	1057	1	510.000	2197.250	76.000	510.000	2197.250	-76.000/
2543	1058	1	1383.045	2643.500	76.000	1383.045	2643.500	-76.000/
2544	1059	1	2017.731	3575.169	76.000	2017.731	3575.169	-76.000/
2545	1060	1	1618.306	2877.110	76.000	1618.306	2877.110	-76.000/
2546	1061	1	2133.500	4267.000	76.000	2133.500	4267.000	-76.000/
2547	1062	1	0.000	1931.500	76.000	0.000	2335.500	-76.000/
2548	1063	1	50.750	1931.500	76.000	50.750	2335.500	-76.000/
2549	1064	1	2133.500	4209.273	76.000	2133.500	4209.273	-76.000/
2550	1065	1	101.500	1931.500	76.000	101.500	2335.500	-76.000/
2551	1066	1	2133.500	4151.545	76.000	2133.500	4151.545	-76.000/
2552	1067	1	744.941	2262.632	76.000	744.941	2262.632	-76.000/
2553	1068	1	152.250	1931.500	76.000	152.250	2335.500	-76.000/
2554	1069	1	1675.071	2936.534	76.000	1675.071	2936.534	-76.000/
2555	1070	1	2075.896	3748.385	76.000	2075.896	3748.385	-76.000/
2556	1071	1	2133.500	4093.818	76.000	2133.500	4093.818	-76.000/
2557	1072	1	1901.775	3283.181	76.000	1901.775	3283.181	-76.000/
2558	1073	1	203.000	1931.500	76.000	203.000	2335.500	-76.000/
2559	1074	1	1959.919	3399.864	76.000	1959.919	3399.864	-76.000/
2560	1075	1	1325.305	2581.821	76.000	1325.305	2581.821	-76.000/
2561	1076	1	1729.409	2997.000	76.000	1729.409	2997.000	-76.000/
2562	1077	1	568.439	2197.720	76.000	568.439	2197.720	-76.000/
2563	1078	1	2133.500	4036.091	76.000	2133.500	4036.091	-76.000/
2564	1079	1	1037.509	2387.244	76.000	1037.509	2387.244	-76.000/
2565	1080	1	1844.410	3167.736	76.000	1844.410	3167.736	-76.000/
2566	1081	1	274.970	2135.091	76.000	274.970	2135.091	-76.000/
2567	1082	1	1152.665	2452.462	76.000	1152.665	2452.462	-76.000/
2568	1083	1	921.758	2323.655	76.000	921.758	2323.655	-76.000/
2569	1084	1	2017.616	3516.733	76.000	2017.616	3516.733	-76.000/
2570	1085	1	2133.500	3978.364	76.000	2133.500	3978.364	-76.000/
2571	1086	1	2075.813	3690.677	76.000	2075.813	3690.677	-76.000/
2572	1087	1	346.941	2136.681	76.000	346.941	2136.681	-76.000/
2573	1088	1	1267.621	2518.812	76.000	1267.621	2518.812	-76.000/
2574	1089	1	1786.950	3053.700	76.000	1786.950	3053.700	-76.000/
2575	1090	1	804.221	2261.816	76.000	804.221	2261.816	-76.000/
2576	1091	1	2133.500	3920.636	76.000	2133.500	3920.636	-76.000/
2577	1092	1	626.879	2198.190	76.000	626.879	2198.190	-76.000/
2578	1093	1	390.846	2137.558	76.000	390.846	2137.558	-76.000/
2579	1094	1	1959.791	3341.667	76.000	1959.791	3341.667	-76.000/
2580	1095	1	1499.257	2701.935	76.000	1499.257	2701.935	-76.000/
2581	1096	1	1901.549	3225.249	76.000	1901.549	3225.249	-76.000/
2582	1097	1	1559.146	2759.803	76.000	1559.146	2759.803	-76.000/

2583	1098	1	2075.714	3632.699	76.000	2075.714	3632.699	-76.000/
2584	1099	1	1440.773	2643.500	76.000	1440.773	2643.500	-76.000/
2585	1100	1	2133.500	3862.909	76.000	2133.500	3862.909	-76.000/
2586	1101	1	434.751	2138.436	76.000	434.751	2138.436	-76.000/
2587	1102	1	2017.500	3458.297	76.000	2017.500	3458.297	-76.000/
2588	1103	1	1619.965	2817.436	76.000	1619.965	2817.436	-76.000/
2589	1104	1	1095.305	2387.225	76.000	1095.305	2387.225	-76.000/
2590	1105	1	1844.435	3110.362	76.000	1844.435	3110.362	-76.000/
2591	1106	1	980.017	2322.561	76.000	980.017	2322.561	-76.000/
2592	1107	1	685.741	2198.432	76.000	685.741	2198.432	-76.000/
2593	1108	1	1383.048	2582.236	76.000	1383.048	2582.236	-76.000/
2594	1109	1	1678.460	2876.069	76.000	1678.460	2876.069	-76.000/
2595	1110	1	1209.846	2453.353	76.000	1209.846	2453.353	-76.000/
2596	1111	1	472.375	2135.968	76.000	472.375	2135.968	-76.000/
2597	1112	1	2133.500	3805.182	76.000	2133.500	3805.182	-76.000/
2598	1113	1	863.500	2261.000	76.000	863.500	2261.000	-76.000/
2599	1114	1	1734.296	2935.868	76.000	1734.296	2935.868	-76.000/
2600	1115	1	2075.615	3574.721	76.000	2075.615	3574.721	-76.000/
2601	1116	1	1787.136	2997.000	76.000	1787.136	2997.000	-76.000/
2602	1117	1	1959.614	3283.672	76.000	1959.614	3283.672	-76.000/
2603	1118	1	1325.291	2520.142	76.000	1325.291	2520.142	-76.000/
2604	1119	1	510.000	2133.500	76.000	510.000	2133.500	-76.000/
2605	1120	1	2017.541	3400.259	76.000	2017.541	3400.259	-76.000/
2606	1121	1	2133.500	3747.455	76.000	2133.500	3747.455	-76.000/
2607	1122	1	1901.828	3167.786	76.000	1901.828	3167.786	-76.000/
2608	1123	1	744.603	2198.674	76.000	744.603	2198.674	-76.000/
2609	1124	1	1037.664	2322.460	76.000	1037.664	2322.460	-76.000/
2610	1125	1	1152.522	2388.224	76.000	1152.522	2388.224	-76.000/
2611	1126	1	2075.558	3516.639	76.000	2075.558	3516.639	-76.000/
2612	1127	1	568.420	2133.827	76.000	568.420	2133.827	-76.000/
2613	1128	1	1844.649	3053.681	76.000	1844.649	3053.681	-76.000/
2614	1129	1	1557.687	2701.651	76.000	1557.687	2701.651	-76.000/
2615	1130	1	921.910	2259.429	76.000	921.910	2259.429	-76.000/
2616	1131	1	1498.500	2643.500	76.000	1498.500	2643.500	-76.000/
2617	1132	1	2133.500	3689.727	76.000	2133.500	3689.727	-76.000/
2618	1133	1	1267.454	2454.657	76.000	1267.454	2454.657	-76.000/
2619	1134	1	1621.624	2757.762	76.000	1621.624	2757.762	-76.000/
2620	1135	1	1440.792	2582.651	76.000	1440.792	2582.651	-76.000/
2621	1136	1	1959.436	3225.677	76.000	1959.436	3225.677	-76.000/
2622	1137	1	2017.581	3342.220	76.000	2017.581	3342.220	-76.000/
2623	1138	1	804.052	2197.962	76.000	804.052	2197.962	-76.000/
2624	1139	1	1681.281	2815.895	76.000	1681.281	2815.895	-76.000/
2625	1140	1	626.839	2134.155	76.000	626.839	2134.155	-76.000/
2626	1141	1	437.493	2085.257	76.000	437.493	2085.257	-76.000/
2627	1142	1	2133.500	3632.000	76.000	2133.500	3632.000	-76.000/
2628	1143	1	1902.108	3110.324	76.000	1902.108	3110.324	-76.000/
2629	1144	1	2075.500	3458.558	76.000	2075.500	3458.558	-76.000/
2630	1145	1	1383.051	2520.973	76.000	1383.051	2520.973	-76.000/
2631	1146	1	1739.184	2874.736	76.000	1739.184	2874.736	-76.000/
2632	1147	1	1095.311	2322.359	76.000	1095.311	2322.359	-76.000/
2633	1148	1	1209.740	2389.223	76.000	1209.740	2389.223	-76.000/
2634	1149	1	1793.522	2935.201	76.000	1793.522	2935.201	-76.000/
2635	1150	1	0.000	1931.000	76.000	0.000	2133.000	-76.000/
2636	1151	1	980.320	2257.858	76.000	980.320	2257.858	-76.000/
2637	1152	1	50.750	1931.000	76.000	50.750	2133.000	-76.000/
2638	1153	1	101.500	1931.000	76.000	101.500	2133.000	-76.000/
2639	1154	1	399.372	2064.344	76.000	399.372	2064.344	-76.000/
2640	1155	1	1844.864	2997.000	76.000	1844.864	2997.000	-76.000/
2641	1156	1	685.552	2134.435	76.000	685.552	2134.435	-76.000/
2642	1157	1	473.747	2077.503	76.000	473.747	2077.503	-76.000/
2643	1158	1	152.250	1931.000	76.000	152.250	2133.000	-76.000/
2644	1159	1	863.500	2197.250	76.000	863.500	2197.250	-76.000/
2645	1160	1	2133.500	3574.273	76.000	2133.500	3574.273	-76.000/
2646	1161	1	1325.063	2455.961	76.000	1325.063	2455.961	-76.000/
2647	1162	1	2017.452	3284.163	76.000	2017.452	3284.163	-76.000/
2648	1163	1	203.000	1931.000	76.000	203.000	2133.000	-76.000/

2649	1164	1	1959.681	3168.287	76.000	1959.681	3168.287	-76.000/
2650	1165	1	282.126	2037.716	76.000	282.126	2037.716	-76.000/
2651	1166	1	1556.227	2643.500	76.000	1556.227	2643.500	-76.000/
2652	1167	1	2075.520	3400.675	76.000	2075.520	3400.675	-76.000/
2653	1168	1	1617.789	2700.631	76.000	1617.789	2700.631	-76.000/
2654	1169	1	361.252	2043.432	76.000	361.252	2043.432	-76.000/
2655	1170	1	1498.623	2582.616	76.000	1498.623	2582.616	-76.000/
2656	1171	1	510.000	2069.750	76.000	510.000	2069.750	-76.000/
2657	1172	1	1902.349	3053.662	76.000	1902.349	3053.662	-76.000/
2658	1173	1	744.266	2134.716	76.000	744.266	2134.716	-76.000/
2659	1174	1	1152.446	2323.029	76.000	1152.446	2323.029	-76.000/
2660	1175	1	1037.818	2257.676	76.000	1037.818	2257.676	-76.000/
2661	1176	1	2133.500	3516.545	76.000	2133.500	3516.545	-76.000/
2662	1177	1	1684.102	2755.722	76.000	1684.102	2755.722	-76.000/
2663	1178	1	1440.811	2521.803	76.000	1440.811	2521.803	-76.000/
2664	1179	1	1267.287	2390.501	76.000	1267.287	2390.501	-76.000/
2665	1180	1	921.880	2195.527	76.000	921.880	2195.527	-76.000/
2666	1181	1	568.253	2069.958	76.000	568.253	2069.958	-76.000/
2667	1182	1	2017.323	3226.106	76.000	2017.323	3226.106	-76.000/
2668	1183	1	2075.541	3342.792	76.000	2075.541	3342.792	-76.000/
2669	1184	1	1747.742	2812.048	76.000	1747.742	2812.048	-76.000/
2670	1185	1	1959.926	3110.897	76.000	1959.926	3110.897	-76.000/
2671	1186	1	1799.907	2873.402	76.000	1799.907	2873.402	-76.000/
2672	1187	1	1382.865	2457.420	76.000	1382.865	2457.420	-76.000/
2673	1188	1	440.236	2032.078	76.000	440.236	2032.078	-76.000/
2674	1189	1	1849.692	2935.898	76.000	1849.692	2935.898	-76.000/
2675	1190	1	803.883	2134.108	76.000	803.883	2134.108	-76.000/
2676	1191	1	2133.500	3458.818	76.000	2133.500	3458.818	-76.000/
2677	1192	1	626.506	2070.167	76.000	626.506	2070.167	-76.000/
2678	1193	1	1902.591	2997.000	76.000	1902.591	2997.000	-76.000/
2679	1194	1	1095.316	2257.493	76.000	1095.316	2257.493	-76.000/
2680	1195	1	1209.582	2323.698	76.000	1209.582	2323.698	-76.000/
2681	1196	1	1613.955	2643.500	76.000	1613.955	2643.500	-76.000/
2682	1197	1	980.261	2193.804	76.000	980.261	2193.804	-76.000/
2683	1198	1	1556.455	2582.581	76.000	1556.455	2582.581	-76.000/
2684	1199	1	1324.835	2391.779	76.000	1324.835	2391.779	-76.000/
2685	1200	1	1677.892	2699.611	76.000	1677.892	2699.611	-76.000/
2686	1201	1	2075.476	3284.900	76.000	2075.476	3284.900	-76.000/
2687	1202	1	2017.533	3168.788	76.000	2017.533	3168.788	-76.000/
2688	1203	1	475.118	2019.039	76.000	475.118	2019.039	-76.000/
2689	1204	1	1498.747	2521.733	76.000	1498.747	2521.733	-76.000/
2690	1205	1	685.485	2070.307	76.000	685.485	2070.307	-76.000/
2691	1206	1	863.500	2133.500	76.000	863.500	2133.500	-76.000/
2692	1207	1	2133.500	3401.091	76.000	2133.500	3401.091	-76.000/
2693	1208	1	1960.122	3053.949	76.000	1960.122	3053.949	-76.000/
2694	1209	1	1440.667	2458.879	76.000	1440.667	2458.879	-76.000/
2695	1210	1	407.899	1991.130	76.000	407.899	1991.130	-76.000/
2696	1211	1	1152.370	2257.834	76.000	1152.370	2257.834	-76.000/
2697	1212	1	510.000	2006.000	76.000	510.000	2006.000	-76.000/
2698	1213	1	1266.946	2325.244	76.000	1266.946	2325.244	-76.000/
2699	1214	1	1854.521	2874.795	76.000	1854.521	2874.795	-76.000/
2700	1215	1	744.464	2070.447	76.000	744.464	2070.447	-76.000/
2701	1216	1	1038.014	2192.954	76.000	1038.014	2192.954	-76.000/
2702	1217	1	1756.301	2749.361	76.000	1756.301	2749.361	-76.000/
2703	1218	1	2075.411	3227.007	76.000	2075.411	3227.007	-76.000/
2704	1219	1	1905.863	2936.594	76.000	1905.863	2936.594	-76.000/
2705	1220	1	2133.500	3343.364	76.000	2133.500	3343.364	-76.000/
2706	1221	1	2017.744	3111.471	76.000	2017.744	3111.471	-76.000/
2707	1222	1	921.851	2131.625	76.000	921.851	2131.625	-76.000/
2708	1223	1	1814.203	2808.201	76.000	1814.203	2808.201	-76.000/
2709	1224	1	1382.679	2393.867	76.000	1382.679	2393.867	-76.000/
2710	1225	1	1671.682	2643.500	76.000	1671.682	2643.500	-76.000/
2711	1226	1	568.086	2006.089	76.000	568.086	2006.089	-76.000/
2712	1227	1	1614.343	2583.039	76.000	1614.343	2583.039	-76.000/
2713	1228	1	1960.318	2997.000	76.000	1960.318	2997.000	-76.000/
2714	1229	1	0.000	1930.500	76.000	0.000	1930.500	-76.000/

2715	1230	1	50.750	1930.500	76.000	50.750	1930.500	-76.000/
2716	1231	1	1556.683	2521.662	76.000	1556.683	2521.662	-76.000/
2717	1232	1	101.500	1930.500	76.000	101.500	1930.500	-76.000/
2718	1233	1	803.982	2070.099	76.000	803.982	2070.099	-76.000/
2719	1234	1	152.250	1930.500	76.000	152.250	1930.500	-76.000/
2720	1235	1	289.281	1940.341	76.000	289.281	1940.341	-76.000/
2721	1236	1	1209.423	2258.174	76.000	1209.423	2258.174	-76.000/
2722	1237	1	203.000	1930.500	76.000	203.000	1930.500	-76.000/
2723	1238	1	458.950	1966.690	76.000	458.950	1966.690	-76.000/
2724	1239	1	626.173	2006.178	76.000	626.173	2006.178	-76.000/
2725	1240	1	1742.855	2696.430	76.000	1742.855	2696.430	-76.000/
2726	1241	1	1095.767	2192.104	76.000	1095.767	2192.104	-76.000/
2727	1242	1	375.563	1950.183	76.000	375.563	1950.183	-76.000/
2728	1243	1	2075.517	3169.485	76.000	2075.517	3169.485	-76.000/
2729	1244	1	1498.733	2459.318	76.000	1498.733	2459.318	-76.000/
2730	1245	1	2133.500	3285.636	76.000	2133.500	3285.636	-76.000/
2731	1246	1	1324.310	2326.789	76.000	1324.310	2326.789	-76.000/
2732	1247	1	980.202	2129.751	76.000	980.202	2129.751	-76.000/
2733	1248	1	2017.895	3054.235	76.000	2017.895	3054.235	-76.000/
2734	1249	1	863.500	2069.750	76.000	863.500	2069.750	-76.000/
2735	1250	1	1440.523	2395.954	76.000	1440.523	2395.954	-76.000/
2736	1251	1	1909.135	2876.188	76.000	1909.135	2876.188	-76.000/
2737	1252	1	685.417	2006.179	76.000	685.417	2006.179	-76.000/
2738	1253	1	83.750	1904.905	76.000	83.750	1904.905	-76.000/
2739	1254	1	1863.002	2812.140	76.000	1863.002	2812.140	-76.000/
2740	1255	1	41.875	1902.664	76.000	41.875	1902.664	-76.000/
2741	1256	1	0.000	1900.423	76.000	0.000	1900.423	-76.000/
2742	1257	1	1962.337	2937.143	76.000	1962.337	2937.143	-76.000/
2743	1258	1	1729.409	2643.500	76.000	1729.409	2643.500	-76.000/
2744	1259	1	1672.230	2583.497	76.000	1672.230	2583.497	-76.000/
2745	1260	1	2133.500	3227.909	76.000	2133.500	3227.909	-76.000/
2746	1261	1	1266.604	2259.986	76.000	1266.604	2259.986	-76.000/
2747	1262	1	1152.945	2192.135	76.000	1152.945	2192.135	-76.000/
2748	1263	1	2075.622	3111.963	76.000	2075.622	3111.963	-76.000/
2749	1264	1	116.750	1894.349	76.000	116.750	1894.349	-76.000/
2750	1265	1	1614.731	2522.578	76.000	1614.731	2522.578	-76.000/
2751	1266	1	1038.209	2128.233	76.000	1038.209	2128.233	-76.000/
2752	1267	1	510.000	1942.250	76.000	510.000	1942.250	-76.000/
2753	1268	1	744.662	2006.179	76.000	744.662	2006.179	-76.000/
2754	1269	1	1828.500	2743.000	76.000	1828.500	2743.000	-76.000/
2755	1270	1	1382.328	2328.519	76.000	1382.328	2328.519	-76.000/
2756	1271	1	2018.045	2997.000	76.000	2018.045	2997.000	-76.000/
2757	1272	1	921.993	2067.545	76.000	921.993	2067.545	-76.000/
2758	1273	1	1556.799	2459.758	76.000	1556.799	2459.758	-76.000/
2759	1274	1	149.751	1883.792	76.000	149.751	1883.792	-76.000/
2760	1275	1	66.000	1879.310	76.000	66.000	1879.310	-76.000/
2761	1276	1	33.000	1874.828	76.000	33.000	1874.828	-76.000/
2762	1277	1	568.110	1942.083	76.000	568.110	1942.083	-76.000/
2763	1278	1	442.781	1914.341	76.000	442.781	1914.341	-76.000/
2764	1279	1	1498.719	2396.903	76.000	1498.719	2396.903	-76.000/
2765	1280	1	0.000	1870.345	76.000	0.000	1870.345	-76.000/
2766	1281	1	1807.818	2693.250	76.000	1807.818	2693.250	-76.000/
2767	1282	1	2133.500	3170.182	76.000	2133.500	3170.182	-76.000/
2768	1283	1	804.081	2006.089	76.000	804.081	2006.089	-76.000/
2769	1284	1	1911.800	2816.078	76.000	1911.800	2816.078	-76.000/
2770	1285	1	1210.124	2192.165	76.000	1210.124	2192.165	-76.000/
2771	1286	1	1323.785	2261.798	76.000	1323.785	2261.798	-76.000/
2772	1287	1	2075.697	3054.481	76.000	2075.697	3054.481	-76.000/
2773	1288	1	1096.217	2126.715	76.000	1096.217	2126.715	-76.000/
2774	1289	1	1964.357	2877.286	76.000	1964.357	2877.286	-76.000/
2775	1290	1	626.219	1941.915	76.000	626.219	1941.915	-76.000/
2776	1291	1	1871.482	2749.484	76.000	1871.482	2749.484	-76.000/
2777	1292	1	980.486	2065.340	76.000	980.486	2065.340	-76.000/
2778	1293	1	81.251	1858.197	76.000	81.251	1858.197	-76.000/
2779	1294	1	1440.345	2330.250	76.000	1440.345	2330.250	-76.000/
2780	1295	1	1729.957	2583.400	76.000	1729.957	2583.400	-76.000/

2781	1296	1	1787.136	2643.500	76.000	1787.136	2643.500	-76.000/
2782	1297	1	1672.779	2523.493	76.000	1672.779	2523.493	-76.000/
2783	1298	1	2018.812	2937.692	76.000	2018.812	2937.692	-76.000/
2784	1299	1	40.625	1847.662	76.000	40.625	1847.662	-76.000/
2785	1300	1	863.500	2006.000	76.000	863.500	2006.000	-76.000/
2786	1301	1	1614.750	2460.085	76.000	1614.750	2460.085	-76.000/
2787	1302	1	685.452	1941.957	76.000	685.452	1941.957	-76.000/
2788	1303	1	2133.500	3112.455	76.000	2133.500	3112.455	-76.000/
2789	1304	1	220.522	1848.171	76.000	220.522	1848.171	-76.000/
2790	1305	1	0.000	1837.126	76.000	0.000	1837.126	-76.000/
2791	1306	1	1267.141	2193.669	76.000	1267.141	2193.669	-76.000/
2792	1307	1	298.561	1854.920	76.000	298.561	1854.920	-76.000/
2793	1308	1	1153.521	2126.435	76.000	1153.521	2126.435	-76.000/
2794	1309	1	96.501	1837.085	76.000	96.501	1837.085	-76.000/
2795	1310	1	1556.915	2397.853	76.000	1556.915	2397.853	-76.000/
2796	1311	1	1858.173	2696.492	76.000	1858.173	2696.492	-76.000/
2797	1312	1	2075.773	2997.000	76.000	2075.773	2997.000	-76.000/
2798	1313	1	1381.976	2263.172	76.000	1381.976	2263.172	-76.000/
2799	1314	1	376.599	1861.668	76.000	376.599	1861.668	-76.000/
2800	1315	1	1038.561	2063.532	76.000	1038.561	2063.532	-76.000/
2801	1316	1	1914.464	2755.967	76.000	1914.464	2755.967	-76.000/
2802	1317	1	744.685	1942.000	76.000	744.685	1942.000	-76.000/
2803	1318	1	510.000	1878.500	76.000	510.000	1878.500	-76.000/
2804	1319	1	1966.144	2817.584	76.000	1966.144	2817.584	-76.000/
2805	1320	1	922.135	2003.465	76.000	922.135	2003.465	-76.000/
2806	1321	1	48.251	1820.496	76.000	48.251	1820.496	-76.000/
2807	1322	1	1498.497	2331.566	76.000	1498.497	2331.566	-76.000/
2808	1323	1	2019.578	2878.384	76.000	2019.578	2878.384	-76.000/
2809	1324	1	2133.500	3054.727	76.000	2133.500	3054.727	-76.000/
2810	1325	1	163.264	1817.894	76.000	163.264	1817.894	-76.000/
2811	1326	1	568.133	1878.076	76.000	568.133	1878.076	-76.000/
2812	1327	1	1787.683	2583.304	76.000	1787.683	2583.304	-76.000/
2813	1328	1	1730.505	2523.301	76.000	1730.505	2523.301	-76.000/
2814	1329	1	1844.864	2643.500	76.000	1844.864	2643.500	-76.000/
2815	1330	1	1324.159	2195.173	76.000	1324.159	2195.173	-76.000/
2816	1331	1	1210.825	2126.156	76.000	1210.825	2126.156	-76.000/
2817	1332	1	804.093	1942.125	76.000	804.093	1942.125	-76.000/
2818	1333	1	1672.701	2460.413	76.000	1672.701	2460.413	-76.000/
2819	1334	1	1096.637	2061.723	76.000	1096.637	2061.723	-76.000/
2820	1335	1	0.000	1803.907	76.000	0.000	1803.907	-76.000/
2821	1336	1	2076.156	2937.888	76.000	2076.156	2937.888	-76.000/
2822	1337	1	1440.168	2264.545	76.000	1440.168	2264.545	-76.000/
2823	1338	1	443.300	1838.209	76.000	443.300	1838.209	-76.000/
2824	1339	1	980.770	2000.929	76.000	980.770	2000.929	-76.000/
2825	1340	1	1908.528	2699.734	76.000	1908.528	2699.734	-76.000/
2826	1341	1	626.266	1877.652	76.000	626.266	1877.652	-76.000/
2827	1342	1	1614.769	2397.592	76.000	1614.769	2397.592	-76.000/
2828	1343	1	863.500	1942.250	76.000	863.500	1942.250	-76.000/
2829	1344	1	1967.931	2757.882	76.000	1967.931	2757.882	-76.000/
2830	1345	1	106.006	1787.617	76.000	106.006	1787.617	-76.000/
2831	1346	1	1556.649	2332.883	76.000	1556.649	2332.883	-76.000/
2832	1347	1	2133.500	2997.000	76.000	2133.500	2997.000	-76.000/
2833	1348	1	685.487	1877.736	76.000	685.487	1877.736	-76.000/
2834	1349	1	2020.488	2819.090	76.000	2020.488	2819.090	-76.000/
2835	1350	1	1267.679	2127.352	76.000	1267.679	2127.352	-76.000/
2836	1351	1	1382.116	2196.852	76.000	1382.116	2196.852	-76.000/
2837	1352	1	1153.970	2061.104	76.000	1153.970	2061.104	-76.000/
2838	1353	1	53.003	1776.329	76.000	53.003	1776.329	-76.000/
2839	1354	1	1038.913	1998.831	76.000	1038.913	1998.831	-76.000/
2840	1355	1	1788.230	2523.108	76.000	1788.230	2523.108	-76.000/
2841	1356	1	2076.539	2878.775	76.000	2076.539	2878.775	-76.000/
2842	1357	1	1845.309	2583.042	76.000	1845.309	2583.042	-76.000/
2843	1358	1	1498.275	2266.229	76.000	1498.275	2266.229	-76.000/
2844	1359	1	1902.591	2643.500	76.000	1902.591	2643.500	-76.000/
2845	1360	1	1730.535	2460.749	76.000	1730.535	2460.749	-76.000/
2846	1361	1	0.000	1765.041	76.000	0.000	1765.041	-76.000/

2847	1362	1	744.709	1877.821	76.000	744.709	1877.821	-76.000/
2848	1363	1	922.270	1939.649	76.000	922.270	1939.649	-76.000/
2849	1364	1	510.000	1814.750	76.000	510.000	1814.750	-76.000/
2850	1365	1	1672.623	2397.332	76.000	1672.623	2397.332	-76.000/
2851	1366	1	1964.124	2700.691	76.000	1964.124	2700.691	-76.000/
2852	1367	1	238.044	1765.842	76.000	238.044	1765.842	-76.000/
2853	1368	1	2133.500	2938.083	76.000	2133.500	2938.083	-76.000/
2854	1369	1	1324.532	2128.547	76.000	1324.532	2128.547	-76.000/
2855	1370	1	307.840	1769.498	76.000	307.840	1769.498	-76.000/
2856	1371	1	1211.303	2060.484	76.000	1211.303	2060.484	-76.000/
2857	1372	1	568.442	1814.359	76.000	568.442	1814.359	-76.000/
2858	1373	1	1614.553	2333.005	76.000	1614.553	2333.005	-76.000/
2859	1374	1	1440.074	2198.531	76.000	1440.074	2198.531	-76.000/
2860	1375	1	804.104	1878.160	76.000	804.104	1878.160	-76.000/
2861	1376	1	176.777	1751.996	76.000	176.777	1751.996	-76.000/
2862	1377	1	1097.057	1996.732	76.000	1097.057	1996.732	-76.000/
2863	1378	1	2021.397	2759.796	76.000	2021.397	2759.796	-76.000/
2864	1379	1	377.636	1773.154	76.000	377.636	1773.154	-76.000/
2865	1380	1	981.039	1937.048	76.000	981.039	1937.048	-76.000/
2866	1381	1	115.511	1738.150	76.000	115.511	1738.150	-76.000/
2867	1382	1	2076.994	2819.670	76.000	2076.994	2819.670	-76.000/
2868	1383	1	626.885	1813.967	76.000	626.885	1813.967	-76.000/
2869	1384	1	1556.382	2267.913	76.000	1556.382	2267.913	-76.000/
2870	1385	1	57.756	1732.162	76.000	57.756	1732.162	-76.000/
2871	1386	1	1845.755	2522.585	76.000	1845.755	2522.585	-76.000/
2872	1387	1	863.500	1878.500	76.000	863.500	1878.500	-76.000/
2873	1388	1	0.000	1726.174	76.000	0.000	1726.174	-76.000/
2874	1389	1	1902.935	2582.780	76.000	1902.935	2582.780	-76.000/
2875	1390	1	1788.369	2461.085	76.000	1788.369	2461.085	-76.000/
2876	1391	1	1268.026	2061.752	76.000	1268.026	2061.752	-76.000/
2877	1392	1	443.818	1762.077	76.000	443.818	1762.077	-76.000/
2878	1393	1	1382.256	2130.531	76.000	1382.256	2130.531	-76.000/
2879	1394	1	2133.500	2879.167	76.000	2133.500	2879.167	-76.000/
2880	1395	1	1960.318	2643.500	76.000	1960.318	2643.500	-76.000/
2881	1396	1	685.956	1814.101	76.000	685.956	1814.101	-76.000/
2882	1397	1	1730.565	2398.197	76.000	1730.565	2398.197	-76.000/
2883	1398	1	1154.419	1995.772	76.000	1154.419	1995.772	-76.000/
2884	1399	1	1498.155	2200.067	76.000	1498.155	2200.067	-76.000/
2885	1400	1	1039.042	1935.236	76.000	1039.042	1935.236	-76.000/
2886	1401	1	2019.721	2701.648	76.000	2019.721	2701.648	-76.000/
2887	1402	1	1672.457	2333.127	76.000	1672.457	2333.127	-76.000/
2888	1403	1	922.404	1875.833	76.000	922.404	1875.833	-76.000/
2889	1404	1	745.027	1814.236	76.000	745.027	1814.236	-76.000/
2890	1405	1	2077.448	2760.565	76.000	2077.448	2760.565	-76.000/
2891	1406	1	510.000	1751.000	76.000	510.000	1751.000	-76.000/
2892	1407	1	1614.337	2268.417	76.000	1614.337	2268.417	-76.000/
2893	1408	1	1324.748	2063.019	76.000	1324.748	2063.019	-76.000/
2894	1409	1	1439.980	2132.516	76.000	1439.980	2132.516	-76.000/
2895	1410	1	1211.781	1994.812	76.000	1211.781	1994.812	-76.000/
2896	1411	1	2133.500	2820.250	76.000	2133.500	2820.250	-76.000/
2897	1412	1	1097.044	1933.424	76.000	1097.044	1933.424	-76.000/
2898	1413	1	568.752	1750.641	76.000	568.752	1750.641	-76.000/
2899	1414	1	804.263	1814.493	76.000	804.263	1814.493	-76.000/
2900	1415	1	1903.279	2522.061	76.000	1903.279	2522.061	-76.000/
2901	1416	1	1845.812	2460.079	76.000	1845.812	2460.079	-76.000/
2902	1417	1	246.522	1694.671	76.000	246.522	1694.671	-76.000/
2903	1418	1	1960.545	2581.957	76.000	1960.545	2581.957	-76.000/
2904	1419	1	184.014	1687.748	76.000	184.014	1687.748	-76.000/
2905	1420	1	1556.236	2201.604	76.000	1556.236	2201.604	-76.000/
2906	1421	1	1788.507	2399.061	76.000	1788.507	2399.061	-76.000/
2907	1422	1	981.309	1873.166	76.000	981.309	1873.166	-76.000/
2908	1423	1	121.506	1680.825	76.000	121.506	1680.825	-76.000/
2909	1424	1	313.295	1696.499	76.000	313.295	1696.499	-76.000/
2910	1425	1	60.753	1677.831	76.000	60.753	1677.831	-76.000/
2911	1426	1	2018.045	2643.500	76.000	2018.045	2643.500	-76.000/
2912	1427	1	0.000	1674.837	76.000	0.000	1674.837	-76.000/

2913	1428	1	627.503	1750.283	76.000	627.503	1750.283	-76.000/
2914	1429	1	1730.295	2333.755	76.000	1730.295	2333.755	-76.000/
2915	1430	1	380.068	1698.327	76.000	380.068	1698.327	-76.000/
2916	1431	1	863.500	1814.750	76.000	863.500	1814.750	-76.000/
2917	1432	1	2076.611	2702.032	76.000	2076.611	2702.032	-76.000/
2918	1433	1	1382.361	2064.587	76.000	1382.361	2064.587	-76.000/
2919	1434	1	1268.373	1996.151	76.000	1268.373	1996.151	-76.000/
2920	1435	1	1154.434	1932.644	76.000	1154.434	1932.644	-76.000/
2921	1436	1	1672.291	2268.921	76.000	1672.291	2268.921	-76.000/
2922	1437	1	1498.034	2133.905	76.000	1498.034	2133.905	-76.000/
2923	1438	1	686.424	1750.467	76.000	686.424	1750.467	-76.000/
2924	1439	1	1039.170	1871.641	76.000	1039.170	1871.641	-76.000/
2925	1440	1	2133.500	2761.333	76.000	2133.500	2761.333	-76.000/
2926	1441	1	445.034	1692.789	76.000	445.034	1692.789	-76.000/
2927	1442	1	1614.071	2202.327	76.000	1614.071	2202.327	-76.000/
2928	1443	1	922.272	1812.545	76.000	922.272	1812.545	-76.000/
2929	1444	1	745.345	1750.651	76.000	745.345	1750.651	-76.000/
2930	1445	1	1903.255	2459.074	76.000	1903.255	2459.074	-76.000/
2931	1446	1	1960.771	2520.415	76.000	1960.771	2520.415	-76.000/
2932	1447	1	1845.869	2397.574	76.000	1845.869	2397.574	-76.000/
2933	1448	1	1324.964	1997.491	76.000	1324.964	1997.491	-76.000/
2934	1449	1	2018.154	2581.135	76.000	2018.154	2581.135	-76.000/
2935	1450	1	510.000	1687.250	76.000	510.000	1687.250	-76.000/
2936	1451	1	1439.974	2066.155	76.000	1439.974	2066.155	-76.000/
2937	1452	1	1211.824	1931.864	76.000	1211.824	1931.864	-76.000/
2938	1453	1	1788.133	2334.384	76.000	1788.133	2334.384	-76.000/
2939	1454	1	2075.773	2643.500	76.000	2075.773	2643.500	-76.000/
2940	1455	1	1097.031	1870.115	76.000	1097.031	1870.115	-76.000/
2941	1456	1	1556.089	2135.295	76.000	1556.089	2135.295	-76.000/
2942	1457	1	804.422	1750.825	76.000	804.422	1750.825	-76.000/
2943	1458	1	568.834	1687.071	76.000	568.834	1687.071	-76.000/
2944	1459	1	1730.024	2269.314	76.000	1730.024	2269.314	-76.000/
2945	1460	1	0.000	1623.500	76.000	0.000	1623.500	-76.000/
2946	1461	1	63.750	1623.500	76.000	63.750	1623.500	-76.000/
2947	1462	1	981.044	1810.340	76.000	981.044	1810.340	-76.000/
2948	1463	1	2133.500	2702.417	76.000	2133.500	2702.417	-76.000/
2949	1464	1	127.500	1623.500	76.000	127.500	1623.500	-76.000/
2950	1465	1	191.250	1623.500	76.000	191.250	1623.500	-76.000/
2951	1466	1	627.668	1686.891	76.000	627.668	1686.891	-76.000/
2952	1467	1	255.000	1623.500	76.000	255.000	1623.500	-76.000/
2953	1468	1	1671.906	2203.050	76.000	1671.906	2203.050	-76.000/
2954	1469	1	1382.467	1998.642	76.000	1382.467	1998.642	-76.000/
2955	1470	1	1268.719	1932.351	76.000	1268.719	1932.351	-76.000/
2956	1471	1	863.500	1751.000	76.000	863.500	1751.000	-76.000/
2957	1472	1	1154.450	1869.515	76.000	1154.450	1869.515	-76.000/
2958	1473	1	1497.883	2067.396	76.000	1497.883	2067.396	-76.000/
2959	1474	1	318.750	1623.500	76.000	318.750	1623.500	-76.000/
2960	1475	1	1960.735	2457.254	76.000	1960.735	2457.254	-76.000/
2961	1476	1	1038.818	1809.178	76.000	1038.818	1809.178	-76.000/
2962	1477	1	1903.231	2396.087	76.000	1903.231	2396.087	-76.000/
2963	1478	1	686.587	1686.983	76.000	686.587	1686.983	-76.000/
2964	1479	1	2018.262	2518.769	76.000	2018.262	2518.769	-76.000/
2965	1480	1	382.500	1623.500	76.000	382.500	1623.500	-76.000/
2966	1481	1	1613.805	2136.236	76.000	1613.805	2136.236	-76.000/
2967	1482	1	1845.479	2332.976	76.000	1845.479	2332.976	-76.000/
2968	1483	1	2075.827	2580.442	76.000	2075.827	2580.442	-76.000/
2969	1484	1	1787.758	2269.708	76.000	1787.758	2269.708	-76.000/
2970	1485	1	446.250	1623.500	76.000	446.250	1623.500	-76.000/
2971	1486	1	2133.500	2643.500	76.000	2133.500	2643.500	-76.000/
2972	1487	1	922.140	1749.257	76.000	922.140	1749.257	-76.000/
2973	1488	1	1325.613	1932.838	76.000	1325.613	1932.838	-76.000/
2974	1489	1	745.506	1687.075	76.000	745.506	1687.075	-76.000/
2975	1490	1	1439.969	1999.794	76.000	1439.969	1999.794	-76.000/
2976	1491	1	1211.868	1868.915	76.000	1211.868	1868.915	-76.000/
2977	1492	1	510.000	1623.500	76.000	510.000	1623.500	-76.000/
2978	1493	1	1096.593	1808.017	76.000	1096.593	1808.017	-76.000/



2979	1494	1	1729.495	2203.448	76.000	1729.495	2203.448	-76.000/
2980	1495	1	1555.792	2068.637	76.000	1555.792	2068.637	-76.000/
2981	1496	1	804.503	1687.163	76.000	804.503	1687.163	-76.000/
2982	1497	1	0.000	1564.583	76.000	0.000	1564.583	-76.000/
2983	1498	1	63.585	1564.639	76.000	63.585	1564.639	-76.000/
2984	1499	1	980.779	1747.513	76.000	980.779	1747.513	-76.000/
2985	1500	1	568.917	1623.500	76.000	568.917	1623.500	-76.000/
2986	1501	1	127.169	1564.695	76.000	127.169	1564.695	-76.000/
2987	1502	1	1671.521	2137.178	76.000	1671.521	2137.178	-76.000/
2988	1503	1	190.697	1564.770	76.000	190.697	1564.770	-76.000/
2989	1504	1	1960.699	2394.092	76.000	1960.699	2394.092	-76.000/
2990	1505	1	2018.215	2455.433	76.000	2018.215	2455.433	-76.000/
2991	1506	1	1382.994	1933.806	76.000	1382.994	1933.806	-76.000/
2992	1507	1	1269.065	1868.551	76.000	1269.065	1868.551	-76.000/
2993	1508	1	254.226	1564.845	76.000	254.226	1564.845	-76.000/
2994	1509	1	1902.825	2331.568	76.000	1902.825	2331.568	-76.000/
2995	1510	1	2075.881	2517.385	76.000	2075.881	2517.385	-76.000/
2996	1511	1	1497.732	2000.886	76.000	1497.732	2000.886	-76.000/
2997	1512	1	1154.132	1807.279	76.000	1154.132	1807.279	-76.000/
2998	1513	1	627.833	1623.500	76.000	627.833	1623.500	-76.000/
2999	1514	1	2133.500	2579.750	76.000	2133.500	2579.750	-76.000/
3000	1515	1	1845.088	2268.378	76.000	1845.088	2268.378	-76.000/
3001	1516	1	863.500	1687.250	76.000	863.500	1687.250	-76.000/
3002	1517	1	317.912	1564.865	76.000	317.912	1564.865	-76.000/
3003	1518	1	1038.467	1746.716	76.000	1038.467	1746.716	-76.000/
3004	1519	1	1613.348	2069.338	76.000	1613.348	2069.338	-76.000/
3005	1520	1	381.599	1564.885	76.000	381.599	1564.885	-76.000/
3006	1521	1	1787.085	2203.846	76.000	1787.085	2203.846	-76.000/
3007	1522	1	686.750	1623.500	76.000	686.750	1623.500	-76.000/
3008	1523	1	445.800	1564.734	76.000	445.800	1564.734	-76.000/
3009	1524	1	921.683	1686.378	76.000	921.683	1686.378	-76.000/
3010	1525	1	1326.262	1868.186	76.000	1326.262	1868.186	-76.000/
3011	1526	1	1440.376	1934.773	76.000	1440.376	1934.773	-76.000/
3012	1527	1	1211.671	1806.540	76.000	1211.671	1806.540	-76.000/
3013	1528	1	1728.967	2137.581	76.000	1728.967	2137.581	-76.000/
3014	1529	1	745.667	1623.500	76.000	745.667	1623.500	-76.000/
3015	1530	1	1555.495	2001.979	76.000	1555.495	2001.979	-76.000/
3016	1531	1	1096.154	1745.919	76.000	1096.154	1745.919	-76.000/
3017	1532	1	510.000	1564.583	76.000	510.000	1564.583	-76.000/
3018	1533	1	2018.167	2392.098	76.000	2018.167	2392.098	-76.000/
3019	1534	1	1960.373	2330.067	76.000	1960.373	2330.067	-76.000/
3020	1535	1	2075.857	2453.842	76.000	2075.857	2453.842	-76.000/
3021	1536	1	2133.500	2516.000	76.000	2133.500	2516.000	-76.000/
3022	1537	1	1670.904	2070.040	76.000	1670.904	2070.040	-76.000/
3023	1538	1	1902.418	2267.049	76.000	1902.418	2267.049	-76.000/
3024	1539	1	979.867	1685.507	76.000	979.867	1685.507	-76.000/
3025	1540	1	0.000	1505.667	76.000	0.000	1505.667	-76.000/
3026	1541	1	568.806	1564.557	76.000	568.806	1564.557	-76.000/
3027	1542	1	63.419	1505.778	76.000	63.419	1505.778	-76.000/
3028	1543	1	804.583	1623.500	76.000	804.583	1623.500	-76.000/
3029	1544	1	126.838	1505.890	76.000	126.838	1505.890	-76.000/
3030	1545	1	190.145	1506.040	76.000	190.145	1506.040	-76.000/
3031	1546	1	1844.399	2203.027	76.000	1844.399	2203.027	-76.000/
3032	1547	1	1383.522	1868.969	76.000	1383.522	1868.969	-76.000/
3033	1548	1	1268.942	1806.390	76.000	1268.942	1806.390	-76.000/
3034	1549	1	1497.972	1935.828	76.000	1497.972	1935.828	-76.000/
3035	1550	1	253.451	1506.189	76.000	253.451	1506.189	-76.000/
3036	1551	1	1153.814	1745.042	76.000	1153.814	1745.042	-76.000/
3037	1552	1	627.611	1564.530	76.000	627.611	1564.530	-76.000/
3038	1553	1	317.075	1506.230	76.000	317.075	1506.230	-76.000/
3039	1554	1	1786.412	2137.984	76.000	1786.412	2137.984	-76.000/
3040	1555	1	1612.891	2002.440	76.000	1612.891	2002.440	-76.000/
3041	1556	1	863.500	1623.500	76.000	863.500	1623.500	-76.000/
3042	1557	1	1037.574	1685.108	76.000	1037.574	1685.108	-76.000/
3043	1558	1	380.699	1506.271	76.000	380.699	1506.271	-76.000/
3044	1559	1	686.399	1564.610	76.000	686.399	1564.610	-76.000/

3045	1560	1	1728.159	2070.548	76.000	1728.159	2070.548	-76.000/
3046	1561	1	1326.213	1806.240	76.000	1326.213	1806.240	-76.000/
3047	1562	1	445.349	1505.969	76.000	445.349	1505.969	-76.000/
3048	1563	1	1440.782	1869.753	76.000	1440.782	1869.753	-76.000/
3049	1564	1	2017.922	2328.566	76.000	2017.922	2328.566	-76.000/
3050	1565	1	2075.834	2390.299	76.000	2075.834	2390.299	-76.000/
3051	1566	1	1211.474	1744.166	76.000	1211.474	1744.166	-76.000/
3052	1567	1	921.227	1623.500	76.000	921.227	1623.500	-76.000/
3053	1568	1	2133.500	2452.250	76.000	2133.500	2452.250	-76.000/
3054	1569	1	1960.047	2266.042	76.000	1960.047	2266.042	-76.000/
3055	1570	1	1555.568	1936.882	76.000	1555.568	1936.882	-76.000/
3056	1571	1	745.187	1564.690	76.000	745.187	1564.690	-76.000/
3057	1572	1	1095.282	1684.710	76.000	1095.282	1684.710	-76.000/
3058	1573	1	1901.713	2202.208	76.000	1901.713	2202.208	-76.000/
3059	1574	1	510.000	1505.667	76.000	510.000	1505.667	-76.000/
3060	1575	1	1670.288	2002.902	76.000	1670.288	2002.902	-76.000/
3061	1576	1	1843.710	2137.676	76.000	1843.710	2137.676	-76.000/
3062	1577	1	978.955	1623.500	76.000	978.955	1623.500	-76.000/
3063	1578	1	568.694	1505.613	76.000	568.694	1505.613	-76.000/
3064	1579	1	804.343	1564.636	76.000	804.343	1564.636	-76.000/
3065	1580	1	0.000	1446.750	76.000	0.000	1446.750	-76.000/
3066	1581	1	63.310	1446.899	76.000	63.310	1446.899	-76.000/
3067	1582	1	1383.590	1806.582	76.000	1383.590	1806.582	-76.000/
3068	1583	1	126.620	1447.048	76.000	126.620	1447.048	-76.000/
3069	1584	1	1268.819	1744.230	76.000	1268.819	1744.230	-76.000/
3070	1585	1	1498.212	1870.769	76.000	1498.212	1870.769	-76.000/
3071	1586	1	190.189	1447.108	76.000	190.189	1447.108	-76.000/
3072	1587	1	1152.975	1684.271	76.000	1152.975	1684.271	-76.000/
3073	1588	1	1785.413	2071.055	76.000	1785.413	2071.055	-76.000/
3074	1589	1	253.759	1447.169	76.000	253.759	1447.169	-76.000/
3075	1590	1	627.389	1505.560	76.000	627.389	1505.560	-76.000/
3076	1591	1	1612.908	1937.381	76.000	1612.908	1937.381	-76.000/
3077	1592	1	863.500	1564.583	76.000	863.500	1564.583	-76.000/
3078	1593	1	317.407	1447.202	76.000	317.407	1447.202	-76.000/
3079	1594	1	1036.682	1623.500	76.000	1036.682	1623.500	-76.000/
3080	1595	1	2075.711	2326.658	76.000	2075.711	2326.658	-76.000/
3081	1596	1	2017.676	2265.034	76.000	2017.676	2265.034	-76.000/
3082	1597	1	2133.500	2388.500	76.000	2133.500	2388.500	-76.000/
3083	1598	1	686.048	1505.720	76.000	686.048	1505.720	-76.000/
3084	1599	1	381.055	1447.236	76.000	381.055	1447.236	-76.000/
3085	1600	1	1959.292	2201.341	76.000	1959.292	2201.341	-76.000/
3086	1601	1	1727.350	2003.514	76.000	1727.350	2003.514	-76.000/
3087	1602	1	1326.164	1744.295	76.000	1326.164	1744.295	-76.000/
3088	1603	1	1440.967	1806.923	76.000	1440.967	1806.923	-76.000/
3089	1604	1	1210.669	1683.833	76.000	1210.669	1683.833	-76.000/
3090	1605	1	1901.007	2137.368	76.000	1901.007	2137.368	-76.000/
3091	1606	1	445.527	1446.993	76.000	445.527	1446.993	-76.000/
3092	1607	1	921.582	1564.521	76.000	921.582	1564.521	-76.000/
3093	1608	1	1555.641	1871.786	76.000	1555.641	1871.786	-76.000/
3094	1609	1	744.707	1505.879	76.000	744.707	1505.879	-76.000/
3095	1610	1	1094.409	1623.500	76.000	1094.409	1623.500	-76.000/
3096	1611	1	510.000	1446.750	76.000	510.000	1446.750	-76.000/
3097	1612	1	1670.249	1937.880	76.000	1670.249	1937.880	-76.000/
3098	1613	1	1842.928	2071.176	76.000	1842.928	2071.176	-76.000/
3099	1614	1	979.663	1564.460	76.000	979.663	1564.460	-76.000/
3100	1615	1	804.103	1505.773	76.000	804.103	1505.773	-76.000/
3101	1616	1	568.601	1446.564	76.000	568.601	1446.564	-76.000/
3102	1617	1	1383.658	1744.195	76.000	1383.658	1744.195	-76.000/
3103	1618	1	1268.205	1683.865	76.000	1268.205	1683.865	-76.000/
3104	1619	1	0.000	1387.833	76.000	0.000	1387.833	-76.000/
3105	1620	1	1498.361	1807.997	76.000	1498.361	1807.997	-76.000/
3106	1621	1	63.201	1388.019	76.000	63.201	1388.019	-76.000/
3107	1622	1	126.402	1388.205	76.000	126.402	1388.205	-76.000/
3108	1623	1	1784.413	2004.127	76.000	1784.413	2004.127	-76.000/
3109	1624	1	1152.136	1623.500	76.000	1152.136	1623.500	-76.000/
3110	1625	1	190.234	1388.177	76.000	190.234	1388.177	-76.000/

3111	1626	1	2075.588	2263.017	76.000	2075.588	2263.017	-76.000/
3112	1627	1	2133.500	2324.750	76.000	2133.500	2324.750	-76.000/
3113	1628	1	1612.926	1872.321	76.000	1612.926	1872.321	-76.000/
3114	1629	1	2016.871	2200.473	76.000	2016.871	2200.473	-76.000/
3115	1630	1	627.202	1446.378	76.000	627.202	1446.378	-76.000/
3116	1631	1	254.066	1388.149	76.000	254.066	1388.149	-76.000/
3117	1632	1	863.500	1505.667	76.000	863.500	1505.667	-76.000/
3118	1633	1	1958.536	2136.640	76.000	1958.536	2136.640	-76.000/
3119	1634	1	1037.516	1564.310	76.000	1037.516	1564.310	-76.000/
3120	1635	1	317.738	1388.175	76.000	317.738	1388.175	-76.000/
3121	1636	1	1727.313	1938.393	76.000	1727.313	1938.393	-76.000/
3122	1637	1	686.083	1446.590	76.000	686.083	1446.590	-76.000/
3123	1638	1	1325.741	1683.898	76.000	1325.741	1683.898	-76.000/
3124	1639	1	1900.442	2071.297	76.000	1900.442	2071.297	-76.000/
3125	1640	1	381.411	1388.201	76.000	381.411	1388.201	-76.000/
3126	1641	1	1441.152	1744.094	76.000	1441.152	1744.094	-76.000/
3127	1642	1	1209.864	1623.500	76.000	1209.864	1623.500	-76.000/
3128	1643	1	1555.755	1809.070	76.000	1555.755	1809.070	-76.000/
3129	1644	1	921.936	1505.543	76.000	921.936	1505.543	-76.000/
3130	1645	1	445.705	1388.017	76.000	445.705	1388.017	-76.000/
3131	1646	1	1095.370	1564.161	76.000	1095.370	1564.161	-76.000/
3132	1647	1	744.964	1446.803	76.000	744.964	1446.803	-76.000/
3133	1648	1	1842.145	2004.677	76.000	1842.145	2004.677	-76.000/
3134	1649	1	1670.210	1872.857	76.000	1670.210	1872.857	-76.000/
3135	1650	1	510.000	1387.833	76.000	510.000	1387.833	-76.000/
3136	1651	1	2133.500	2261.000	76.000	2133.500	2261.000	-76.000/
3137	1652	1	2075.185	2198.862	76.000	2075.185	2198.862	-76.000/
3138	1653	1	1383.352	1683.847	76.000	1383.352	1683.847	-76.000/
3139	1654	1	980.372	1505.419	76.000	980.372	1505.419	-76.000/
3140	1655	1	1267.591	1623.500	76.000	1267.591	1623.500	-76.000/
3141	1656	1	804.232	1446.777	76.000	804.232	1446.777	-76.000/
3142	1657	1	1784.377	1938.907	76.000	1784.377	1938.907	-76.000/
3143	1658	1	1498.511	1745.224	76.000	1498.511	1745.224	-76.000/
3144	1659	1	2016.066	2135.912	76.000	2016.066	2135.912	-76.000/
3145	1660	1	568.507	1387.514	76.000	568.507	1387.514	-76.000/
3146	1661	1	0.000	1328.917	76.000	0.000	1328.917	-76.000/
3147	1662	1	1152.964	1564.295	76.000	1152.964	1564.295	-76.000/
3148	1663	1	63.475	1329.010	76.000	63.475	1329.010	-76.000/
3149	1664	1	1613.045	1809.259	76.000	1613.045	1809.259	-76.000/
3150	1665	1	126.951	1329.102	76.000	126.951	1329.102	-76.000/
3151	1666	1	1958.099	2070.916	76.000	1958.099	2070.916	-76.000/
3152	1667	1	190.742	1329.088	76.000	190.742	1329.088	-76.000/
3153	1668	1	627.015	1387.195	76.000	627.015	1387.195	-76.000/
3154	1669	1	254.533	1329.074	76.000	254.533	1329.074	-76.000/
3155	1670	1	863.500	1446.750	76.000	863.500	1446.750	-76.000/
3156	1671	1	1038.351	1505.120	76.000	1038.351	1505.120	-76.000/
3157	1672	1	1727.276	1873.272	76.000	1727.276	1873.272	-76.000/
3158	1673	1	1899.878	2005.227	76.000	1899.878	2005.227	-76.000/
3159	1674	1	318.244	1329.087	76.000	318.244	1329.087	-76.000/
3160	1675	1	1325.318	1623.500	76.000	1325.318	1623.500	-76.000/
3161	1676	1	1440.962	1683.797	76.000	1440.962	1683.797	-76.000/
3162	1677	1	686.118	1387.461	76.000	686.118	1387.461	-76.000/
3163	1678	1	1210.558	1564.428	76.000	1210.558	1564.428	-76.000/
3164	1679	1	1555.870	1746.354	76.000	1555.870	1746.354	-76.000/
3165	1680	1	381.955	1329.100	76.000	381.955	1329.100	-76.000/
3166	1681	1	921.737	1446.491	76.000	921.737	1446.491	-76.000/
3167	1682	1	1842.199	1939.756	76.000	1842.199	1939.756	-76.000/
3168	1683	1	1670.334	1809.448	76.000	1670.334	1809.448	-76.000/
3169	1684	1	445.978	1329.008	76.000	445.978	1329.008	-76.000/
3170	1685	1	1096.330	1504.822	76.000	1096.330	1504.822	-76.000/
3171	1686	1	2133.500	2197.250	76.000	2133.500	2197.250	-76.000/
3172	1687	1	745.222	1387.727	76.000	745.222	1387.727	-76.000/
3173	1688	1	2074.783	2134.706	76.000	2074.783	2134.706	-76.000/
3174	1689	1	2015.755	2070.535	76.000	2015.755	2070.535	-76.000/
3175	1690	1	510.000	1328.917	76.000	510.000	1328.917	-76.000/
3176	1691	1	1383.045	1623.500	76.000	1383.045	1623.500	-76.000/

3177	1692	1	1784.341	1873.688	76.000	1784.341	1873.688	-76.000/
3178	1693	1	1268.415	1564.517	76.000	1268.415	1564.517	-76.000/
3179	1694	1	1498.505	1684.362	76.000	1498.505	1684.362	-76.000/
3180	1695	1	979.973	1446.231	76.000	979.973	1446.231	-76.000/
3181	1696	1	804.361	1387.780	76.000	804.361	1387.780	-76.000/
3182	1697	1	1957.661	2005.192	76.000	1957.661	2005.192	-76.000/
3183	1698	1	568.712	1328.757	76.000	568.712	1328.757	-76.000/
3184	1699	1	1613.164	1746.196	76.000	1613.164	1746.196	-76.000/
3185	1700	1	1153.791	1505.089	76.000	1153.791	1505.089	-76.000/
3186	1701	1	0.000	1270.000	76.000	0.000	1270.000	-76.000/
3187	1702	1	63.750	1270.000	76.000	63.750	1270.000	-76.000/
3188	1703	1	127.500	1270.000	76.000	127.500	1270.000	-76.000/
3189	1704	1	191.250	1270.000	76.000	191.250	1270.000	-76.000/
3190	1705	1	1900.021	1940.605	76.000	1900.021	1940.605	-76.000/
3191	1706	1	1727.457	1809.725	76.000	1727.457	1809.725	-76.000/
3192	1707	1	627.424	1328.598	76.000	627.424	1328.598	-76.000/
3193	1708	1	1037.983	1446.127	76.000	1037.983	1446.127	-76.000/
3194	1709	1	863.500	1387.833	76.000	863.500	1387.833	-76.000/
3195	1710	1	255.000	1270.000	76.000	255.000	1270.000	-76.000/
3196	1711	1	1326.271	1564.606	76.000	1326.271	1564.606	-76.000/
3197	1712	1	1440.773	1623.500	76.000	1440.773	1623.500	-76.000/
3198	1713	1	318.750	1270.000	76.000	318.750	1270.000	-76.000/
3199	1714	1	1556.048	1684.927	76.000	1556.048	1684.927	-76.000/
3200	1715	1	1211.253	1505.357	76.000	1211.253	1505.357	-76.000/
3201	1716	1	2133.500	2133.500	76.000	2133.500	2133.500	-76.000/
3202	1717	1	686.434	1328.731	76.000	686.434	1328.731	-76.000/
3203	1718	1	1842.253	1874.835	76.000	1842.253	1874.835	-76.000/
3204	1719	1	382.500	1270.000	76.000	382.500	1270.000	-76.000/
3205	1720	1	2074.627	2070.143	76.000	2074.627	2070.143	-76.000/
3206	1721	1	921.537	1387.438	76.000	921.537	1387.438	-76.000/
3207	1722	1	1670.458	1746.038	76.000	1670.458	1746.038	-76.000/
3208	1723	1	1095.993	1446.022	76.000	1095.993	1446.022	-76.000/
3209	1724	1	2015.444	2005.158	76.000	2015.444	2005.158	-76.000/
3210	1725	1	446.250	1270.000	76.000	446.250	1270.000	-76.000/
3211	1726	1	745.444	1328.863	76.000	745.444	1328.863	-76.000/
3212	1727	1	1383.945	1564.654	76.000	1383.945	1564.654	-76.000/
3213	1728	1	1784.579	1810.003	76.000	1784.579	1810.003	-76.000/
3214	1729	1	1498.500	1623.500	76.000	1498.500	1623.500	-76.000/
3215	1730	1	1269.239	1505.534	76.000	1269.239	1505.534	-76.000/
3216	1731	1	510.000	1270.000	76.000	510.000	1270.000	-76.000/
3217	1732	1	1957.808	1940.746	76.000	1957.808	1940.746	-76.000/
3218	1733	1	979.574	1387.043	76.000	979.574	1387.043	-76.000/
3219	1734	1	1613.559	1684.848	76.000	1613.559	1684.848	-76.000/
3220	1735	1	804.472	1328.890	76.000	804.472	1328.890	-76.000/
3221	1736	1	1153.708	1446.198	76.000	1153.708	1446.198	-76.000/
3222	1737	1	568.917	1270.000	76.000	568.917	1270.000	-76.000/
3223	1738	1	1900.165	1875.983	76.000	1900.165	1875.983	-76.000/
3224	1739	1	0.000	1212.273	76.000	0.000	1212.273	-76.000/
3225	1740	1	63.619	1211.985	76.000	63.619	1211.985	-76.000/
3226	1741	1	1727.638	1746.178	76.000	1727.638	1746.178	-76.000/
3227	1742	1	127.239	1211.698	76.000	127.239	1211.698	-76.000/
3228	1743	1	1037.615	1387.133	76.000	1037.615	1387.133	-76.000/
3229	1744	1	190.831	1211.462	76.000	190.831	1211.462	-76.000/
3230	1745	1	627.833	1270.000	76.000	627.833	1270.000	-76.000/
3231	1746	1	863.500	1328.917	76.000	863.500	1328.917	-76.000/
3232	1747	1	2133.500	2069.750	76.000	2133.500	2069.750	-76.000/
3233	1748	1	1441.618	1564.701	76.000	1441.618	1564.701	-76.000/
3234	1749	1	1327.224	1505.712	76.000	1327.224	1505.712	-76.000/
3235	1750	1	254.423	1211.227	76.000	254.423	1211.227	-76.000/
3236	1751	1	1556.227	1623.500	76.000	1556.227	1623.500	-76.000/
3237	1752	1	2074.472	2005.579	76.000	2074.472	2005.579	-76.000/
3238	1753	1	1211.423	1446.375	76.000	1211.423	1446.375	-76.000/
3239	1754	1	1842.504	1811.097	76.000	1842.504	1811.097	-76.000/
3240	1755	1	318.233	1211.270	76.000	318.233	1211.270	-76.000/
3241	1756	1	686.750	1270.000	76.000	686.750	1270.000	-76.000/
3242	1757	1	1671.070	1684.769	76.000	1671.070	1684.769	-76.000/

3243	1758	1	2015.595	1940.887	76.000	2015.595	1940.887	-76.000/
3244	1759	1	921.382	1328.719	76.000	921.382	1328.719	-76.000/
3245	1760	1	382.043	1211.313	76.000	382.043	1211.313	-76.000/
3246	1761	1	1095.656	1387.222	76.000	1095.656	1387.222	-76.000/
3247	1762	1	446.022	1211.793	76.000	446.022	1211.793	-76.000/
3248	1763	1	745.667	1270.000	76.000	745.667	1270.000	-76.000/
3249	1764	1	1784.817	1746.318	76.000	1784.817	1746.318	-76.000/
3250	1765	1	1384.844	1505.807	76.000	1384.844	1505.807	-76.000/
3251	1766	1	1957.955	1876.299	76.000	1957.955	1876.299	-76.000/
3252	1767	1	1499.992	1564.949	76.000	1499.992	1564.949	-76.000/
3253	1768	1	1269.178	1446.253	76.000	1269.178	1446.253	-76.000/
3254	1769	1	510.000	1212.273	76.000	510.000	1212.273	-76.000/
3255	1770	1	1613.955	1623.500	76.000	1613.955	1623.500	-76.000/
3256	1771	1	979.264	1328.522	76.000	979.264	1328.522	-76.000/
3257	1772	1	1153.624	1387.308	76.000	1153.624	1387.308	-76.000/
3258	1773	1	804.583	1270.000	76.000	804.583	1270.000	-76.000/
3259	1774	1	1900.430	1812.191	76.000	1900.430	1812.191	-76.000/
3260	1775	1	1728.523	1684.839	76.000	1728.523	1684.839	-76.000/
3261	1776	1	568.878	1212.025	76.000	568.878	1212.025	-76.000/
3262	1777	1	2133.500	2006.000	76.000	2133.500	2006.000	-76.000/
3263	1778	1	0.000	1154.545	76.000	0.000	1154.545	-76.000/
3264	1779	1	63.489	1153.971	76.000	63.489	1153.971	-76.000/
3265	1780	1	1442.463	1505.902	76.000	1442.463	1505.902	-76.000/
3266	1781	1	1037.148	1328.566	76.000	1037.148	1328.566	-76.000/
3267	1782	1	126.977	1153.396	76.000	126.977	1153.396	-76.000/
3268	1783	1	2074.547	1941.568	76.000	2074.547	1941.568	-76.000/
3269	1784	1	1326.933	1446.131	76.000	1326.933	1446.131	-76.000/
3270	1785	1	863.500	1270.000	76.000	863.500	1270.000	-76.000/
3271	1786	1	1558.366	1565.196	76.000	1558.366	1565.196	-76.000/
3272	1787	1	627.756	1211.777	76.000	627.756	1211.777	-76.000/
3273	1788	1	190.412	1152.925	76.000	190.412	1152.925	-76.000/
3274	1789	1	1842.756	1747.359	76.000	1842.756	1747.359	-76.000/
3275	1790	1	1211.593	1387.393	76.000	1211.593	1387.393	-76.000/
3276	1791	1	253.846	1152.453	76.000	253.846	1152.453	-76.000/
3277	1792	1	2015.745	1876.615	76.000	2015.745	1876.615	-76.000/
3278	1793	1	1671.682	1623.500	76.000	1671.682	1623.500	-76.000/
3279	1794	1	317.716	1152.540	76.000	317.716	1152.540	-76.000/
3280	1795	1	686.666	1211.671	76.000	686.666	1211.671	-76.000/
3281	1796	1	921.227	1270.000	76.000	921.227	1270.000	-76.000/
3282	1797	1	1095.032	1328.611	76.000	1095.032	1328.611	-76.000/
3283	1798	1	381.586	1152.626	76.000	381.586	1152.626	-76.000/
3284	1799	1	1785.977	1684.909	76.000	1785.977	1684.909	-76.000/
3285	1800	1	1958.332	1812.632	76.000	1958.332	1812.632	-76.000/
3286	1801	1	1384.419	1446.417	76.000	1384.419	1446.417	-76.000/
3287	1802	1	1501.484	1506.397	76.000	1501.484	1506.397	-76.000/
3288	1803	1	745.575	1211.566	76.000	745.575	1211.566	-76.000/
3289	1804	1	445.793	1153.586	76.000	445.793	1153.586	-76.000/
3290	1805	1	1269.117	1386.971	76.000	1269.117	1386.971	-76.000/
3291	1806	1	1618.213	1566.271	76.000	1618.213	1566.271	-76.000/
3292	1807	1	978.955	1270.000	76.000	978.955	1270.000	-76.000/
3293	1808	1	510.000	1154.545	76.000	510.000	1154.545	-76.000/
3294	1809	1	1900.695	1748.400	76.000	1900.695	1748.400	-76.000/
3295	1810	1	2133.500	1942.250	76.000	2133.500	1942.250	-76.000/
3296	1811	1	1152.880	1328.654	76.000	1152.880	1328.654	-76.000/
3297	1812	1	1729.409	1623.500	76.000	1729.409	1623.500	-76.000/
3298	1813	1	804.537	1211.920	76.000	804.537	1211.920	-76.000/
3299	1814	1	2074.623	1877.558	76.000	2074.623	1877.558	-76.000/
3300	1815	1	568.840	1154.049	76.000	568.840	1154.049	-76.000/
3301	1816	1	1441.906	1446.702	76.000	1441.906	1446.702	-76.000/
3302	1817	1	0.000	1096.818	76.000	0.000	1096.818	-76.000/
3303	1818	1	1560.505	1506.893	76.000	1560.505	1506.893	-76.000/
3304	1819	1	1036.682	1270.000	76.000	1036.682	1270.000	-76.000/
3305	1820	1	1326.642	1386.550	76.000	1326.642	1386.550	-76.000/
3306	1821	1	63.385	1095.905	76.000	63.385	1095.905	-76.000/
3307	1822	1	1843.810	1685.429	76.000	1843.810	1685.429	-76.000/
3308	1823	1	863.500	1212.273	76.000	863.500	1212.273	-76.000/

3309	1824	1	126.770	1094.992	76.000	126.770	1094.992	-76.000/
3310	1825	1	2016.234	1813.072	76.000	2016.234	1813.072	-76.000/
3311	1826	1	627.679	1153.553	76.000	627.679	1153.553	-76.000/
3312	1827	1	190.385	1094.768	76.000	190.385	1094.768	-76.000/
3313	1828	1	1210.728	1328.696	76.000	1210.728	1328.696	-76.000/
3314	1829	1	1678.060	1567.345	76.000	1678.060	1567.345	-76.000/
3315	1830	1	253.999	1094.544	76.000	253.999	1094.544	-76.000/
3316	1831	1	317.846	1094.697	76.000	317.846	1094.697	-76.000/
3317	1832	1	686.581	1153.343	76.000	686.581	1153.343	-76.000/
3318	1833	1	1958.709	1748.965	76.000	1958.709	1748.965	-76.000/
3319	1834	1	1094.409	1270.000	76.000	1094.409	1270.000	-76.000/
3320	1835	1	1787.136	1623.500	76.000	1787.136	1623.500	-76.000/
3321	1836	1	921.427	1211.978	76.000	921.427	1211.978	-76.000/
3322	1837	1	1500.776	1447.247	76.000	1500.776	1447.247	-76.000/
3323	1838	1	381.692	1094.849	76.000	381.692	1094.849	-76.000/
3324	1839	1	1383.995	1387.026	76.000	1383.995	1387.026	-76.000/
3325	1840	1	1622.471	1509.041	76.000	1622.471	1509.041	-76.000/
3326	1841	1	1268.354	1328.486	76.000	1268.354	1328.486	-76.000/
3327	1842	1	745.483	1153.133	76.000	745.483	1153.133	-76.000/
3328	1843	1	445.846	1095.834	76.000	445.846	1095.834	-76.000/
3329	1844	1	2133.500	1878.500	76.000	2133.500	1878.500	-76.000/
3330	1845	1	1901.643	1685.950	76.000	1901.643	1685.950	-76.000/
3331	1846	1	979.355	1211.683	76.000	979.355	1211.683	-76.000/
3332	1847	1	1742.939	1570.548	76.000	1742.939	1570.548	-76.000/
3333	1848	1	1152.136	1270.000	76.000	1152.136	1270.000	-76.000/
3334	1849	1	510.000	1096.818	76.000	510.000	1096.818	-76.000/
3335	1850	1	2074.867	1813.911	76.000	2074.867	1813.911	-76.000/
3336	1851	1	804.491	1153.839	76.000	804.491	1153.839	-76.000/
3337	1852	1	1441.349	1387.502	76.000	1441.349	1387.502	-76.000/
3338	1853	1	568.676	1096.264	76.000	568.676	1096.264	-76.000/
3339	1854	1	1559.646	1447.792	76.000	1559.646	1447.792	-76.000/
3340	1855	1	1844.864	1623.500	76.000	1844.864	1623.500	-76.000/
3341	1856	1	1325.980	1328.275	76.000	1325.980	1328.275	-76.000/
3342	1857	1	2016.723	1749.529	76.000	2016.723	1749.529	-76.000/
3343	1858	1	1037.008	1211.850	76.000	1037.008	1211.850	-76.000/
3344	1859	1	0.000	1039.091	76.000	0.000	1039.091	-76.000/
3345	1860	1	63.281	1037.839	76.000	63.281	1037.839	-76.000/
3346	1861	1	1684.438	1511.190	76.000	1684.438	1511.190	-76.000/
3347	1862	1	863.500	1154.545	76.000	863.500	1154.545	-76.000/
3348	1863	1	1209.864	1270.000	76.000	1209.864	1270.000	-76.000/
3349	1864	1	627.351	1095.710	76.000	627.351	1095.710	-76.000/
3350	1865	1	126.562	1036.587	76.000	126.562	1036.587	-76.000/
3351	1866	1	190.357	1036.611	76.000	190.357	1036.611	-76.000/
3352	1867	1	254.152	1036.636	76.000	254.152	1036.636	-76.000/
3353	1868	1	1959.514	1686.232	76.000	1959.514	1686.232	-76.000/
3354	1869	1	1807.818	1573.750	76.000	1807.818	1573.750	-76.000/
3355	1870	1	686.391	1095.534	76.000	686.391	1095.534	-76.000/
3356	1871	1	1094.661	1212.017	76.000	1094.661	1212.017	-76.000/
3357	1872	1	317.975	1036.854	76.000	317.975	1036.854	-76.000/
3358	1873	1	1500.068	1388.097	76.000	1500.068	1388.097	-76.000/
3359	1874	1	921.628	1153.956	76.000	921.628	1153.956	-76.000/
3360	1875	1	1383.520	1328.513	76.000	1383.520	1328.513	-76.000/
3361	1876	1	1620.614	1449.416	76.000	1620.614	1449.416	-76.000/
3362	1877	1	2133.500	1814.750	76.000	2133.500	1814.750	-76.000/
3363	1878	1	381.798	1037.072	76.000	381.798	1037.072	-76.000/
3364	1879	1	1267.591	1270.000	76.000	1267.591	1270.000	-76.000/
3365	1880	1	1902.591	1623.500	76.000	1902.591	1623.500	-76.000/
3366	1881	1	745.430	1095.359	76.000	745.430	1095.359	-76.000/
3367	1882	1	445.899	1038.082	76.000	445.899	1038.082	-76.000/
3368	1883	1	2075.112	1750.264	76.000	2075.112	1750.264	-76.000/
3369	1884	1	1756.469	1517.595	76.000	1756.469	1517.595	-76.000/
3370	1885	1	979.755	1153.367	76.000	979.755	1153.367	-76.000/
3371	1886	1	1152.427	1212.160	76.000	1152.427	1212.160	-76.000/
3372	1887	1	510.000	1039.091	76.000	510.000	1039.091	-76.000/
3373	1888	1	804.465	1096.089	76.000	804.465	1096.089	-76.000/
3374	1889	1	1441.061	1328.751	76.000	1441.061	1328.751	-76.000/

3375	1890	1	1558.787	1388.691	76.000	1558.787	1388.691	-76.000/
3376	1891	1	1858.230	1570.553	76.000	1858.230	1570.553	-76.000/
3377	1892	1	2017.384	1686.514	76.000	2017.384	1686.514	-76.000/
3378	1893	1	1325.318	1270.000	76.000	1325.318	1270.000	-76.000/
3379	1894	1	568.512	1038.479	76.000	568.512	1038.479	-76.000/
3380	1895	1	1681.583	1451.040	76.000	1681.583	1451.040	-76.000/
3381	1896	1	1037.334	1153.700	76.000	1037.334	1153.700	-76.000/
3382	1897	1	0.000	981.364	76.000	0.000	981.364	-76.000/
3383	1898	1	863.500	1096.818	76.000	863.500	1096.818	-76.000/
3384	1899	1	1210.193	1212.303	76.000	1210.193	1212.303	-76.000/
3385	1900	1	63.341	980.103	76.000	63.341	980.103	-76.000/
3386	1901	1	627.023	1037.866	76.000	627.023	1037.866	-76.000/
3387	1902	1	126.683	978.841	76.000	126.683	978.841	-76.000/
3388	1903	1	1960.318	1623.500	76.000	1960.318	1623.500	-76.000/
3389	1904	1	190.480	978.687	76.000	190.480	978.687	-76.000/
3390	1905	1	1828.500	1524.000	76.000	1828.500	1524.000	-76.000/
3391	1906	1	254.278	978.533	76.000	254.278	978.533	-76.000/
3392	1907	1	1499.284	1329.048	76.000	1499.284	1329.048	-76.000/
3393	1908	1	2133.500	1751.000	76.000	2133.500	1751.000	-76.000/
3394	1909	1	1094.913	1154.033	76.000	1094.913	1154.033	-76.000/
3395	1910	1	1383.045	1270.000	76.000	1383.045	1270.000	-76.000/
3396	1911	1	1618.757	1389.791	76.000	1618.757	1389.791	-76.000/
3397	1912	1	686.201	1037.726	76.000	686.201	1037.726	-76.000/
3398	1913	1	921.419	1096.252	76.000	921.419	1096.252	-76.000/
3399	1914	1	318.317	978.932	76.000	318.317	978.932	-76.000/
3400	1915	1	1908.641	1567.356	76.000	1908.641	1567.356	-76.000/
3401	1916	1	1267.936	1212.404	76.000	1267.936	1212.404	-76.000/
3402	1917	1	382.356	979.331	76.000	382.356	979.331	-76.000/
3403	1918	1	1747.918	1454.940	76.000	1747.918	1454.940	-76.000/
3404	1919	1	2075.442	1686.882	76.000	2075.442	1686.882	-76.000/
3405	1920	1	745.378	1037.585	76.000	745.378	1037.585	-76.000/
3406	1921	1	446.178	980.348	76.000	446.178	980.348	-76.000/
3407	1922	1	979.338	1095.686	76.000	979.338	1095.686	-76.000/
3408	1923	1	1152.717	1154.319	76.000	1152.717	1154.319	-76.000/
3409	1924	1	510.000	981.364	76.000	510.000	981.364	-76.000/
3410	1925	1	1557.507	1329.345	76.000	1557.507	1329.345	-76.000/
3411	1926	1	1440.773	1270.000	76.000	1440.773	1270.000	-76.000/
3412	1927	1	2018.045	1623.500	76.000	2018.045	1623.500	-76.000/
3413	1928	1	1871.596	1517.606	76.000	1871.596	1517.606	-76.000/
3414	1929	1	804.439	1038.338	76.000	804.439	1038.338	-76.000/
3415	1930	1	1325.680	1212.506	76.000	1325.680	1212.506	-76.000/
3416	1931	1	1678.728	1390.890	76.000	1678.728	1390.890	-76.000/
3417	1932	1	568.522	980.677	76.000	568.522	980.677	-76.000/
3418	1933	1	1037.139	1095.892	76.000	1037.139	1095.892	-76.000/
3419	1934	1	1964.210	1566.376	76.000	1964.210	1566.376	-76.000/
3420	1935	1	1210.522	1154.605	76.000	1210.522	1154.605	-76.000/
3421	1936	1	863.500	1039.091	76.000	863.500	1039.091	-76.000/
3422	1937	1	1814.252	1458.840	76.000	1814.252	1458.840	-76.000/
3423	1938	1	0.000	923.636	76.000	0.000	923.636	-76.000/
3424	1939	1	63.402	922.366	76.000	63.402	922.366	-76.000/
3425	1940	1	627.044	979.991	76.000	627.044	979.991	-76.000/
3426	1941	1	2133.500	1687.250	76.000	2133.500	1687.250	-76.000/
3427	1942	1	126.803	921.096	76.000	126.803	921.096	-76.000/
3428	1943	1	1498.500	1270.000	76.000	1498.500	1270.000	-76.000/
3429	1944	1	190.603	920.763	76.000	190.603	920.763	-76.000/
3430	1945	1	1616.356	1329.895	76.000	1616.356	1329.895	-76.000/
3431	1946	1	1383.253	1212.474	76.000	1383.253	1212.474	-76.000/
3432	1947	1	1094.940	1096.098	76.000	1094.940	1096.098	-76.000/
3433	1948	1	1914.692	1511.211	76.000	1914.692	1511.211	-76.000/
3434	1949	1	254.403	920.430	76.000	254.403	920.430	-76.000/
3435	1950	1	921.211	1038.548	76.000	921.211	1038.548	-76.000/
3436	1951	1	686.201	979.997	76.000	686.201	979.997	-76.000/
3437	1952	1	1739.366	1392.285	76.000	1739.366	1392.285	-76.000/
3438	1953	1	1268.282	1154.808	76.000	1268.282	1154.808	-76.000/
3439	1954	1	2075.773	1623.500	76.000	2075.773	1623.500	-76.000/
3440	1955	1	318.658	921.011	76.000	318.658	921.011	-76.000/

3441	1956	1	382.913	921.591	76.000	382.913	921.591	-76.000/
3442	1957	1	745.357	980.002	76.000	745.357	980.002	-76.000/
3443	1958	1	2019.778	1565.397	76.000	2019.778	1565.397	-76.000/
3444	1959	1	1863.118	1454.953	76.000	1863.118	1454.953	-76.000/
3445	1960	1	1152.507	1096.184	76.000	1152.507	1096.184	-76.000/
3446	1961	1	446.457	922.614	76.000	446.457	922.614	-76.000/
3447	1962	1	978.921	1038.005	76.000	978.921	1038.005	-76.000/
3448	1963	1	1556.227	1270.000	76.000	1556.227	1270.000	-76.000/
3449	1964	1	1440.827	1212.443	76.000	1440.827	1212.443	-76.000/
3450	1965	1	1675.205	1330.445	76.000	1675.205	1330.445	-76.000/
3451	1966	1	510.000	923.636	76.000	510.000	923.636	-76.000/
3452	1967	1	1326.042	1155.011	76.000	1326.042	1155.011	-76.000/
3453	1968	1	804.429	980.683	76.000	804.429	980.683	-76.000/
3454	1969	1	1968.101	1509.252	76.000	1968.101	1509.252	-76.000/
3455	1970	1	1800.005	1393.680	76.000	1800.005	1393.680	-76.000/
3456	1971	1	1036.944	1038.083	76.000	1036.944	1038.083	-76.000/
3457	1972	1	568.532	922.876	76.000	568.532	922.876	-76.000/
3458	1973	1	1210.075	1096.271	76.000	1210.075	1096.271	-76.000/
3459	1974	1	2133.500	1623.500	76.000	2133.500	1623.500	-76.000/
3460	1975	1	863.500	981.364	76.000	863.500	981.364	-76.000/
3461	1976	1	0.000	865.909	76.000	0.000	865.909	-76.000/
3462	1977	1	1498.547	1212.428	76.000	1498.547	1212.428	-76.000/
3463	1978	1	63.251	864.600	76.000	63.251	864.600	-76.000/
3464	1979	1	627.064	922.116	76.000	627.064	922.116	-76.000/
3465	1980	1	1911.983	1451.066	76.000	1911.983	1451.066	-76.000/
3466	1981	1	1613.955	1270.000	76.000	1613.955	1270.000	-76.000/
3467	1982	1	1383.461	1154.949	76.000	1383.461	1154.949	-76.000/
3468	1983	1	126.502	863.291	76.000	126.502	863.291	-76.000/
3469	1984	1	2076.639	1564.990	76.000	2076.639	1564.990	-76.000/
3470	1985	1	190.370	863.072	76.000	190.370	863.072	-76.000/
3471	1986	1	1094.966	1038.162	76.000	1094.966	1038.162	-76.000/
3472	1987	1	1734.388	1331.143	76.000	1734.388	1331.143	-76.000/
3473	1988	1	921.129	980.678	76.000	921.129	980.678	-76.000/
3474	1989	1	254.238	862.853	76.000	254.238	862.853	-76.000/
3475	1990	1	686.200	922.268	76.000	686.200	922.268	-76.000/
3476	1991	1	1267.582	1096.596	76.000	1267.582	1096.596	-76.000/
3477	1992	1	318.636	863.302	76.000	318.636	863.302	-76.000/
3478	1993	1	2021.511	1507.293	76.000	2021.511	1507.293	-76.000/
3479	1994	1	1854.639	1392.301	76.000	1854.639	1392.301	-76.000/
3480	1995	1	383.034	863.750	76.000	383.034	863.750	-76.000/
3481	1996	1	745.337	922.419	76.000	745.337	922.419	-76.000/
3482	1997	1	1556.267	1212.412	76.000	1556.267	1212.412	-76.000/
3483	1998	1	1152.297	1038.049	76.000	1152.297	1038.049	-76.000/
3484	1999	1	1440.881	1154.886	76.000	1440.881	1154.886	-76.000/
3485	2000	1	978.757	979.992	76.000	978.757	979.992	-76.000/
3486	2001	1	446.517	864.830	76.000	446.517	864.830	-76.000/
3487	2002	1	1671.682	1270.000	76.000	1671.682	1270.000	-76.000/
3488	2003	1	1966.320	1449.555	76.000	1966.320	1449.555	-76.000/
3489	2004	1	1325.089	1096.922	76.000	1325.089	1096.922	-76.000/
3490	2005	1	510.000	865.909	76.000	510.000	865.909	-76.000/
3491	2006	1	804.418	923.028	76.000	804.418	923.028	-76.000/
3492	2007	1	1793.570	1331.840	76.000	1793.570	1331.840	-76.000/
3493	2008	1	2133.500	1564.583	76.000	2133.500	1564.583	-76.000/
3494	2009	1	1036.687	979.810	76.000	1036.687	979.810	-76.000/
3495	2010	1	1209.629	1037.937	76.000	1209.629	1037.937	-76.000/
3496	2011	1	568.620	865.270	76.000	568.620	865.270	-76.000/
3497	2012	1	1909.273	1390.921	76.000	1909.273	1390.921	-76.000/
3498	2013	1	863.500	923.636	76.000	863.500	923.636	-76.000/
3499	2014	1	1498.594	1154.855	76.000	1498.594	1154.855	-76.000/
3500	2015	1	1614.283	1212.399	76.000	1614.283	1212.399	-76.000/
3501	2016	1	2077.505	1506.480	76.000	2077.505	1506.480	-76.000/
3502	2017	1	1382.724	1096.899	76.000	1382.724	1096.899	-76.000/
3503	2018	1	0.000	808.182	76.000	0.000	808.182	-76.000/
3504	2019	1	627.239	864.631	76.000	627.239	864.631	-76.000/
3505	2020	1	1729.409	1270.000	76.000	1729.409	1270.000	-76.000/
3506	2021	1	63.100	806.833	76.000	63.100	806.833	-76.000/



3507	2022	1	126.200	805.485	76.000	126.200	805.485	-76.000/
3508	2023	1	1094.617	979.628	76.000	1094.617	979.628	-76.000/
3509	2024	1	190.136	805.380	76.000	190.136	805.380	-76.000/
3510	2025	1	1266.883	1038.385	76.000	1266.883	1038.385	-76.000/
3511	2026	1	2020.658	1448.044	76.000	2020.658	1448.044	-76.000/
3512	2027	1	921.047	922.808	76.000	921.047	922.808	-76.000/
3513	2028	1	1849.751	1331.150	76.000	1849.751	1331.150	-76.000/
3514	2029	1	686.305	864.505	76.000	686.305	864.505	-76.000/
3515	2030	1	254.072	805.276	76.000	254.072	805.276	-76.000/
3516	2031	1	318.614	805.593	76.000	318.614	805.593	-76.000/
3517	2032	1	1556.307	1154.825	76.000	1556.307	1154.825	-76.000/
3518	2033	1	1440.359	1096.877	76.000	1440.359	1096.877	-76.000/
3519	2034	1	383.155	805.909	76.000	383.155	805.909	-76.000/
3520	2035	1	1672.299	1212.385	76.000	1672.299	1212.385	-76.000/
3521	2036	1	745.370	864.378	76.000	745.370	864.378	-76.000/
3522	2037	1	1151.850	979.444	76.000	1151.850	979.444	-76.000/
3523	2038	1	1964.540	1389.858	76.000	1964.540	1389.858	-76.000/
3524	2039	1	978.593	921.980	76.000	978.593	921.980	-76.000/
3525	2040	1	446.577	807.046	76.000	446.577	807.046	-76.000/
3526	2041	1	1324.137	1038.832	76.000	1324.137	1038.832	-76.000/
3527	2042	1	1787.136	1270.000	76.000	1787.136	1270.000	-76.000/
3528	2043	1	2133.500	1505.667	76.000	2133.500	1505.667	-76.000/
3529	2044	1	804.435	865.144	76.000	804.435	865.144	-76.000/
3530	2045	1	510.000	808.182	76.000	510.000	808.182	-76.000/
3531	2046	1	1905.932	1330.461	76.000	1905.932	1330.461	-76.000/
3532	2047	1	2077.079	1447.397	76.000	2077.079	1447.397	-76.000/
3533	2048	1	1036.430	921.536	76.000	1036.430	921.536	-76.000/
3534	2049	1	1209.083	979.261	76.000	1209.083	979.261	-76.000/
3535	2050	1	568.707	807.664	76.000	568.707	807.664	-76.000/
3536	2051	1	1614.611	1154.797	76.000	1614.611	1154.797	-76.000/
3537	2052	1	1498.325	1096.913	76.000	1498.325	1096.913	-76.000/
3538	2053	1	863.500	865.909	76.000	863.500	865.909	-76.000/
3539	2054	1	1730.240	1212.332	76.000	1730.240	1212.332	-76.000/
3540	2055	1	1381.987	1038.850	76.000	1381.987	1038.850	-76.000/
3541	2056	1	2019.806	1388.794	76.000	2019.806	1388.794	-76.000/
3542	2057	1	627.414	807.147	76.000	627.414	807.147	-76.000/
3543	2058	1	0.000	750.455	76.000	0.000	750.455	-76.000/
3544	2059	1	62.823	749.174	76.000	62.823	749.174	-76.000/
3545	2060	1	1844.864	1270.000	76.000	1844.864	1270.000	-76.000/
3546	2061	1	1094.267	921.093	76.000	1094.267	921.093	-76.000/
3547	2062	1	125.647	747.894	76.000	125.647	747.894	-76.000/
3548	2063	1	1266.398	979.802	76.000	1266.398	979.802	-76.000/
3549	2064	1	189.475	747.586	76.000	189.475	747.586	-76.000/
3550	2065	1	920.820	864.745	76.000	920.820	864.745	-76.000/
3551	2066	1	686.409	806.742	76.000	686.409	806.742	-76.000/
3552	2067	1	253.302	747.277	76.000	253.302	747.277	-76.000/
3553	2068	1	1556.292	1096.950	76.000	1556.292	1096.950	-76.000/
3554	2069	1	1962.429	1329.929	76.000	1962.429	1329.929	-76.000/
3555	2070	1	1672.915	1154.770	76.000	1672.915	1154.770	-76.000/
3556	2071	1	317.845	747.638	76.000	317.845	747.638	-76.000/
3557	2072	1	1439.837	1038.867	76.000	1439.837	1038.867	-76.000/
3558	2073	1	2133.500	1446.750	76.000	2133.500	1446.750	-76.000/
3559	2074	1	1151.402	920.839	76.000	1151.402	920.839	-76.000/
3560	2075	1	1788.182	1212.279	76.000	1788.182	1212.279	-76.000/
3561	2076	1	382.388	747.999	76.000	382.388	747.999	-76.000/
3562	2077	1	745.404	806.338	76.000	745.404	806.338	-76.000/
3563	2078	1	978.139	863.582	76.000	978.139	863.582	-76.000/
3564	2079	1	1323.714	980.343	76.000	1323.714	980.343	-76.000/
3565	2080	1	446.194	749.227	76.000	446.194	749.227	-76.000/
3566	2081	1	2076.653	1388.314	76.000	2076.653	1388.314	-76.000/
3567	2082	1	1902.591	1270.000	76.000	1902.591	1270.000	-76.000/
3568	2083	1	804.452	807.260	76.000	804.452	807.260	-76.000/
3569	2084	1	510.000	750.455	76.000	510.000	750.455	-76.000/
3570	2085	1	1614.691	1096.954	76.000	1614.691	1096.954	-76.000/
3571	2086	1	1208.537	920.584	76.000	1208.537	920.584	-76.000/
3572	2087	1	1035.842	863.095	76.000	1035.842	863.095	-76.000/

3573	2088	1	1498.056	1038.971	76.000	1498.056	1038.971	-76.000/
3574	2089	1	1731.072	1154.663	76.000	1731.072	1154.663	-76.000/
3575	2090	1	568.650	750.002	76.000	568.650	750.002	-76.000/
3576	2091	1	2018.926	1329.397	76.000	2018.926	1329.397	-76.000/
3577	2092	1	863.500	808.182	76.000	863.500	808.182	-76.000/
3578	2093	1	1381.597	980.415	76.000	1381.597	980.415	-76.000/
3579	2094	1	1845.751	1212.065	76.000	1845.751	1212.065	-76.000/
3580	2095	1	627.301	749.549	76.000	627.301	749.549	-76.000/
3581	2096	1	0.000	692.727	76.000	0.000	692.727	-76.000/
3582	2097	1	1093.544	862.608	76.000	1093.544	862.608	-76.000/
3583	2098	1	62.547	691.516	76.000	62.547	691.516	-76.000/
3584	2099	1	1265.914	921.219	76.000	1265.914	921.219	-76.000/
3585	2100	1	125.094	690.304	76.000	125.094	690.304	-76.000/
3586	2101	1	920.593	806.683	76.000	920.593	806.683	-76.000/
3587	2102	1	1960.318	1270.000	76.000	1960.318	1270.000	-76.000/
3588	2103	1	188.813	689.791	76.000	188.813	689.791	-76.000/
3589	2104	1	2133.500	1387.833	76.000	2133.500	1387.833	-76.000/
3590	2105	1	1556.276	1039.074	76.000	1556.276	1039.074	-76.000/
3591	2106	1	686.449	749.140	76.000	686.449	749.140	-76.000/
3592	2107	1	1673.090	1096.959	76.000	1673.090	1096.959	-76.000/
3593	2108	1	252.532	689.278	76.000	252.532	689.278	-76.000/
3594	2109	1	1439.480	980.487	76.000	1439.480	980.487	-76.000/
3595	2110	1	1789.228	1154.557	76.000	1789.228	1154.557	-76.000/
3596	2111	1	317.077	689.684	76.000	317.077	689.684	-76.000/
3597	2112	1	1150.786	862.259	76.000	1150.786	862.259	-76.000/
3598	2113	1	745.597	748.730	76.000	745.597	748.730	-76.000/
3599	2114	1	381.622	690.089	76.000	381.622	690.089	-76.000/
3600	2115	1	977.685	805.184	76.000	977.685	805.184	-76.000/
3601	2116	1	1323.290	921.853	76.000	1323.290	921.853	-76.000/
3602	2117	1	2076.213	1329.157	76.000	2076.213	1329.157	-76.000/
3603	2118	1	1903.320	1211.851	76.000	1903.320	1211.851	-76.000/
3604	2119	1	445.811	691.408	76.000	445.811	691.408	-76.000/
3605	2120	1	804.548	749.592	76.000	804.548	749.592	-76.000/
3606	2121	1	1614.771	1039.111	76.000	1614.771	1039.111	-76.000/
3607	2122	1	510.000	692.727	76.000	510.000	692.727	-76.000/
3608	2123	1	1497.733	980.877	76.000	1497.733	980.877	-76.000/
3609	2124	1	1731.072	1096.816	76.000	1731.072	1096.816	-76.000/
3610	2125	1	1208.028	861.910	76.000	1208.028	861.910	-76.000/
3611	2126	1	2018.045	1270.000	76.000	2018.045	1270.000	-76.000/
3612	2127	1	1035.253	804.653	76.000	1035.253	804.653	-76.000/
3613	2128	1	1381.206	921.980	76.000	1381.206	921.980	-76.000/
3614	2129	1	1846.638	1154.129	76.000	1846.638	1154.129	-76.000/
3615	2130	1	568.594	692.339	76.000	568.594	692.339	-76.000/
3616	2131	1	863.500	750.455	76.000	863.500	750.455	-76.000/
3617	2132	1	627.187	691.951	76.000	627.187	691.951	-76.000/
3618	2133	1	1960.857	1211.925	76.000	1960.857	1211.925	-76.000/
3619	2134	1	2133.500	1328.917	76.000	2133.500	1328.917	-76.000/
3620	2135	1	1092.821	804.122	76.000	1092.821	804.122	-76.000/
3621	2136	1	0.000	635.000	76.000	0.000	635.000	-76.000/
3622	2137	1	1265.630	862.441	76.000	1265.630	862.441	-76.000/
3623	2138	1	62.573	634.142	76.000	62.573	634.142	-76.000/
3624	2139	1	1555.986	981.266	76.000	1555.986	981.266	-76.000/
3625	2140	1	1673.265	1039.148	76.000	1673.265	1039.148	-76.000/
3626	2141	1	125.145	633.285	76.000	125.145	633.285	-76.000/
3627	2142	1	920.541	748.943	76.000	920.541	748.943	-76.000/
3628	2143	1	188.945	633.011	76.000	188.945	633.011	-76.000/
3629	2144	1	1789.054	1096.673	76.000	1789.054	1096.673	-76.000/
3630	2145	1	686.489	691.537	76.000	686.489	691.537	-76.000/
3631	2146	1	1439.122	922.107	76.000	1439.122	922.107	-76.000/
3632	2147	1	252.745	632.738	76.000	252.745	632.738	-76.000/
3633	2148	1	2075.773	1270.000	76.000	2075.773	1270.000	-76.000/
3634	2149	1	317.117	633.093	76.000	317.117	633.093	-76.000/
3635	2150	1	1150.170	803.679	76.000	1150.170	803.679	-76.000/
3636	2151	1	1904.048	1153.701	76.000	1904.048	1153.701	-76.000/
3637	2152	1	1323.232	862.973	76.000	1323.232	862.973	-76.000/
3638	2153	1	977.582	747.431	76.000	977.582	747.431	-76.000/

3639	2154	1	745.790	691.123	76.000	745.790	691.123	-76.000/
3640	2155	1	381.489	633.449	76.000	381.489	633.449	-76.000/
3641	2156	1	445.745	634.224	76.000	445.745	634.224	-76.000/
3642	2157	1	1614.296	981.376	76.000	1614.296	981.376	-76.000/
3643	2158	1	2018.394	1211.999	76.000	2018.394	1211.999	-76.000/
3644	2159	1	1731.073	1038.969	76.000	1731.073	1038.969	-76.000/
3645	2160	1	1497.409	922.782	76.000	1497.409	922.782	-76.000/
3646	2161	1	804.645	691.925	76.000	804.645	691.925	-76.000/
3647	2162	1	510.000	635.000	76.000	510.000	635.000	-76.000/
3648	2163	1	1207.519	803.235	76.000	1207.519	803.235	-76.000/
3649	2164	1	1035.075	746.794	76.000	1035.075	746.794	-76.000/
3650	2165	1	1846.728	1096.283	76.000	1846.728	1096.283	-76.000/
3651	2166	1	1381.133	863.183	76.000	1381.133	863.183	-76.000/
3652	2167	1	863.500	692.727	76.000	863.500	692.727	-76.000/
3653	2168	1	568.444	634.059	76.000	568.444	634.059	-76.000/
3654	2169	1	2133.500	1270.000	76.000	2133.500	1270.000	-76.000/
3655	2170	1	1961.395	1153.850	76.000	1961.395	1153.850	-76.000/
3656	2171	1	1092.567	746.157	76.000	1092.567	746.157	-76.000/
3657	2172	1	1672.607	981.487	76.000	1672.607	981.487	-76.000/
3658	2173	1	1265.347	803.664	76.000	1265.347	803.664	-76.000/
3659	2174	1	626.887	633.118	76.000	626.887	633.118	-76.000/
3660	2175	1	1555.695	923.457	76.000	1555.695	923.457	-76.000/
3661	2176	1	0.000	577.273	76.000	0.000	577.273	-76.000/
3662	2177	1	1788.880	1038.790	76.000	1788.880	1038.790	-76.000/
3663	2178	1	62.598	576.769	76.000	62.598	576.769	-76.000/
3664	2179	1	920.489	691.202	76.000	920.489	691.202	-76.000/
3665	2180	1	125.197	576.265	76.000	125.197	576.265	-76.000/
3666	2181	1	2075.947	1212.136	76.000	2075.947	1212.136	-76.000/
3667	2182	1	1439.033	863.393	76.000	1439.033	863.393	-76.000/
3668	2183	1	189.077	576.232	76.000	189.077	576.232	-76.000/
3669	2184	1	686.102	633.037	76.000	686.102	633.037	-76.000/
3670	2185	1	1904.401	1095.893	76.000	1904.401	1095.893	-76.000/
3671	2186	1	252.958	576.198	76.000	252.958	576.198	-76.000/
3672	2187	1	317.157	576.503	76.000	317.157	576.503	-76.000/
3673	2188	1	1150.023	745.732	76.000	1150.023	745.732	-76.000/
3674	2189	1	1323.174	804.093	76.000	1323.174	804.093	-76.000/
3675	2190	1	977.478	689.677	76.000	977.478	689.677	-76.000/
3676	2191	1	745.317	632.955	76.000	745.317	632.955	-76.000/
3677	2192	1	381.357	576.808	76.000	381.357	576.808	-76.000/
3678	2193	1	2018.742	1153.998	76.000	2018.742	1153.998	-76.000/
3679	2194	1	1613.821	923.642	76.000	1613.821	923.642	-76.000/
3680	2195	1	1730.592	981.283	76.000	1730.592	981.283	-76.000/
3681	2196	1	445.678	577.040	76.000	445.678	577.040	-76.000/
3682	2197	1	1497.420	864.168	76.000	1497.420	864.168	-76.000/
3683	2198	1	1846.817	1038.438	76.000	1846.817	1038.438	-76.000/
3684	2199	1	804.409	633.978	76.000	804.409	633.978	-76.000/
3685	2200	1	1207.478	745.307	76.000	1207.478	745.307	-76.000/
3686	2201	1	1034.896	688.934	76.000	1034.896	688.934	-76.000/
3687	2202	1	510.000	577.273	76.000	510.000	577.273	-76.000/
3688	2203	1	2133.500	1212.273	76.000	2133.500	1212.273	-76.000/
3689	2204	1	1381.059	804.386	76.000	1381.059	804.386	-76.000/
3690	2205	1	1961.730	1095.883	76.000	1961.730	1095.883	-76.000/
3691	2206	1	863.500	635.000	76.000	863.500	635.000	-76.000/
3692	2207	1	568.293	575.779	76.000	568.293	575.779	-76.000/
3693	2208	1	1671.948	923.826	76.000	1671.948	923.826	-76.000/
3694	2209	1	1555.807	864.942	76.000	1555.807	864.942	-76.000/
3695	2210	1	1788.577	981.078	76.000	1788.577	981.078	-76.000/
3696	2211	1	2076.121	1154.272	76.000	2076.121	1154.272	-76.000/
3697	2212	1	1092.314	688.191	76.000	1092.314	688.191	-76.000/
3698	2213	1	1265.433	745.659	76.000	1265.433	745.659	-76.000/
3699	2214	1	626.587	574.286	76.000	626.587	574.286	-76.000/
3700	2215	1	0.000	519.545	76.000	0.000	519.545	-76.000/
3701	2216	1	62.721	519.421	76.000	62.721	519.421	-76.000/
3702	2217	1	920.524	633.657	76.000	920.524	633.657	-76.000/
3703	2218	1	1904.754	1038.086	76.000	1904.754	1038.086	-76.000/
3704	2219	1	1438.944	804.679	76.000	1438.944	804.679	-76.000/

3705	2220	1	125.442	519.296	76.000	125.442	519.296	-76.000/
3706	2221	1	189.147	519.308	76.000	189.147	519.308	-76.000/
3707	2222	1	685.716	574.537	76.000	685.716	574.537	-76.000/
3708	2223	1	252.852	519.319	76.000	252.852	519.319	-76.000/
3709	2224	1	2019.058	1095.873	76.000	2019.058	1095.873	-76.000/
3710	2225	1	1149.875	687.785	76.000	1149.875	687.785	-76.000/
3711	2226	1	317.089	519.623	76.000	317.089	519.623	-76.000/
3712	2227	1	1323.388	746.011	76.000	1323.388	746.011	-76.000/
3713	2228	1	977.548	632.314	76.000	977.548	632.314	-76.000/
3714	2229	1	1730.111	923.597	76.000	1730.111	923.597	-76.000/
3715	2230	1	1614.051	865.255	76.000	1614.051	865.255	-76.000/
3716	2231	1	381.327	519.927	76.000	381.327	519.927	-76.000/
3717	2232	1	744.845	574.788	76.000	744.845	574.788	-76.000/
3718	2233	1	1846.516	980.761	76.000	1846.516	980.761	-76.000/
3719	2234	1	1497.431	805.553	76.000	1497.431	805.553	-76.000/
3720	2235	1	2133.500	1154.545	76.000	2133.500	1154.545	-76.000/
3721	2236	1	445.663	519.736	76.000	445.663	519.736	-76.000/
3722	2237	1	804.172	576.030	76.000	804.172	576.030	-76.000/
3723	2238	1	1207.437	687.378	76.000	1207.437	687.378	-76.000/
3724	2239	1	1962.064	1037.917	76.000	1962.064	1037.917	-76.000/
3725	2240	1	1034.825	631.426	76.000	1034.825	631.426	-76.000/
3726	2241	1	1381.370	746.359	76.000	1381.370	746.359	-76.000/
3727	2242	1	510.000	519.545	76.000	510.000	519.545	-76.000/
3728	2243	1	863.500	577.273	76.000	863.500	577.273	-76.000/
3729	2244	1	2076.279	1096.346	76.000	2076.279	1096.346	-76.000/
3730	2245	1	1672.295	865.567	76.000	1672.295	865.567	-76.000/
3731	2246	1	1788.273	923.367	76.000	1788.273	923.367	-76.000/
3732	2247	1	567.246	515.693	76.000	567.246	515.693	-76.000/
3733	2248	1	1555.919	806.427	76.000	1555.919	806.427	-76.000/
3734	2249	1	1265.519	687.654	76.000	1265.519	687.654	-76.000/
3735	2250	1	1092.103	630.539	76.000	1092.103	630.539	-76.000/
3736	2251	1	1904.455	980.444	76.000	1904.455	980.444	-76.000/
3737	2252	1	1439.353	746.708	76.000	1439.353	746.708	-76.000/
3738	2253	1	920.558	576.112	76.000	920.558	576.112	-76.000/
3739	2254	1	0.000	461.818	76.000	0.000	461.818	-76.000/
3740	2255	1	62.844	462.073	76.000	62.844	462.073	-76.000/
3741	2256	1	624.492	511.840	76.000	624.492	511.840	-76.000/
3742	2257	1	125.688	462.327	76.000	125.688	462.327	-76.000/
3743	2258	1	2019.375	1037.747	76.000	2019.375	1037.747	-76.000/
3744	2259	1	189.217	462.384	76.000	189.217	462.384	-76.000/
3745	2260	1	252.745	462.440	76.000	252.745	462.440	-76.000/
3746	2261	1	1149.653	629.985	76.000	1149.653	629.985	-76.000/
3747	2262	1	684.130	513.333	76.000	684.130	513.333	-76.000/
3748	2263	1	1323.602	687.930	76.000	1323.602	687.930	-76.000/
3749	2264	1	1730.011	865.596	76.000	1730.011	865.596	-76.000/
3750	2265	1	317.021	462.743	76.000	317.021	462.743	-76.000/
3751	2266	1	1614.280	806.868	76.000	1614.280	806.868	-76.000/
3752	2267	1	977.617	574.950	76.000	977.617	574.950	-76.000/
3753	2268	1	1846.214	923.085	76.000	1846.214	923.085	-76.000/
3754	2269	1	2133.500	1096.818	76.000	2133.500	1096.818	-76.000/
3755	2270	1	381.297	463.046	76.000	381.297	463.046	-76.000/
3756	2271	1	1497.754	747.527	76.000	1497.754	747.527	-76.000/
3757	2272	1	743.768	514.827	76.000	743.768	514.827	-76.000/
3758	2273	1	1961.867	980.427	76.000	1961.867	980.427	-76.000/
3759	2274	1	445.648	462.432	76.000	445.648	462.432	-76.000/
3760	2275	1	1207.204	629.431	76.000	1207.204	629.431	-76.000/
3761	2276	1	803.634	517.186	76.000	803.634	517.186	-76.000/
3762	2277	1	1034.754	573.918	76.000	1034.754	573.918	-76.000/
3763	2278	1	1381.682	688.333	76.000	1381.682	688.333	-76.000/
3764	2279	1	2076.437	1038.419	76.000	2076.437	1038.419	-76.000/
3765	2280	1	510.000	461.818	76.000	510.000	461.818	-76.000/
3766	2281	1	1787.727	865.625	76.000	1787.727	865.625	-76.000/
3767	2282	1	1672.642	807.308	76.000	1672.642	807.308	-76.000/
3768	2283	1	863.500	519.545	76.000	863.500	519.545	-76.000/
3769	2284	1	1556.156	748.346	76.000	1556.156	748.346	-76.000/
3770	2285	1	1904.155	922.803	76.000	1904.155	922.803	-76.000/

3771	2286	1	1265.512	629.576	76.000	1265.512	629.576	-76.000/
3772	2287	1	1091.892	572.886	76.000	1091.892	572.886	-76.000/
3773	2288	1	566.199	455.606	76.000	566.199	455.606	-76.000/
3774	2289	1	1439.761	688.736	76.000	1439.761	688.736	-76.000/
3775	2290	1	2019.279	980.409	76.000	2019.279	980.409	-76.000/
3776	2291	1	920.554	518.502	76.000	920.554	518.502	-76.000/
3777	2292	1	0.000	404.091	76.000	0.000	404.091	-76.000/
3778	2293	1	62.784	404.504	76.000	62.784	404.504	-76.000/
3779	2294	1	125.568	404.918	76.000	125.568	404.918	-76.000/
3780	2295	1	189.301	405.003	76.000	189.301	405.003	-76.000/
3781	2296	1	1729.911	807.596	76.000	1729.911	807.596	-76.000/
3782	2297	1	622.397	449.394	76.000	622.397	449.394	-76.000/
3783	2298	1	2133.500	1039.091	76.000	2133.500	1039.091	-76.000/
3784	2299	1	1149.431	572.185	76.000	1149.431	572.185	-76.000/
3785	2300	1	1845.895	865.540	76.000	1845.895	865.540	-76.000/
3786	2301	1	253.034	405.087	76.000	253.034	405.087	-76.000/
3787	2302	1	1614.388	749.050	76.000	1614.388	749.050	-76.000/
3788	2303	1	1323.819	629.721	76.000	1323.819	629.721	-76.000/
3789	2304	1	317.197	405.245	76.000	317.197	405.245	-76.000/
3790	2305	1	977.607	517.458	76.000	977.607	517.458	-76.000/
3791	2306	1	682.544	452.130	76.000	682.544	452.130	-76.000/
3792	2307	1	1961.670	922.937	76.000	1961.670	922.937	-76.000/
3793	2308	1	1498.078	689.500	76.000	1498.078	689.500	-76.000/
3794	2309	1	381.359	405.403	76.000	381.359	405.403	-76.000/
3795	2310	1	742.691	454.865	76.000	742.691	454.865	-76.000/
3796	2311	1	2076.390	980.886	76.000	2076.390	980.886	-76.000/
3797	2312	1	1206.971	571.483	76.000	1206.971	571.483	-76.000/
3798	2313	1	445.680	404.747	76.000	445.680	404.747	-76.000/
3799	2314	1	1034.743	516.767	76.000	1034.743	516.767	-76.000/
3800	2315	1	1382.222	630.254	76.000	1382.222	630.254	-76.000/
3801	2316	1	803.096	458.342	76.000	803.096	458.342	-76.000/
3802	2317	1	1787.181	807.883	76.000	1787.181	807.883	-76.000/
3803	2318	1	1672.620	749.755	76.000	1672.620	749.755	-76.000/
3804	2319	1	510.000	404.091	76.000	510.000	404.091	-76.000/
3805	2320	1	1904.062	865.455	76.000	1904.062	865.455	-76.000/
3806	2321	1	1556.394	690.265	76.000	1556.394	690.265	-76.000/
3807	2322	1	863.500	461.818	76.000	863.500	461.818	-76.000/
3808	2323	1	1265.504	571.498	76.000	1265.504	571.498	-76.000/
3809	2324	1	2019.184	923.070	76.000	2019.184	923.070	-76.000/
3810	2325	1	1091.879	516.076	76.000	1091.879	516.076	-76.000/
3811	2326	1	1440.625	630.787	76.000	1440.625	630.787	-76.000/
3812	2327	1	920.549	460.892	76.000	920.549	460.892	-76.000/
3813	2328	1	562.974	390.644	76.000	562.974	390.644	-76.000/
3814	2329	1	2133.500	981.364	76.000	2133.500	981.364	-76.000/
3815	2330	1	1730.060	750.372	76.000	1730.060	750.372	-76.000/
3816	2331	1	62.724	346.936	76.000	62.724	346.936	-76.000/
3817	2332	1	1845.575	807.995	76.000	1845.575	807.995	-76.000/
3818	2333	1	0.000	346.364	76.000	0.000	346.364	-76.000/
3819	2334	1	125.448	347.508	76.000	125.448	347.508	-76.000/
3820	2335	1	1614.496	691.233	76.000	1614.496	691.233	-76.000/
3821	2336	1	1149.779	515.471	76.000	1149.779	515.471	-76.000/
3822	2337	1	189.385	347.622	76.000	189.385	347.622	-76.000/
3823	2338	1	1324.037	571.513	76.000	1324.037	571.513	-76.000/
3824	2339	1	1961.754	865.519	76.000	1961.754	865.519	-76.000/
3825	2340	1	253.322	347.735	76.000	253.322	347.735	-76.000/
3826	2341	1	977.598	459.966	76.000	977.598	459.966	-76.000/
3827	2342	1	317.372	347.748	76.000	317.372	347.748	-76.000/
3828	2343	1	1498.963	631.644	76.000	1498.963	631.644	-76.000/
3829	2344	1	2076.342	923.353	76.000	2076.342	923.353	-76.000/
3830	2345	1	381.422	347.760	76.000	381.422	347.760	-76.000/
3831	2346	1	615.949	377.197	76.000	615.949	377.197	-76.000/
3832	2347	1	678.653	385.680	76.000	678.653	385.680	-76.000/
3833	2348	1	1207.678	514.867	76.000	1207.678	514.867	-76.000/
3834	2349	1	741.357	394.164	76.000	741.357	394.164	-76.000/
3835	2350	1	1787.500	750.990	76.000	1787.500	750.990	-76.000/
3836	2351	1	1382.763	572.175	76.000	1382.763	572.175	-76.000/

3837	2352	1	445.711	347.062	76.000	445.711	347.062	-76.000/
3838	2353	1	1034.733	459.616	76.000	1034.733	459.616	-76.000/
3839	2354	1	1672.598	692.201	76.000	1672.598	692.201	-76.000/
3840	2355	1	1903.969	808.108	76.000	1903.969	808.108	-76.000/
3841	2356	1	802.429	399.127	76.000	802.429	399.127	-76.000/
3842	2357	1	510.000	346.364	76.000	510.000	346.364	-76.000/
3843	2358	1	1557.301	632.501	76.000	1557.301	632.501	-76.000/
3844	2359	1	2019.446	865.582	76.000	2019.446	865.582	-76.000/
3845	2360	1	863.500	404.091	76.000	863.500	404.091	-76.000/
3846	2361	1	1266.244	514.692	76.000	1266.244	514.692	-76.000/
3847	2362	1	1091.867	459.265	76.000	1091.867	459.265	-76.000/
3848	2363	1	1441.489	572.838	76.000	1441.489	572.838	-76.000/
3849	2364	1	2133.500	923.636	76.000	2133.500	923.636	-76.000/
3850	2365	1	1730.209	693.149	76.000	1730.209	693.149	-76.000/
3851	2366	1	1845.600	751.168	76.000	1845.600	751.168	-76.000/
3852	2367	1	920.676	403.276	76.000	920.676	403.276	-76.000/
3853	2368	1	1615.184	633.584	76.000	1615.184	633.584	-76.000/
3854	2369	1	1961.838	808.101	76.000	1961.838	808.101	-76.000/
3855	2370	1	1150.126	458.758	76.000	1150.126	458.758	-76.000/
3856	2371	1	62.718	289.335	76.000	62.718	289.335	-76.000/
3857	2372	1	0.000	288.636	76.000	0.000	288.636	-76.000/
3858	2373	1	125.436	290.033	76.000	125.436	290.033	-76.000/
3859	2374	1	1324.809	514.517	76.000	1324.809	514.517	-76.000/
3860	2375	1	559.750	325.682	76.000	559.750	325.682	-76.000/
3861	2376	1	189.467	290.258	76.000	189.467	290.258	-76.000/
3862	2377	1	253.498	290.483	76.000	253.498	290.483	-76.000/
3863	2378	1	2076.473	865.746	76.000	2076.473	865.746	-76.000/
3864	2379	1	1499.848	573.787	76.000	1499.848	573.787	-76.000/
3865	2380	1	977.852	402.462	76.000	977.852	402.462	-76.000/
3866	2381	1	317.618	290.338	76.000	317.618	290.338	-76.000/
3867	2382	1	381.738	290.193	76.000	381.738	290.193	-76.000/
3868	2383	1	1787.820	694.097	76.000	1787.820	694.097	-76.000/
3869	2384	1	1208.384	458.251	76.000	1208.384	458.251	-76.000/
3870	2385	1	1903.700	751.346	76.000	1903.700	751.346	-76.000/
3871	2386	1	1383.357	515.028	76.000	1383.357	515.028	-76.000/
3872	2387	1	1673.067	634.667	76.000	1673.067	634.667	-76.000/
3873	2388	1	1035.175	402.396	76.000	1035.175	402.396	-76.000/
3874	2389	1	445.869	289.415	76.000	445.869	289.415	-76.000/
3875	2390	1	740.023	333.462	76.000	740.023	333.462	-76.000/
3876	2391	1	674.761	319.231	76.000	674.761	319.231	-76.000/
3877	2392	1	2019.708	808.094	76.000	2019.708	808.094	-76.000/
3878	2393	1	1558.207	574.737	76.000	1558.207	574.737	-76.000/
3879	2394	1	801.761	339.913	76.000	801.761	339.913	-76.000/
3880	2395	1	609.500	305.000	76.000	609.500	305.000	-76.000/
3881	2396	1	510.000	288.636	76.000	510.000	288.636	-76.000/
3882	2397	1	1266.983	457.886	76.000	1266.983	457.886	-76.000/
3883	2398	1	863.500	346.364	76.000	863.500	346.364	-76.000/
3884	2399	1	2133.500	865.909	76.000	2133.500	865.909	-76.000/
3885	2400	1	1092.498	402.329	76.000	1092.498	402.329	-76.000/
3886	2401	1	1441.904	515.540	76.000	1441.904	515.540	-76.000/
3887	2402	1	1845.625	694.341	76.000	1845.625	694.341	-76.000/
3888	2403	1	1730.635	635.651	76.000	1730.635	635.651	-76.000/
3889	2404	1	1961.480	751.121	76.000	1961.480	751.121	-76.000/
3890	2405	1	920.803	345.661	76.000	920.803	345.661	-76.000/
3891	2406	1	1615.871	575.935	76.000	1615.871	575.935	-76.000/
3892	2407	1	562.995	275.258	76.000	562.995	275.258	-76.000/
3893	2408	1	1150.632	402.020	76.000	1150.632	402.020	-76.000/
3894	2409	1	1325.582	457.521	76.000	1325.582	457.521	-76.000/
3895	2410	1	2076.604	808.138	76.000	2076.604	808.138	-76.000/
3896	2411	1	62.711	231.733	76.000	62.711	231.733	-76.000/
3897	2412	1	0.000	230.909	76.000	0.000	230.909	-76.000/
3898	2413	1	125.423	232.558	76.000	125.423	232.558	-76.000/
3899	2414	1	189.548	232.894	76.000	189.548	232.894	-76.000/
3900	2415	1	1500.304	516.283	76.000	1500.304	516.283	-76.000/
3901	2416	1	253.673	233.230	76.000	253.673	233.230	-76.000/
3902	2417	1	978.107	344.958	76.000	978.107	344.958	-76.000/

3903	2418	1	317.864	232.928	76.000	317.864	232.928	-76.000/
3904	2419	1	1788.204	636.636	76.000	1788.204	636.636	-76.000/
3905	2420	1	1903.430	694.585	76.000	1903.430	694.585	-76.000/
3906	2421	1	1208.767	401.711	76.000	1208.767	401.711	-76.000/
3907	2422	1	1673.535	577.132	76.000	1673.535	577.132	-76.000/
3908	2423	1	615.990	261.880	76.000	615.990	261.880	-76.000/
3909	2424	1	382.054	232.626	76.000	382.054	232.626	-76.000/
3910	2425	1	1383.951	457.882	76.000	1383.951	457.882	-76.000/
3911	2426	1	678.682	270.354	76.000	678.682	270.354	-76.000/
3912	2427	1	2019.261	750.896	76.000	2019.261	750.896	-76.000/
3913	2428	1	1035.617	345.176	76.000	1035.617	345.176	-76.000/
3914	2429	1	741.374	278.828	76.000	741.374	278.828	-76.000/
3915	2430	1	446.027	231.767	76.000	446.027	231.767	-76.000/
3916	2431	1	1558.703	517.027	76.000	1558.703	517.027	-76.000/
3917	2432	1	802.437	283.732	76.000	802.437	283.732	-76.000/
3918	2433	1	2133.500	808.182	76.000	2133.500	808.182	-76.000/
3919	2434	1	510.000	230.909	76.000	510.000	230.909	-76.000/
3920	2435	1	1267.268	401.225	76.000	1267.268	401.225	-76.000/
3921	2436	1	863.500	288.636	76.000	863.500	288.636	-76.000/
3922	2437	1	1093.128	345.394	76.000	1093.128	345.394	-76.000/
3923	2438	1	1845.872	636.803	76.000	1845.872	636.803	-76.000/
3924	2439	1	1442.319	458.242	76.000	1442.319	458.242	-76.000/
3925	2440	1	1731.062	578.154	76.000	1731.062	578.154	-76.000/
3926	2441	1	1961.122	694.141	76.000	1961.122	694.141	-76.000/
3927	2442	1	566.240	224.834	76.000	566.240	224.834	-76.000/
3928	2443	1	1616.362	518.079	76.000	1616.362	518.079	-76.000/
3929	2444	1	2076.380	750.675	76.000	2076.380	750.675	-76.000/
3930	2445	1	920.772	288.298	76.000	920.772	288.298	-76.000/
3931	2446	1	1151.139	345.282	76.000	1151.139	345.282	-76.000/
3932	2447	1	1325.769	400.739	76.000	1325.769	400.739	-76.000/
3933	2448	1	1500.759	458.779	76.000	1500.759	458.779	-76.000/
3934	2449	1	62.899	173.944	76.000	62.899	173.944	-76.000/
3935	2450	1	0.000	173.182	76.000	0.000	173.182	-76.000/
3936	2451	1	125.798	174.706	76.000	125.798	174.706	-76.000/
3937	2452	1	622.481	218.759	76.000	622.481	218.759	-76.000/
3938	2453	1	189.796	174.851	76.000	189.796	174.851	-76.000/
3939	2454	1	978.045	287.960	76.000	978.045	287.960	-76.000/
3940	2455	1	1788.589	579.175	76.000	1788.589	579.175	-76.000/
3941	2456	1	1903.541	636.970	76.000	1903.541	636.970	-76.000/
3942	2457	1	253.794	174.997	76.000	253.794	174.997	-76.000/
3943	2458	1	682.603	221.477	76.000	682.603	221.477	-76.000/
3944	2459	1	1209.150	345.171	76.000	1209.150	345.171	-76.000/
3945	2460	1	2018.814	693.697	76.000	2018.814	693.697	-76.000/
3946	2461	1	318.115	174.785	76.000	318.115	174.785	-76.000/
3947	2462	1	1674.022	519.131	76.000	1674.022	519.131	-76.000/
3948	2463	1	1384.216	400.753	76.000	1384.216	400.753	-76.000/
3949	2464	1	382.437	174.574	76.000	382.437	174.574	-76.000/
3950	2465	1	742.725	224.194	76.000	742.725	224.194	-76.000/
3951	2466	1	1035.651	288.373	76.000	1035.651	288.373	-76.000/
3952	2467	1	2133.500	750.455	76.000	2133.500	750.455	-76.000/
3953	2468	1	1559.199	459.317	76.000	1559.199	459.317	-76.000/
3954	2469	1	446.218	173.878	76.000	446.218	173.878	-76.000/
3955	2470	1	803.113	227.552	76.000	803.113	227.552	-76.000/
3956	2471	1	1267.553	344.564	76.000	1267.553	344.564	-76.000/
3957	2472	1	1846.120	579.265	76.000	1846.120	579.265	-76.000/
3958	2473	1	510.000	173.182	76.000	510.000	173.182	-76.000/
3959	2474	1	1093.258	288.787	76.000	1093.258	288.787	-76.000/
3960	2475	1	1961.128	636.755	76.000	1961.128	636.755	-76.000/
3961	2476	1	1442.662	400.767	76.000	1442.662	400.767	-76.000/
3962	2477	1	863.500	230.909	76.000	863.500	230.909	-76.000/
3963	2478	1	1731.661	520.070	76.000	1731.661	520.070	-76.000/
3964	2479	1	2076.157	693.212	76.000	2076.157	693.212	-76.000/
3965	2480	1	1616.853	460.223	76.000	1616.853	460.223	-76.000/
3966	2481	1	567.196	169.272	76.000	567.196	169.272	-76.000/
3967	2482	1	920.741	230.936	76.000	920.741	230.936	-76.000/
3968	2483	1	1325.956	343.957	76.000	1325.956	343.957	-76.000/

3969	2484	1	1151.233	288.635	76.000	1151.233	288.635	-76.000/
3970	2485	1	1500.880	401.308	76.000	1500.880	401.308	-76.000/
3971	2486	1	624.392	165.362	76.000	624.392	165.362	-76.000/
3972	2487	1	1903.651	579.355	76.000	1903.651	579.355	-76.000/
3973	2488	1	63.087	116.154	76.000	63.087	116.154	-76.000/
3974	2489	1	1789.300	521.010	76.000	1789.300	521.010	-76.000/
3975	2490	1	0.000	115.455	76.000	0.000	115.455	-76.000/
3976	2491	1	126.173	116.854	76.000	126.173	116.854	-76.000/
3977	2492	1	977.983	230.962	76.000	977.983	230.962	-76.000/
3978	2493	1	2018.715	636.539	76.000	2018.715	636.539	-76.000/
3979	2494	1	190.044	116.808	76.000	190.044	116.808	-76.000/
3980	2495	1	684.102	167.141	76.000	684.102	167.141	-76.000/
3981	2496	1	1674.508	461.129	76.000	1674.508	461.129	-76.000/
3982	2497	1	253.915	116.763	76.000	253.915	116.763	-76.000/
3983	2498	1	1209.209	288.484	76.000	1209.209	288.484	-76.000/
3984	2499	1	1384.481	343.624	76.000	1384.481	343.624	-76.000/
3985	2500	1	318.367	116.643	76.000	318.367	116.643	-76.000/
3986	2501	1	2133.500	692.727	76.000	2133.500	692.727	-76.000/
3987	2502	1	743.811	168.920	76.000	743.811	168.920	-76.000/
3988	2503	1	1035.685	231.571	76.000	1035.685	231.571	-76.000/
3989	2504	1	1559.098	401.850	76.000	1559.098	401.850	-76.000/
3990	2505	1	382.819	116.523	76.000	382.819	116.523	-76.000/
3991	2506	1	803.656	171.051	76.000	803.656	171.051	-76.000/
3992	2507	1	446.410	115.989	76.000	446.410	115.989	-76.000/
3993	2508	1	1267.534	288.039	76.000	1267.534	288.039	-76.000/
3994	2509	1	1846.554	521.414	76.000	1846.554	521.414	-76.000/
3995	2510	1	1961.134	579.368	76.000	1961.134	579.368	-76.000/
3996	2511	1	1093.387	232.180	76.000	1093.387	232.180	-76.000/
3997	2512	1	1443.005	343.291	76.000	1443.005	343.291	-76.000/
3998	2513	1	1732.259	461.987	76.000	1732.259	461.987	-76.000/
3999	2514	1	510.000	115.455	76.000	510.000	115.455	-76.000/
4000	2515	1	2076.108	635.770	76.000	2076.108	635.770	-76.000/
4001	2516	1	863.500	173.182	76.000	863.500	173.182	-76.000/
4002	2517	1	1616.997	402.512	76.000	1616.997	402.512	-76.000/
4003	2518	1	568.151	113.710	76.000	568.151	113.710	-76.000/
4004	2519	1	1325.859	287.594	76.000	1325.859	287.594	-76.000/
4005	2520	1	920.858	173.329	76.000	920.858	173.329	-76.000/
4006	2521	1	1151.327	231.989	76.000	1151.327	231.989	-76.000/
4007	2522	1	1501.001	343.837	76.000	1501.001	343.837	-76.000/
4008	2523	1	1903.809	521.818	76.000	1903.809	521.818	-76.000/
4009	2524	1	626.303	111.965	76.000	626.303	111.965	-76.000/
4010	2525	1	2018.617	579.381	76.000	2018.617	579.381	-76.000/
4011	2526	1	1790.011	462.846	76.000	1790.011	462.846	-76.000/
4012	2527	1	978.217	173.476	76.000	978.217	173.476	-76.000/
4013	2528	1	0.000	57.727	76.000	0.000	57.727	-76.000/
4014	2529	1	63.418	58.077	76.000	63.418	58.077	-76.000/
4015	2530	1	685.600	112.805	76.000	685.600	112.805	-76.000/
4016	2531	1	126.837	58.427	76.000	126.837	58.427	-76.000/
4017	2532	1	1674.897	403.175	76.000	1674.897	403.175	-76.000/
4018	2533	1	2133.500	635.000	76.000	2133.500	635.000	-76.000/
4019	2534	1	1209.267	231.797	76.000	1209.267	231.797	-76.000/
4020	2535	1	190.647	58.404	76.000	190.647	58.404	-76.000/
4021	2536	1	1384.305	287.220	76.000	1384.305	287.220	-76.000/
4022	2537	1	254.458	58.381	76.000	254.458	58.381	-76.000/
4023	2538	1	744.897	113.646	76.000	744.897	113.646	-76.000/
4024	2539	1	318.559	58.321	76.000	318.559	58.321	-76.000/
4025	2540	1	1558.997	344.383	76.000	1558.997	344.383	-76.000/
4026	2541	1	1035.937	173.858	76.000	1035.937	173.858	-76.000/
4027	2542	1	382.660	58.261	76.000	382.660	58.261	-76.000/
4028	2543	1	1961.308	521.568	76.000	1961.308	521.568	-76.000/
4029	2544	1	1846.989	463.563	76.000	1846.989	463.563	-76.000/
4030	2545	1	804.199	114.550	76.000	804.199	114.550	-76.000/
4031	2546	1	1267.515	231.514	76.000	1267.515	231.514	-76.000/
4032	2547	1	446.330	57.994	76.000	446.330	57.994	-76.000/
4033	2548	1	2076.058	578.327	76.000	2076.058	578.327	-76.000/
4034	2549	1	1442.750	286.847	76.000	1442.750	286.847	-76.000/



4035	2550	1	1732.467	403.937	76.000	1732.467	403.937	-76.000/
4036	2551	1	1093.657	174.240	76.000	1093.657	174.240	-76.000/
4037	2552	1	510.000	57.727	76.000	510.000	57.727	-76.000/
4038	2553	1	863.500	115.455	76.000	863.500	115.455	-76.000/
4039	2554	1	1617.142	344.802	76.000	1617.142	344.802	-76.000/
4040	2555	1	1325.763	231.231	76.000	1325.763	231.231	-76.000/
4041	2556	1	568.534	56.855	76.000	568.534	56.855	-76.000/
4042	2557	1	1151.510	174.326	76.000	1151.510	174.326	-76.000/
4043	2558	1	920.975	115.722	76.000	920.975	115.722	-76.000/
4044	2559	1	1903.968	464.280	76.000	1903.968	464.280	-76.000/
4045	2560	1	1500.748	286.945	76.000	1500.748	286.945	-76.000/
4046	2561	1	2018.806	521.318	76.000	2018.806	521.318	-76.000/
4047	2562	1	1790.038	404.699	76.000	1790.038	404.699	-76.000/
4048	2563	1	627.068	55.982	76.000	627.068	55.982	-76.000/
4049	2564	1	2133.500	577.273	76.000	2133.500	577.273	-76.000/
4050	2565	1	1675.286	345.221	76.000	1675.286	345.221	-76.000/
4051	2566	1	978.451	115.990	76.000	978.451	115.990	-76.000/
4052	2567	1	686.175	56.403	76.000	686.175	56.403	-76.000/
4053	2568	1	1384.128	230.817	76.000	1384.128	230.817	-76.000/
4054	2569	1	0.000	0.000	76.000	0.000	0.000	-76.000/
4055	2570	1	63.750	0.000	76.000	63.750	0.000	-76.000/
4056	2571	1	1209.362	174.412	76.000	1209.362	174.412	-76.000/
4057	2572	1	127.500	0.000	76.000	127.500	0.000	-76.000/
4058	2573	1	191.250	0.000	76.000	191.250	0.000	-76.000/
4059	2574	1	1558.746	287.043	76.000	1558.746	287.043	-76.000/
4060	2575	1	255.000	0.000	76.000	255.000	0.000	-76.000/
4061	2576	1	745.282	56.823	76.000	745.282	56.823	-76.000/
4062	2577	1	1036.188	116.144	76.000	1036.188	116.144	-76.000/
4063	2578	1	318.750	0.000	76.000	318.750	0.000	-76.000/
4064	2579	1	1961.481	463.767	76.000	1961.481	463.767	-76.000/
4065	2580	1	1847.253	405.372	76.000	1847.253	405.372	-76.000/
4066	2581	1	2076.153	520.432	76.000	2076.153	520.432	-76.000/
4067	2582	1	382.500	0.000	76.000	382.500	0.000	-76.000/
4068	2583	1	1267.470	174.270	76.000	1267.470	174.270	-76.000/
4069	2584	1	804.391	57.275	76.000	804.391	57.275	-76.000/
4070	2585	1	1442.494	230.402	76.000	1442.494	230.402	-76.000/
4071	2586	1	1732.676	345.886	76.000	1732.676	345.886	-76.000/
4072	2587	1	446.250	0.000	76.000	446.250	0.000	-76.000/
4073	2588	1	1093.926	116.299	76.000	1093.926	116.299	-76.000/
4074	2589	1	1616.705	287.455	76.000	1616.705	287.455	-76.000/
4075	2590	1	863.500	57.727	76.000	863.500	57.727	-76.000/
4076	2591	1	510.000	0.000	76.000	510.000	0.000	-76.000/
4077	2592	1	1325.577	174.129	76.000	1325.577	174.129	-76.000/
4078	2593	1	568.917	0.000	76.000	568.917	0.000	-76.000/
4079	2594	1	1904.468	406.045	76.000	1904.468	406.045	-76.000/
4080	2595	1	2018.995	463.254	76.000	2018.995	463.254	-76.000/
4081	2596	1	1500.495	230.052	76.000	1500.495	230.052	-76.000/
4082	2597	1	1151.692	116.663	76.000	1151.692	116.663	-76.000/
4083	2598	1	921.101	57.861	76.000	921.101	57.861	-76.000/
4084	2599	1	1790.065	346.552	76.000	1790.065	346.552	-76.000/
4085	2600	1	2133.500	519.545	76.000	2133.500	519.545	-76.000/
4086	2601	1	627.833	0.000	76.000	627.833	0.000	-76.000/
4087	2602	1	1674.663	287.868	76.000	1674.663	287.868	-76.000/
4088	2603	1	1383.767	173.773	76.000	1383.767	173.773	-76.000/
4089	2604	1	978.703	57.995	76.000	978.703	57.995	-76.000/
4090	2605	1	686.750	0.000	76.000	686.750	0.000	-76.000/
4091	2606	1	1209.457	117.027	76.000	1209.457	117.027	-76.000/
4092	2607	1	1558.496	229.702	76.000	1558.496	229.702	-76.000/
4093	2608	1	1961.957	405.720	76.000	1961.957	405.720	-76.000/
4094	2609	1	745.667	0.000	76.000	745.667	0.000	-76.000/
4095	2610	1	1847.517	347.181	76.000	1847.517	347.181	-76.000/
4096	2611	1	2076.247	462.536	76.000	2076.247	462.536	-76.000/
4097	2612	1	1036.435	58.072	76.000	1036.435	58.072	-76.000/
4098	2613	1	1267.425	117.026	76.000	1267.425	117.026	-76.000/
4099	2614	1	1732.346	288.155	76.000	1732.346	288.155	-76.000/
4100	2615	1	1441.957	173.418	76.000	1441.957	173.418	-76.000/

4101	2616	1	804.583	0.000	76.000	804.583	0.000	-76.000/
4102	2617	1	1616.268	230.109	76.000	1616.268	230.109	-76.000/
4103	2618	1	1094.168	58.150	76.000	1094.168	58.150	-76.000/
4104	2619	1	863.500	0.000	76.000	863.500	0.000	-76.000/
4105	2620	1	1325.392	117.026	76.000	1325.392	117.026	-76.000/
4106	2621	1	1904.969	347.810	76.000	1904.969	347.810	-76.000/
4107	2622	1	2019.445	405.396	76.000	2019.445	405.396	-76.000/
4108	2623	1	1500.060	172.998	76.000	1500.060	172.998	-76.000/
4109	2624	1	2133.500	461.818	76.000	2133.500	461.818	-76.000/
4110	2625	1	1790.029	288.442	76.000	1790.029	288.442	-76.000/
4111	2626	1	1151.914	58.331	76.000	1151.914	58.331	-76.000/
4112	2627	1	921.227	0.000	76.000	921.227	0.000	-76.000/
4113	2628	1	1674.039	230.515	76.000	1674.039	230.515	-76.000/
4114	2629	1	1383.406	116.730	76.000	1383.406	116.730	-76.000/
4115	2630	1	978.955	0.000	76.000	978.955	0.000	-76.000/
4116	2631	1	1209.661	58.513	76.000	1209.661	58.513	-76.000/
4117	2632	1	1558.163	172.577	76.000	1558.163	172.577	-76.000/
4118	2633	1	1962.432	347.674	76.000	1962.432	347.674	-76.000/
4119	2634	1	2076.472	404.743	76.000	2076.472	404.743	-76.000/
4120	2635	1	1847.392	289.213	76.000	1847.392	289.213	-76.000/
4121	2636	1	1036.682	0.000	76.000	1036.682	0.000	-76.000/
4122	2637	1	1732.016	230.423	76.000	1732.016	230.423	-76.000/
4123	2638	1	1441.420	116.434	76.000	1441.420	116.434	-76.000/
4124	2639	1	1267.508	58.513	76.000	1267.508	58.513	-76.000/
4125	2640	1	1616.041	172.642	76.000	1616.041	172.642	-76.000/
4126	2641	1	1094.409	0.000	76.000	1094.409	0.000	-76.000/
4127	2642	1	2019.894	347.537	76.000	2019.894	347.537	-76.000/
4128	2643	1	1904.756	289.985	76.000	1904.756	289.985	-76.000/
4129	2644	1	1325.355	58.513	76.000	1325.355	58.513	-76.000/
4130	2645	1	2133.500	404.091	76.000	2133.500	404.091	-76.000/
4131	2646	1	1499.625	115.943	76.000	1499.625	115.943	-76.000/
4132	2647	1	1789.993	230.331	76.000	1789.993	230.331	-76.000/
4133	2648	1	1152.136	0.000	76.000	1152.136	0.000	-76.000/
4134	2649	1	1673.920	172.706	76.000	1673.920	172.706	-76.000/
4135	2650	1	1383.226	58.365	76.000	1383.226	58.365	-76.000/
4136	2651	1	1557.830	115.452	76.000	1557.830	115.452	-76.000/
4137	2652	1	1962.118	289.913	76.000	1962.118	289.913	-76.000/
4138	2653	1	1209.864	0.000	76.000	1209.864	0.000	-76.000/
4139	2654	1	2076.697	346.950	76.000	2076.697	346.950	-76.000/
4140	2655	1	1847.268	231.245	76.000	1847.268	231.245	-76.000/
4141	2656	1	1731.716	172.674	76.000	1731.716	172.674	-76.000/
4142	2657	1	1441.096	58.217	76.000	1441.096	58.217	-76.000/
4143	2658	1	1267.591	0.000	76.000	1267.591	0.000	-76.000/
4144	2659	1	1615.815	115.174	76.000	1615.815	115.174	-76.000/
4145	2660	1	2019.481	289.842	76.000	2019.481	289.842	-76.000/
4146	2661	1	1904.542	232.159	76.000	1904.542	232.159	-76.000/
4147	2662	1	2133.500	346.364	76.000	2133.500	346.364	-76.000/
4148	2663	1	1499.062	57.971	76.000	1499.062	57.971	-76.000/
4149	2664	1	1325.318	0.000	76.000	1325.318	0.000	-76.000/
4150	2665	1	1789.513	172.642	76.000	1789.513	172.642	-76.000/
4151	2666	1	1673.800	114.897	76.000	1673.800	114.897	-76.000/
4152	2667	1	1383.045	0.000	76.000	1383.045	0.000	-76.000/
4153	2668	1	1961.805	232.153	76.000	1961.805	232.153	-76.000/
4154	2669	1	2076.490	289.239	76.000	2076.490	289.239	-76.000/
4155	2670	1	1557.029	57.726	76.000	1557.029	57.726	-76.000/
4156	2671	1	1846.842	173.267	76.000	1846.842	173.267	-76.000/
4157	2672	1	1731.416	114.924	76.000	1731.416	114.924	-76.000/
4158	2673	1	1440.773	0.000	76.000	1440.773	0.000	-76.000/
4159	2674	1	1614.885	57.587	76.000	1614.885	57.587	-76.000/
4160	2675	1	2019.067	232.147	76.000	2019.067	232.147	-76.000/
4161	2676	1	2133.500	288.636	76.000	2133.500	288.636	-76.000/
4162	2677	1	1904.172	173.892	76.000	1904.172	173.892	-76.000/
4163	2678	1	1789.032	114.952	76.000	1789.032	114.952	-76.000/
4164	2679	1	1498.500	0.000	76.000	1498.500	0.000	-76.000/
4165	2680	1	1672.741	57.448	76.000	1672.741	57.448	-76.000/
4166	2681	1	2076.284	231.528	76.000	2076.284	231.528	-76.000/

4167	2682	1	1961.612	173.830	76.000	1961.612	173.830	-76.000/
4168	2683	1	1556.227	0.000	76.000	1556.227	0.000	-76.000/
4169	2684	1	1846.417	115.288	76.000	1846.417	115.288	-76.000/
4170	2685	1	1730.413	57.462	76.000	1730.413	57.462	-76.000/
4171	2686	1	1613.955	0.000	76.000	1613.955	0.000	-76.000/
4172	2687	1	2019.053	173.768	76.000	2019.053	173.768	-76.000/
4173	2688	1	2133.500	230.909	76.000	2133.500	230.909	-76.000/
4174	2689	1	1903.801	115.625	76.000	1903.801	115.625	-76.000/
4175	2690	1	1788.084	57.476	76.000	1788.084	57.476	-76.000/
4176	2691	1	1671.682	0.000	76.000	1671.682	0.000	-76.000/
4177	2692	1	2076.276	173.475	76.000	2076.276	173.475	-76.000/
4178	2693	1	1961.420	115.507	76.000	1961.420	115.507	-76.000/
4179	2694	1	1845.640	57.644	76.000	1845.640	57.644	-76.000/
4180	2695	1	1729.409	0.000	76.000	1729.409	0.000	-76.000/
4181	2696	1	2133.500	173.182	76.000	2133.500	173.182	-76.000/
4182	2697	1	2019.039	115.389	76.000	2019.039	115.389	-76.000/
4183	2698	1	1903.196	57.813	76.000	1903.196	57.813	-76.000/
4184	2699	1	1787.136	0.000	76.000	1787.136	0.000	-76.000/
4185	2700	1	2076.269	115.422	76.000	2076.269	115.422	-76.000/
4186	2701	1	1960.869	57.753	76.000	1960.869	57.753	-76.000/
4187	2702	1	1844.864	0.000	76.000	1844.864	0.000	-76.000/
4188	2703	1	2133.500	115.455	76.000	2133.500	115.455	-76.000/
4189	2704	1	2018.542	57.694	76.000	2018.542	57.694	-76.000/
4190	2705	1	1902.591	0.000	76.000	1902.591	0.000	-76.000/
4191	2706	1	2076.021	57.711	76.000	2076.021	57.711	-76.000/
4192	2707	1	1960.318	0.000	76.000	1960.318	0.000	-76.000/
4193	2708	1	2133.500	57.727	76.000	2133.500	57.727	-76.000/
4194	2709	1	2018.045	0.000	76.000	2018.045	0.000	-76.000/
4195	2710	1	2075.773	0.000	76.000	2075.773	0.000	-76.000/
4196	2711	1	2133.500	0.000	76.000	2133.500	0.000	-76.000/
4197	2712	1	0.000	1931.500	-266.750	0.000	2335.500	-342.750/
4198	2713	1	50.750	1931.500	-266.750	50.750	2335.500	-342.750/
4199	2714	1	101.500	1931.500	-266.750	101.500	2335.500	-342.750/
4200	2715	1	152.250	1931.500	-266.750	152.250	2335.500	-342.750/
4201	2716	1	203.000	1931.500	-266.750	203.000	2335.500	-342.750/
4202	2717	1	0.000	1931.500	-609.500	0.000	2335.500	-609.500/
4203	2718	1	50.750	1931.500	-609.500	50.750	2335.500	-609.500/
4204	2719	1	101.500	1931.500	-609.500	101.500	2335.500	-609.500/
4205	2720	1	152.250	1931.500	-609.500	152.250	2335.500	-609.500/
4206	2721	1	203.000	1931.500	-609.500	203.000	2335.500	-609.500/
4207	2722	1	0.000	1931.500	-914.250	0.000	2335.500	-914.250/
4208	2723	1	50.750	1931.500	-914.250	50.750	2335.500	-914.250/
4209	2724	1	101.500	1931.500	-914.250	101.500	2335.500	-914.250/
4210	2725	1	152.250	1931.500	-914.250	152.250	2335.500	-914.250/
4211	2726	1	203.000	1931.500	-914.250	203.000	2335.500	-914.250/
4212	2727	1	0.000	1931.500	-1219.000	0.000	2335.500	-1219.000/
4213	2728	1	50.750	1931.500	-1219.000	50.750	2335.500	-1219.000/
4214	2729	1	101.500	1931.500	-1219.000	101.500	2335.500	-1219.000/
4215	2730	1	152.250	1931.500	-1219.000	152.250	2335.500	-1219.000/
4216	2731	1	203.000	1931.500	-1219.000	203.000	2335.500	-1219.000/
4217	2732	1	0.000	1931.500	342.750	0.000	2335.500	266.750/
4218	2733	1	50.750	1931.500	342.750	50.750	2335.500	266.750/
4219	2734	1	101.500	1931.500	342.750	101.500	2335.500	266.750/
4220	2735	1	152.250	1931.500	342.750	152.250	2335.500	266.750/
4221	2736	1	203.000	1931.500	342.750	203.000	2335.500	266.750/
4222	2737	1	0.000	1931.500	609.500	0.000	2335.500	609.500/
4223	2738	1	50.750	1931.500	609.500	50.750	2335.500	609.500/
4224	2739	1	101.500	1931.500	609.500	101.500	2335.500	609.500/
4225	2740	1	152.250	1931.500	609.500	152.250	2335.500	609.500/
4226	2741	1	203.000	1931.500	609.500	203.000	2335.500	609.500/
4227	2742	1	0.000	1931.500	914.250	0.000	2335.500	914.250/
4228	2743	1	50.750	1931.500	914.250	50.750	2335.500	914.250/
4229	2744	1	101.500	1931.500	914.250	101.500	2335.500	914.250/
4230	2745	1	152.250	1931.500	914.250	152.250	2335.500	914.250/
4231	2746	1	203.000	1931.500	914.250	203.000	2335.500	914.250/
4232	2747	1	0.000	1931.500	1219.000	0.000	2335.500	1219.000/

```

4233 2748 1 50.750 1931.500 1219.000 50.750 2335.500 1219.000/
4234 2749 1 101.500 1931.500 1219.000 101.500 2335.500 1219.000/
4235 2750 1 152.250 1931.500 1219.000 152.250 2335.500 1219.000/
4236 2751 1 203.000 1931.500 1219.000 203.000 2335.500 1219.000/

```

```
4237 /
```

NODAL RESTRAINTS AND PRESCRIBED D.O.F.

```
4238
```

```
4239
```

```
4240
```

```
4241 <<<<< FORMAT >>>>> (units = mm, degrees)(d(NODE)>0!!!) Node No. MUST be in ascending
```

```
order. Cannot repeat nodes.
```

```
4242 NODE DX-R DY-R DZ-R R1-R R2-R [#NODES d(NODE)] [#NODES d(NODE)] [#NODES
```

```
d(NODE)] /
```

```

4243 1 1 0 0 1 0/
4244 2 1 0 0 1 0/
4245 5 1 0 0 1 0/
4246 10 1 0 0 1 0/
4247 16 1 0 0 1 0/
4248 23 1 0 0 1 0/
4249 33 1 0 0 1 0/
4250 43 1 0 0 1 0/
4251 54 1 0 0 1 0/
4252 67 1 0 0 1 0/
4253 81 1 0 0 1 0/
4254 98 1 0 0 1 0/
4255 111 0 0 1 0 0/
4256 118 1 0 0 1 0/
4257 137 1 0 0 1 0/
4258 156 1 0 0 1 0/
4259 179 1 0 0 1 0/
4260 202 1 0 0 1 0/
4261 230 1 0 0 1 0/
4262 258 1 0 0 1 0/
4263 284 1 0 0 1 0/
4264 316 1 0 0 1 0/
4265 347 1 0 0 1 0/
4266 383 1 0 0 1 0/
4267 420 1 0 0 1 0/
4268 454 1 0 0 1 0/
4269 496 1 0 0 1 0/
4270 535 1 0 0 1 0/
4271 577 1 0 0 1 0/
4272 619 1 0 0 1 0/
4273 659 1 0 0 1 0/
4274 699 1 0 0 1 0/
4275 735 1 0 0 1 0/
4276 769 1 0 0 1 0/
4277 794 1 0 0 1 0/
4278 826 1 0 0 1 0/
4279 853 1 0 0 1 0/
4280 879 1 0 0 1 0/
4281 966 1 0 0 1 0/
4282 1062 1 0 0 1 0/
4283 1150 1 0 0 1 0/
4284 1229 1 0 0 1 0/
4285 1256 1 0 0 1 0/
4286 1269 0 0 1 0 0/
4287 1280 1 0 0 1 0/
4288 1305 1 0 0 1 0/
4289 1335 1 0 0 1 0/
4290 1361 1 0 0 1 0/
4291 1388 1 0 0 1 0/
4292 1427 1 0 0 1 0/
4293 1460 1 0 0 1 0/
4294 1497 1 0 0 1 0/
4295 1540 1 0 0 1 0/
4296 1580 1 0 0 1 0/

```

```

4297      1619      1      0      0      1      0/
4298      1661      1      0      0      1      0/
4299      1701      1      0      0      1      0/
4300      1739      1      0      0      1      0/
4301      1778      1      0      0      1      0/
4302      1817      1      0      0      1      0/
4303      1859      1      0      0      1      0/
4304      1897      1      0      0      1      0/
4305      1905      0      0      1      0      0/
4306      1938      1      0      0      1      0/
4307      1976      1      0      0      1      0/
4308      2018      1      0      0      1      0/
4309      2058      1      0      0      1      0/
4310      2096      1      0      0      1      0/
4311      2136      1      0      0      1      0/
4312      2176      1      0      0      1      0/
4313      2215      1      0      0      1      0/
4314      2254      1      0      0      1      0/
4315      2292      1      0      0      1      0/
4316      2333      1      0      0      1      0/
4317      2372      1      0      0      1      0/
4318      2395      0      0      1      0      0/
4319      2412      1      0      0      1      0/
4320      2450      1      0      0      1      0/
4321      2490      1      0      0      1      0/
4322      2528      1      0      0      1      0/
4323      2569      1      0      0      1      0/
4324      2712      1      0      0      1      0/
4325      2717      1      0      0      1      0/
4326      2722      1      0      0      1      0/
4327      2727      1      1      0      1      0/
4328      2728      0      1      0      1      0/
4329      2729      0      1      0      1      0/
4330      2730      0      1      0      1      0/
4331      2731      0      1      0      1      0/
4332      2732      1      0      0      1      0/
4333      2737      1      0      0      1      0/
4334      2742      1      0      0      1      0/
4335      2747      1      0      0      1      0/
4336      /
4337                          AUTO GENERATE NODAL RESTRAINTS
4338      -----
4339
4340      <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
4341      RTYP  DX-R  DY-R  DZ-R  R1-R  R2-R  X1  Y1  Z1  [ NX  SX
NY  SY  NZ  SZ]  [X2  Y2  Z2]/
4342      /
4343                          AUTO GENERATE RESULTS (DISP OR REACTIONS)
4344      -----
4345
4346      <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
4347      RTYP  D(0-5) R(0-5)  X1  Y1  Z1  [ NX  SX  NY  SY  NZ
SZ]  [X2  Y2  Z2]/
4348      /
4349                          LINKED NODES
4350      -----
4351
4352      <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
4353      RTYP  D(0-5)  X1  Y1  Z1  [ NX  SX  NY  SY  NZ  SZ]
[X2  Y2  Z2]/
4354      /
4355
4356      <NOTES:>

```

4357 Smearred Reinforcement:  
4358       d - Distance from the top of the element to the centroid of the  
4359       reinforcement layer.  
4360

4361 Truss Elements:  
4362       OS - Element offset measured from nodal location (typically middle layer).  
4363       Negative OS is toward element bottom surface.  
4364

4365 REF - Reinforcement Types (smearred & truss):  
4366       1 - Ductile Steel Reinforcement (tension+compression)  
4367       2 - Prestressing Steel (tension+compression)  
4368       3 - Ductile Steel Reinforcement (tension only)  
4369       4 - Ductile Steel Reinforcement (compression only)  
4370

4371 Element incidences:  
4372       <INC9> - Only required when nine noded element is used.  
4373

4374 Element types (MUST input in this order - Shell, solid, then truss):  
4375       1 - Shell elements  
4376       2 - Solid elements  
4377       3 - Truss elements  
4378

4379 Coordinates: (Cannot use a mix of type 1 and 2 coordinates)  
4380       TYPE - 1 - Top and Bottom coordinates of the node are provided.  
4381       2 - Centre Line coordinates of the node are provided.  
4382       3 - Coordinates of the node for the solid element are provided.  
4383

4384 Restrained D.O.F.:  
4385       0 - Unrestrained degree of freedom  
4386       1 - Restrained degree of freedom  
4387

4388 Auto generate restrained D.O.F.:  
4389       TYPE - 1 - Point restraints  
4390       2 - Line restraints  
4391       3 - Area restraints  
4392

4393 (1)       DO NOT INSERT OR DELETE ANY LINE.  
4394       EXCEPTION: INSERTION OF LINES IN THE SPACE PROVIDED FOR INPUT OF  
4395       DATA. IN THIS CASE, LEAVE LINE WITH SLASH AFTER LAST DATA LINE.  
4396

4397 (2)       BLANK SPACES SHOULD BE USED TO SEPARATE DATA WITHIN A DATA LINE.  
4398

4399 (3)       ELEMENT INCIDENCE NUMBER 9 (i.e. <INC9>) TO BE IGNORED WHEN 8 NODDED  
4400       SERENDIPITY ELEMENT USED.  
4401

4402 (4)       DIMENSIONED FOR: 50 ELEMENTS, 200 NODES, 100 RESTRAINED NODES,  
4403       16 CONCRETE LAYERS, 6 REINFORCEMENT LAYERS, 30 MATERIALS, 20 LAYER  
4404       PATTERNS, MAXIMUM FRONTWIDTH OF 100.  
4405

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -           D A T A     -
4          -           Version 1.0  -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title          (30 char. max.) : SLAB
11         Load case title          (30 char. max.) : LATERAL LOAD
12         Load case file name      (8 char. max.) : LOAD3
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 0
18         No. of nodes with imposed displacements : 5
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51         PRESCRIBED NODE DISPLACEMENTS
52         -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         2747   2     1.016/
57         2748   2     1.016/
58         2749   2     1.016/
59         2750   2     1.016/
60         2751   2     1.016/
61         /
62
63         CONCRETE PRESTRAINS
64         -----
65         <NOTE:> UNITS: me
66         <<<<< FORMAT >>>>>

```

```

67 ELMT STRAIN [ #ELMT d(ELMT) d(STRAIN) ] x2 /
68 /
69
70 GRAVITATIONAL LOADS
71 -----
72 <<<<< FORMAT >>>>>
73 ELMT GX GY GZ GAMMA [#ELMT d(ELMT)] x2 /
74 /
75
76 ADDITIONAL LUMPED MASSES
77 -----
78 <NOTE:> UNITS: kg, m/s, m/s2
79 <<<<< FORMAT >>>>>
80 NODE DOF-X DOF-Y DOF-Z MASS Vo-X Vo-Y Vo-Z Acc-X Acc-Y Acc-Z [ #NODE
d(NODE) ] /
81 /
82
83 IMPULSE, BLAST AND IMPACT FORCES
84 -----
85 <NOTE:> UNITS: Sec, kN
86 <<<<< FORMAT >>>>>
87 NODE DOF T1 F1 T2 F2 T3 F3 T4 F4 [ #NODE d(NODE) ] /
88 /
89
90 GROUND ACCELERATION
91 -----
92 <NOTE:> UNITS: Sec, G
93 <<<<< FORMAT >>>>>
94 TIME ACC-X ACC-Y ACC-Z /
95 /
96

```



```

1          - - - - -
2          -   L O A D   C A S E   -
3          -           D A T A     -
4          -           Version 1.0  -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title          (30 char. max.) : SLAB
11         Load case title          (30 char. max.) : LOAD4
12         Load case file name      (8 char. max.) : LOAD4
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 13
18         No. of nodes with imposed displacements : 0
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         879   0.0   0.0   0.001  0.0   0.0/
50         880   0.0   0.0  -0.001  0.0   0.0/
51         882   0.0   0.0   0.001  0.0   0.0/
52         885   0.0   0.0  -0.001  0.0   0.0/
53         889   0.0   0.0   0.001  0.0   0.0/
54         977   0.0   0.0  -0.001  0.0   0.0/
55         1073  0.0   0.0   0.001  0.0   0.0/
56         1163  0.0   0.0  -0.001  0.0   0.0/
57         1237  0.0   0.0   0.001  0.0   0.0/
58         1234  0.0   0.0  -0.001  0.0   0.0/
59         1232  0.0   0.0   0.001  0.0   0.0/
60         1230  0.0   0.0  -0.001  0.0   0.0/
61         1229  0.0   0.0   0.001  0.0   0.0/
62         /
63
64         PRESCRIBED NODE DISPLACEMENTS
65         -----
66         <<<<< FORMAT >>>>>

```

```

67  NODE   DOF     DISPL   [#NODE d(NODE)] /
68      (1-5) (mm|deg)
69  /
70
71      CONCRETE PRESTRAINS
72      -----
73  <NOTE:> UNITS:  me
74  <<<<< FORMAT >>>>>
75  ELMT  STRAIN  [ #ELMT d(ELMT) d(STRAIN) ] x2 /
76  /
77
78      GRAVITATIONAL LOADS
79      -----
80  <<<<< FORMAT >>>>>
81  ELMT  GX  GY  GZ  GAMMA  [#ELMT d(ELMT)] x2 /
82  /
83
84      ADDITIONAL LUMPED MASSES
85      -----
86  <NOTE:> UNITS:  kg, m/s, m/s2
87  <<<<< FORMAT >>>>>
88  NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
d(NODE) ] /
89  /
90
91      IMPULSE, BLAST AND IMPACT FORCES
92      -----
93  <NOTE:> UNITS:  Sec, kN
94  <<<<< FORMAT >>>>>
95  NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
96  /
97
98      GROUND ACCELERATION
99      -----
100 <NOTE:> UNITS:  Sec, G
101 <<<<< FORMAT >>>>>
102 TIME  ACC-X  ACC-Y  ACC-Z /
103 /
104

```

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : GRAVITY LOAD
12         Load case file name   (8 char. max.) : LOAD5
13
14         No. of elements with a u.d.l.      : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads : 2
18         No. of nodes with imposed displacements : 0
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         2728   0.0   0.0   26.250   0.0   0.0/
50         2730   0.0   0.0   26.250   0.0   0.0/
51         /
52
53         PRESCRIBED NODE DISPLACEMENTS
54         -----
55         <<<<< FORMAT >>>>>
56         NODE   DOF   DISPL   [#NODE d(NODE)] /
57         (1-5) (mm|deg)
58         /
59
60         CONCRETE PRESTRAINS
61         -----
62         <NOTE:> UNITS: me
63         <<<<< FORMAT >>>>>
64         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
65         /
66

```

```

67          GRAVITATIONAL LOADS
68          -----
69 <<<<< FORMAT >>>>>
70 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
71 /
72
73          ADDITIONAL LUMPED MASSES
74          -----
75 <NOTE:> UNITS:  kg, m/s, m/s2
76 <<<<< FORMAT >>>>>
77 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
78 d(NODE) ] /
79 /
80          IMPULSE, BLAST AND IMPACT FORCES
81          -----
82 <NOTE:> UNITS:  Sec, kN
83 <<<<< FORMAT >>>>>
84 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
85 /
86
87          GROUND ACCELERATION
88          -----
89 <NOTE:> UNITS:  Sec, G
90 <<<<< FORMAT >>>>>
91 TIME  ACC-X  ACC-Y  ACC-Z /
92 /
93

```

```

1
2      - - - - -
3      -   V e c T o r 4   -
4      -   A u x i l i a r y   D a t a   -
5      - - - - -
6
7  Stiffness Matrix Solver      (1-2) : 2
8  Number of Parallel Threads   : 2
9
10 Shear Analysis Mode          (1-3) : 2
11
12 Concrete Aggregate Type      (1-2) : 1
13 Concrete Conductivity        : 2.19
14 Concrete Fracture Energy     (kN/m) : 0.00
15 Prestressing Friction Coefficient (/r) : 0.30
16 Prestressing Wobble Coefficient (/m) : 0.00250
17
18 Thermal Time Stepping Factor : 0.6666667
19
20 Time Integration Method      (1-3) : 3
21
22 1st Mode to Assign Damping   : 1
23 2nd Mode to Assign Damping   : 2
24 Damping Ratio Assignment #1  : 0.00
25 Damping Ratio Assignment #2  : 2.00
26 Ground Acceleration in x-direction : 0.0
27 Ground Acceleration in y-direction : 0.0
28 Ground Acceleration in z-direction : 0.0
29 Mass Factor due to Self-Weight : 1.0
30
31 Tension Softening Pt 1: Strain (me) : 0.20
32 Tension Softening Pt 1: Stress (MPa) : 3.00
33 Tension Softening Pt 2: Strain (me) : 0.50
34 Tension Softening Pt 2: Stress (MPa) : 2.00
35 Tension Softening Pt 3: Strain (me) : 1.00
36 Tension Softening Pt 3: Stress (MPa) : 1.00
37 Tension Softening Pt 4: Strain (me) : 2.00
38 Tension Softening Pt 4: Stress (MPa) : 0.10
39
40 Matrix Type                  : 1
41 Fibre Type                    : 1
42 Volumetric Fraction of Fibres (%) : 0.0
43 Fibre Length                  (mm) : 50.0
44 Fibre Diameter                (mm) : 0.60
45 Tensile Strength of Fibre     (MPa) : 1050.0
46 Mean fibre-Matrix Bond Stress (MPa) : 0.00
47 SLS Equivalent Strength (Euro) (MPa) : 1.00
48 ULS Equivalent Strength (Euro) (MPa) : 0.50
49
50
51 NOTES:
52 Concrete Aggregate Type:
53     1. Carbonate
54     2. Silicious
55
56 Concrete Fracture Energy:
57     Input 0 for program generated default value.
58
59
60 Time Stepping Factor for Heat Flow Analysis:
61     0.500 : Crank-Nicolson Scheme (Accurate)
62     0.667 : Galerkin Scheme (Stable)
63
64 Shear Analysis Mode:
65     0. Out-of-Plane Shear Strains Neglected
66     1. Multi-Layer Analysis - Uniform Shear Strain

```

```

67         2. Multi-Layer Analysis - Parabolic Shear Strain
68
69
70     Dynamic Analysis Parameters
71     -----
72
73     Dynamic Analysis Mode:
74         1. Impact
75         2. Ground Acceleration
76         3. Impulse
77
78     Newmark Beta Factor:
79         0.25: Constant Acceleration
80         1/6: Linear Acceleration
81
82     Modal Factors : Vibration modes to be considered for Rayleigh Damping
83
84     Damping Factors : Corresponding damping ratios for the above vibration modes
85
86     Ground Acceleration directions:
87         1: Acceleration applied in that direction
88         0: Acceleration not applied in that direction
89
90
91     Steel Fibre Reinforced Concrete
92     -----
93
94     Matrix type:
95         1. Concrete
96         2. Mortar
97
98     Fiber type:
99         1. Hooked
100        2. Straight
101

```

Input Files  
**Slab PD1 (Drakatos et al. 2016)**

```

1          - - - - -
2          -   V e c T o r   -
3          -   J O B   D A T A   -
4          - - - - -
5
6 Job Title          (30 char max) : VT4SLAB
7 Job File Name     (8 char max)  : VT4SLAB
8 Date              (30 char max) :
9
10 STRUCTURE DATA
11 -----
12 Structure Type    : 4
13 File Name         (8 char max)  : STRUCT
14
15 LOADING DATA
16 -----
17 No. of Load Stages      : 1000
18 Starting Load Stage No. : 1
19 Load Series ID         (5 char max) : I
20
21 Load File Name          Factors
22 Case (8 char max) | Initial   Final   Inc   Typ Rep C-Inc|
23 1      LOAD1          1.00000 1.00000 0.00000 1 1 1.00000
24 2      LOAD2          1.00000 1.00000 0.00000 1 1 1.00000
25 3      LOAD5          0.00000 200.00000 0.250000 1 1 1.00000
26 4      NULL           0.00000 0.000000 0.00000 1 1 0.00000
27 5      NULL           0.00000 200.000000 1.00000 1 1 0.00000
28
29 ANALYSIS PARAMETERS
30 -----
31 Analysis Mode              (1-2) : 1
32 Seed File Name             (8 char max) : NULL
33 Convergence Limit          (>1.0) : 1.000005
34 Averaging Factor           (<1.0) : 0.40
35 Maximum No. of Iterations : 80
36 Convergence Criteria       (1-3) : 2
37 Results File Type          (1-4) : 2
38 Result Output Format        (1-3) : 4
39
40 MATERIAL BEHAVIOUR MODELS
41 -----
42 Concrete Compression Base Curve (0-3) : 1
43 Concrete Compression Post-Peak (0-3) : 1
44 Concrete Compression Softening (0-8) : 1
45 Concrete Tension Stiffening (0-5) : 1
46 Concrete Tension Softening (0-8) : 1
47 Concrete Tension Splitting (1-2) : 1
48 Concrete Confined Strength (0-2) : 1
49 Concrete Dilatation (0-5) : 1
50 Concrete Cracking Criterion (0-4) : 1
51 Concrete Crack Slip Check (0-2) : 1
52 Concrete Crack Width Check (0-2) : 1
53 Concrete Bond or Adhesion (0-4) : 1
54 Concrete Creep and Relaxation (0-1) : 1
55 Concrete Hysteresis (0-3) : 2
56 Reinforcement Hysteresis (0-3) : 1
57 Reinforcement Dowel Action (0-1) : 1
58 Reinforcement Buckling (0-1) : 1
59 Element Strain Histories (0-1) : 1
60 Element Slip Distortions (0-4) : 1
61 Strain Rate Effects (0-1) : 1
62 Structural Damping (0-1) : 1
63 Geometric Nonlinearity (0-1) : 1
64 Crack Allocation Process (0-1) : 1
65
66

```



```

67
68 ANALYSIS PARAMETERS:
69 -----
70 1. INTEGRATION SCHEME:
71     1. Selective (Bending - 3 ; Shear - 2)
72     2. Full      (Bending - 3 ; Shear - 3)
73     3. Reduced  (Bending - 2 ; Shear - 2)
74
75 2. CONVERGENCE CRITERIA:
76     1. Displacements - Weighted Average
77     2. Displacements - Maximum Value
78     3. Secant Moduli - RMS
79
80 3. RESULTS FILE TYPE:
81     1. ASCII and Binary Files
82     2. ASCII Files Only
83     3. Binary Files Only
84     4. Last Load Stage Only
85
86 4. RESULTS OUTPUT FORMAT
87     Print concrete strains and stresses of:
88     1. All layers at all gauss points
89     2. Top and bottom layers at all gauss points
90     3. All layers for central gauss point only
91
92 MATERIAL BEHAVIOUR MODELS:
93 -----
94 1. OUT-OF-PLANE SHEAR:
95     0. Shear Not Considered
96     1. Considered - Uniform Shear Strain
97
98 2. GEOMETRIC NONLINEARITY:
99     0. Neglect Effect
100    1. Consider Effect
101
102 3. LOAD HISTORY:
103     0. Neglect Previous Loading Effects
104     1. Consider Previous Loading Effects
105
106 4. CONCRETE COMPRESSION BASE CURVE:
107     0. Linear Elastic
108     1. Normal (Parabolic)
109     2. High Strength
110
111 5. CONCRETE COMPRESSION SOFTENING:
112     0. Neglect Effect
113     1. Vecchio-Collins 1982 Model
114     2. Vecchio-Collins 1986 Model
115     3. Vecchio 1992-A Model
116     4. Vecchio 1992-B Model
117
118 6. CONCRETE TENSION STIFFENING:
119     0. Neglect Effect
120     1. Vecchio-Collins 1982 Model
121     2. Collins-Mitchell Model
122     3. Izumo, Maekawa et al Model
123
124 7. CONCRETE TENSION SOFTENING:
125     0. Neglect Effect
126     1. Linear Softening
127     2. Linear Softening + 10% Residual Stress
128     3. 10% Residual Stress Only
129     4. Yamamoto Model (Base Curve Only)
130     5. Yamamoto Model (Strain Hardening Considered)
131
132 8. CONCRETE STRENGTH ENHANCEMENT:

```

133           0. Biaxial Effects Neglected  
134           1. Biaxial Effects Considered  
135  
136    9. CONCRETE PLASTIC STRAINS:  
137           0. Neglect Effects  
138           1. Consider Effects  
139  
140   10. CONCRETE CRACK SLIP CHECK:  
141           0. Omit Check  
142           1. Perform Check  
143  
144   11. REINFORCEMENT STRESS RESPONSE:  
145           0. Linear Elastic  
146           1. Elastic-Plastic  
147           2. Strain Haredening Considered  
148           3. Bauschinger Effects Considered  
149  
150   12. SPLITTING FAILURE CRITERIA:  
151           0. Neglect Effects  
152           1. Consider Effects  
153  
154   NOTES:  
155   -----  
156   1. This program uses metric units only.  
157  
158   2. Do not insert or delete any line.  
159

```

1
2          - - - - -
3          -   S T R U C T U R E   -
4          -         D A T A         -
5          -       Version 1.0       -
6          - - - - -

```

STRUCTURAL PARAMETERS  
-----

```

10 Structure title           (30 char. max.) : SLAB
11 Structure file name      (8 char. max.) : STRUCT
12 No. of reinforced concrete material types : 4
13 No. of truss element material types      : 0
14 No. of bond material types              : 0
15 No. of shell elements                  : 603
16 No. of solid elements                  : 0
17 No. of truss elements                  : 0
18 No. of link elements                   : 0
19 No. of nodal points                   : 2593
20 No. of nodes with prescribed d.o.f.    : 96

```

MATERIAL SPECIFICATIONS  
-----

(A) GENERAL

```

27 ----- <-----SHELL----->          SHELL SOLID <-----SHELL SHEAR REINFORCEMENT----->
28 MAT REF OOP   T   OS   CON REIN REIN DiaZ ROZ   Fyz   Fuz   Esz   eshz
   euz Agg  clrT clrB Sx   Sy   Sz
29 TYP TYP SSM   (mm) (mm) LYR COMP COMP (mm) (%) (MPa) (MPa) (MPa) (mm/m)
   (mm/m) (mm) (mm) (mm) (mm) (mm) (mm)
30 1 1 0 250 0 20 4 0 8 0 580 680 200000 2.5 54.3 16 0 0 0 0 250
31 2 1 0 250 0 20 6 0 8 0 580 680 200000 2.5 54.3 16 0 0 0 0 250
32 3 1 0 250 0 20 4 0 8 20 580 680 200000 2.5 54.3 16 0 0 0 0 250
33 4 1 0 250 0 20 4 0 8 10 580 680 200000 2.5 54.3 16 0 0 0 0 250
34 /

```

(B) CONCRETE

```

36 -----
37 MAT f'c   f't   Ec   e'c   Mu   Cc   kc   Density
38 TYP (MPa) (MPa) (MPa) (mm/m) (/C) (mm^2/hr) (kg/m^3)
39 1 37.9 0 0 0 0 0 0 2400
40 2 37.9 0 0 0 0 0 0 2400
41 3 999.0 999.0 0 0 0 0 0 0.001
42 4 75.8 0 0 0 0 0 0 2400
43 /

```

(C) SMEARED REINFORCEMENT FOR SHELLS (Total no of input lines must be the same as the number listed under SHELL REIN COMP)

```

45 -----
46 MAT REF DIR   d   DIA   As   Fy   Fu   Es   esh   eu   Cs   Dep   b/t
47 TYP (1-6) (deg) (mm) (mm) (mm^2/m) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)
48 1 1.00 0.00 38.00 16.00 1608.00 559.00 659.00 200000.00 80.00
   100.00 0.00 0.00 0/
49 1 1.00 90.00 54.00 16.00 1608.00 559.00 659.00 200000.00 80.00
   100.00 0.00 0.00 0/
50 1 1.00 90.00 215.00 10.00 790.00 559.00 659.00 200000.00 80.00
   100.00 0.00 0.00 0/
51 1 1.00 0.00 225.00 10.00 790.00 559.00 659.00 200000.00 80.00
   100.00 0.00 0.00 0/
52 2 1.00 0.00 38.00 16.00 1608.00 559.00 659.00 200000.00 80.00
   100.00 0.00 0.00 0/
53 2 1.00 90.00 54.00 16.00 1608.00 559.00 659.00 200000.00 80.00
   100.00 0.00 0.00 0/
54 2 1.00 0.00 77.00 30.00 4347.8261 800.00 900.00 200000.00 80.00
   100.00 0.00 0.00 0/
55 2 1.00 0.00 195.00 30.00 4347.8261 800.00 900.00 200000.00 80.00
   100.00 0.00 0.00 0/

```

```

56 2 1.00 90.00 215.00 10.00 790.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
57 2 1.00 0.00 225.00 10.00 790.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
58 3 1.00 0.00 38.00 16.00 1608.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
59 3 1.00 90.00 54.00 16.00 1608.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
60 3 1.00 90.00 215.00 10.00 790.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
61 3 1.00 0.00 225.00 10.00 790.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
62 4 1.00 0.00 38.00 16.00 1608.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
63 4 1.00 90.00 54.00 16.00 1608.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
64 4 1.00 90.00 215.00 10.00 790.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
65 4 1.00 0.00 225.00 10.00 790.00 559.00 659.00 200000.00 80.00
100.00 0.00 0.00 0/
66 /
67 (D) SMEARED REINFORCEMENT FOR SOLIDS (Total no of input lines must be the same as the
number listed under SOLID REIN COMP)
68 -----
69 MAT SRF ORIENT. RHO Db Fy Fu [Es esh eu Cs Dep b/t]
70 TYP TYP k l m % mm MPa MPa MPa me me /C me
71 /
72 (E) STEEL FOR TRUSS ELEMENTS
73 -----
74 <NOTE:> TO BE USED FOR TRUSS ELEMENTS ONLY
75 MAT REF OS DIA As Fy Fu Es esh eu Cs Dep b/t
76 TYP (1-6) (mm) (mm) (mm2) (MPa) (MPa) (MPa) (mm/m) (mm/m) (/C) (mm/m)
77 /
78 (F) BOND
79 -----
80 <NOTE:> TO BE USED FOR EXTERIOR/INTERIOR BONDED ELEMENTS
81 MAT REF { Ao U1 U2 U3 S1 S2 S3 }/{ CPF Cmin No. HOOK }
82 TYP TYP mm^2 MPa MPa MPa mm mm mm 0-1 mm LYR 0/1
83 /
84 ELEMENT INCIDENCES
85 -----
86
87 (A) HETEROSIS ELEMENTS
88 -----
89 <<<<< FORMAT >>>>> (counterclockwise direction)
90 ELMT INC1 INC2 INC3 INC4 INC5 INC6 INC7 INC8 <INC9> [#ELMT d(ELMT) d(INC1) d(INC4)] x2 /
91 1 1254 1258 1268 1289 1313 1299 1291 1278 1286/
92 2 1484 1479 1471 1445 1421 1431 1440 1454 1450/
93 3 1210 1216 1227 1250 1279 1270 1259 1239 1245/
94 4 1525 1518 1511 1485 1451 1466 1474 1496 1489/
95 5 1242 1248 1254 1278 1291 1285 1274 1256 1261/
96 6 1227 1236 1242 1256 1274 1276 1279 1250 1252/
97 7 1493 1488 1484 1454 1440 1447 1463 1480 1470/
98 8 1511 1498 1493 1480 1463 1457 1451 1485 1483/
99 9 1421 1398 1377 1383 1400 1414 1440 1431 1407/
100 10 1411 1441 1474 1466 1451 1428 1400 1405 1435/
101 11 1440 1414 1400 1428 1451 1457 1463 1447 1438/
102 12 1313 1335 1355 1346 1327 1316 1291 1299 1322/
103 13 1355 1381 1411 1405 1400 1367 1327 1346 1376/
104 14 1400 1383 1377 1348 1320 1323 1327 1367 1354/
105 15 1274 1285 1291 1316 1327 1308 1279 1276 1293/
106 16 1259 1270 1279 1308 1327 1323 1320 1292 1297/
107 17 1268 1258 1254 1235 1207 1214 1229 1249 1241/
108 18 1511 1518 1525 1543 1572 1563 1554 1531 1537/
109 19 1254 1248 1242 1212 1197 1201 1207 1235 1224/
110 20 1493 1498 1511 1531 1554 1544 1538 1520 1527/

```

111 21 1484 1488 1493 1520 1538 1535 1532 1507 1514/  
112 22 1471 1479 1484 1507 1532 1523 1515 1490 1497/  
113 23 1242 1236 1227 1202 1174 1191 1197 1212 1208/  
114 24 1227 1216 1210 1192 1164 1168 1174 1202 1198/  
115 25 1173 1203 1229 1214 1207 1189 1162 1166 1196/  
116 26 1572 1591 1616 1608 1600 1575 1554 1563 1581/  
117 27 1128 1155 1173 1166 1162 1136 1116 1123 1147/  
118 28 1616 1642 1660 1653 1640 1618 1600 1608 1626/  
119 29 1080 1107 1128 1123 1116 1089 1071 1075 1094/  
120 30 1660 1687 1708 1695 1689 1664 1640 1653 1675/  
121 31 1036 1054 1080 1075 1071 1046 1022 1025 1051/  
122 32 1708 1726 1751 1745 1736 1716 1689 1695 1720/  
123 33 988 1012 1036 1025 1022 994 968 980 1005/  
124 34 1751 1775 1798 1786 1783 1757 1736 1745 1768/  
125 35 930 961 988 980 968 944 916 925 952/  
126 36 1798 1816 1842 1840 1837 1811 1783 1786 1812/  
127 37 2320 2318 2311 2297 2276 2285 2289 2308 2305/  
128 38 2261 2258 2256 2223 2189 2192 2193 2228 2226/  
129 39 2311 2310 2309 2292 2268 2272 2276 2297 2294/  
130 40 2265 2263 2261 2228 2193 2197 2199 2233 2230/  
131 41 2309 2307 2303 2287 2260 2264 2268 2292 2290/  
132 42 2270 2267 2265 2233 2199 2201 2203 2237 2234/  
133 43 2303 2296 2295 2273 2240 2254 2260 2287 2279/  
134 44 2274 2271 2270 2237 2203 2206 2209 2241 2239/  
135 45 2295 2293 2291 2266 2232 2236 2240 2273 2269/  
136 46 2284 2280 2274 2241 2209 2208 2207 2250 2242/  
137 47 2291 2288 2284 2250 2207 2224 2232 2266 2259/  
138 48 883 911 930 925 916 886 857 864 895/  
139 49 1842 1870 1896 1894 1891 1863 1837 1840 1867/  
140 50 339 320 305 306 307 324 343 341 322/  
141 51 2189 2152 2117 2121 2126 2160 2193 2192 2156/  
142 52 383 359 339 341 343 364 390 386 363/  
143 53 2117 2083 2048 2051 2055 2090 2126 2121 2085/  
144 54 440 411 383 386 390 417 448 443 413/  
145 55 2048 2013 1979 1983 1986 2020 2055 2051 2016/  
146 56 504 470 440 443 448 479 510 508 475/  
147 57 1979 1948 1919 1921 1926 1955 1986 1983 1951/  
148 58 568 536 504 508 510 541 573 571 540/  
149 59 1919 1890 1861 1864 1868 1897 1926 1921 1893/  
150 60 631 599 568 571 573 606 638 635 602/  
151 61 1861 1832 1803 1807 1809 1838 1868 1864 1834/  
152 62 695 662 631 635 638 670 701 697 666/  
153 63 1803 1772 1744 1747 1752 1781 1809 1807 1777/  
154 64 758 727 695 697 701 732 763 760 729/  
155 65 1744 1714 1682 1684 1690 1721 1752 1747 1718/  
156 66 819 789 758 760 763 795 827 822 792/  
157 67 1682 1647 1607 1611 1617 1656 1690 1684 1651/  
158 68 885 852 819 822 827 859 890 888 856/  
159 69 1607 1564 1519 1526 1530 1574 1617 1611 1571/  
160 70 948 917 885 888 890 923 956 951 919/  
161 71 1519 1475 1433 1437 1443 1487 1530 1526 1481/  
162 72 1009 979 948 951 956 989 1021 1016 986/  
163 73 1433 1399 1371 1375 1379 1408 1443 1437 1402/  
164 74 1074 1042 1009 1016 1021 1050 1081 1079 1047/  
165 75 1371 1344 1314 1318 1321 1350 1379 1375 1347/  
166 76 1153 1112 1074 1079 1081 1121 1160 1156 1115/  
167 77 1314 1280 1237 1243 1246 1287 1321 1318 1283/  
168 78 1237 1195 1153 1156 1160 1205 1246 1243 1200/  
169 79 445 464 478 507 537 516 502 473 488/  
170 80 307 312 318 336 357 347 343 324 329/  
171 81 415 431 445 473 502 484 471 441 455/  
172 82 318 321 323 344 366 361 357 336 340/  
173 83 388 405 415 441 471 452 442 414 429/  
174 84 323 332 338 362 387 380 366 344 355/  
175 85 367 381 388 414 442 434 419 391 407/  
176 86 338 342 352 375 400 392 387 362 365/

177 87 352 360 367 391 419 409 400 375 384/  
178 88 823 854 883 864 857 826 797 806 834/  
179 89 1896 1924 1954 1950 1949 1920 1891 1894 1922/  
180 90 2229 2262 2289 2285 2276 2248 2218 2225 2257/  
181 91 537 566 594 574 562 533 502 516 546/  
182 92 764 794 823 806 797 766 735 753 780/  
183 93 1954 1984 2019 2014 2012 1978 1949 1950 1981/  
184 94 2159 2194 2229 2225 2218 2183 2148 2155 2190/  
185 95 594 622 646 633 616 589 562 574 604/  
186 96 704 734 764 753 735 705 673 693 722/  
187 97 646 674 704 693 673 643 616 633 664/  
188 98 2019 2054 2089 2084 2080 2046 2012 2014 2050/  
189 99 2089 2124 2159 2155 2148 2114 2080 2084 2120/  
190 100 1421 1445 1471 1452 1446 1424 1404 1412 1436/  
191 101 1377 1398 1421 1412 1404 1378 1351 1365 1384/  
192 102 1320 1348 1377 1365 1351 1324 1294 1312 1340/  
193 103 1259 1292 1320 1312 1294 1272 1240 1251 1284/  
194 104 1210 1239 1259 1251 1240 1217 1204 1206 1232/  
195 105 1471 1490 1515 1491 1476 1456 1446 1452 1478/  
196 106 1515 1523 1532 1569 1603 1583 1576 1540 1558/  
197 107 1538 1544 1554 1575 1600 1584 1577 1561 1570/  
198 108 1532 1535 1538 1561 1577 1586 1603 1569 1566/  
199 109 1174 1168 1164 1134 1111 1122 1133 1158 1149/  
200 110 1207 1201 1197 1167 1152 1157 1162 1189 1172/  
201 111 1197 1191 1174 1158 1133 1144 1152 1167 1163/  
202 112 1404 1424 1446 1456 1476 1439 1409 1406 1432/  
203 113 1164 1192 1210 1206 1204 1175 1159 1161 1187/  
204 114 1600 1618 1640 1619 1603 1586 1577 1584 1606/  
205 115 1351 1378 1404 1406 1409 1370 1328 1345 1374/  
206 116 1294 1324 1351 1345 1328 1295 1255 1281 1315/  
207 117 1240 1272 1294 1281 1255 1219 1194 1211 1247/  
208 118 1640 1664 1689 1679 1666 1632 1603 1619 1652/  
209 119 1689 1716 1736 1725 1719 1691 1666 1679 1700/  
210 120 1116 1136 1162 1157 1152 1127 1109 1114 1130/  
211 121 1071 1089 1116 1114 1109 1082 1057 1066 1086/  
212 122 1022 1046 1071 1066 1057 1038 1014 1019 1041/  
213 123 968 994 1022 1019 1014 987 955 960 990/  
214 124 1736 1757 1783 1779 1774 1748 1719 1725 1753/  
215 125 502 533 562 542 531 501 471 484 513/  
216 126 562 589 616 603 591 561 531 542 572/  
217 127 616 643 673 665 648 620 591 603 634/  
218 128 390 364 343 347 357 378 404 393 368/  
219 129 448 417 390 393 404 433 461 449 420/  
220 130 510 479 448 449 461 493 522 515 482/  
221 131 916 944 968 960 955 924 892 898 928/  
222 132 573 541 510 515 522 552 580 578 547/  
223 133 2199 2197 2193 2160 2126 2129 2132 2166 2163/  
224 134 2203 2201 2199 2166 2132 2135 2142 2171 2168/  
225 135 2209 2206 2203 2171 2142 2151 2154 2184 2177/  
226 136 2207 2208 2209 2184 2154 2157 2161 2188 2187/  
227 137 2232 2224 2207 2188 2161 2165 2169 2200 2196/  
228 138 2240 2236 2232 2200 2169 2172 2186 2217 2204/  
229 139 2260 2254 2240 2217 2186 2191 2195 2227 2222/  
230 140 2276 2272 2268 2235 2202 2205 2218 2248 2238/  
231 141 2268 2264 2260 2227 2195 2198 2202 2235 2231/  
232 142 442 452 471 501 531 514 503 472 483/  
233 143 1783 1811 1837 1833 1829 1802 1774 1779 1806/  
234 144 673 705 735 725 708 678 648 665 696/  
235 145 735 766 797 784 769 738 708 725 756/  
236 146 797 826 857 842 831 800 769 784 812/  
237 147 857 886 916 898 892 861 831 842 870/  
238 148 419 434 442 472 503 485 477 447 460/  
239 149 400 409 419 447 477 467 450 423 438/  
240 150 387 392 400 423 450 444 437 412 418/  
241 151 366 380 387 412 437 424 416 389 401/  
242 152 357 361 366 389 416 410 404 378 385/

243 153 2126 2090 2055 2060 2065 2098 2132 2129 2094/  
 244 154 2055 2020 1986 1989 1994 2029 2065 2060 2023/  
 245 155 1986 1955 1926 1928 1932 1962 1994 1989 1957/  
 246 156 1926 1897 1868 1872 1875 1904 1932 1928 1899/  
 247 157 1868 1838 1809 1813 1818 1847 1875 1872 1843/  
 248 158 1809 1781 1752 1754 1758 1787 1818 1813 1784/  
 249 159 1752 1721 1690 1693 1698 1727 1758 1754 1724/  
 250 160 1690 1656 1617 1622 1627 1667 1698 1693 1658/  
 251 161 1617 1574 1530 1536 1542 1585 1627 1622 1579/  
 252 162 1530 1487 1443 1448 1455 1499 1542 1536 1492/  
 253 163 1443 1408 1379 1382 1389 1415 1455 1448 1413/  
 254 164 1379 1350 1321 1325 1329 1357 1389 1382 1353/  
 255 165 638 606 573 578 580 612 645 641 610/  
 256 166 1837 1863 1891 1888 1885 1857 1829 1833 1862/  
 257 167 2148 2183 2218 2205 2202 2167 2133 2136 2170/  
 258 168 2080 2114 2148 2136 2133 2100 2066 2072 2102/  
 259 169 2012 2046 2080 2072 2066 2031 1996 2007 2041/  
 260 170 1949 1978 2012 2007 1996 1969 1941 1946 1975/  
 261 171 1891 1920 1949 1946 1941 1912 1885 1888 1917/  
 262 172 1321 1287 1246 1253 1257 1298 1329 1325 1290/  
 263 173 1246 1205 1160 1165 1169 1213 1257 1253 1209/  
 264 174 1160 1121 1081 1087 1091 1131 1169 1165 1126/  
 265 175 1081 1050 1021 1024 1035 1061 1091 1087 1053/  
 266 176 1021 989 956 959 962 999 1035 1024 993/  
 267 177 956 923 890 894 897 929 962 959 926/  
 268 178 890 859 827 830 833 865 897 894 862/  
 269 179 827 795 763 767 771 802 833 830 798/  
 270 180 763 732 701 703 709 740 771 767 736/  
 271 181 701 670 638 641 645 677 709 703 672/  
 272 182 1152 1144 1133 1120 1104 1108 1109 1127 1124/  
 273 183 1164 1161 1159 1117 1078 1090 1111 1134 1125/  
 274 184 1240 1211 1194 1170 1159 1175 1204 1217 1199/  
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654 564 257 256 255 248 241 242 243 250 249/
655 565 68 60 51 53 56 63 70 69 61/
656 566 71 77 82 79 74 67 62 66 72/
657 567 56 57 62 67 74 73 70 63 65/
658 568 231 238 245 244 243 236 229 230 237/
659 569 240 233 226 225 227 234 241 239 232/
660 570 243 242 241 234 227 228 229 236 235/
661 571 83 75 68 69 70 78 85 84 76/
662 572 82 88 95 92 89 81 74 79 86/
663 573 70 73 74 81 89 87 85 78 80/
664 574 217 224 231 230 229 222 215 216 223/
665 575 226 219 211 212 213 220 227 225 218/
666 576 229 228 227 220 213 214 215 222 221/
667 577 97 90 83 84 85 93 100 98 91/
668 578 95 102 109 104 103 96 89 92 99/
669 579 85 87 89 96 103 101 100 93 94/
670 580 203 210 217 216 215 208 201 202 209/
671 581 211 204 197 198 199 206 213 212 205/
672 582 215 214 213 206 199 200 201 208 207/
673 583 112 105 97 98 100 107 114 113 106/
674 584 109 116 122 118 117 110 103 104 111/
675 585 100 101 103 110 117 115 114 107 108/
676 586 189 196 203 202 201 194 187 188 195/
677 587 197 190 183 184 185 192 199 198 191/
678 588 201 200 199 192 185 186 187 194 193/
679 589 126 119 112 113 114 121 128 127 120/
680 590 122 129 136 132 131 124 117 118 125/
681 591 114 115 117 124 131 130 128 121 123/
682 592 175 182 189 188 187 180 173 174 181/
683 593 183 176 169 170 171 178 185 184 177/
684 594 187 186 185 178 171 172 173 180 179/
685 595 140 133 126 127 128 135 143 141 134/
686 596 136 142 148 146 145 138 131 132 139/
687 597 128 130 131 138 145 144 143 135 137/
688 598 161 168 175 174 173 166 159 160 167/
689 599 148 154 161 160 159 152 145 146 153/
690 600 169 162 155 156 157 164 171 170 163/
691 601 173 172 171 164 157 158 159 166 165/
692 602 145 152 159 158 157 150 143 144 151/
693 603 140 141 143 150 157 156 155 147 149/
694 /
695 (B1) AUTO GENERATE SOLID ELEMENTS & COORDINATES FOR PRIMARY STRUCTURAL ELEMENT (BEAM OR
SLAB)
696 -----
697 <<<<< FORMAT >>>>> (Xi, Yi, & Zi must be in increasing order)(Total solid elements
generated = Sum of NElemX x Sum of NElemY x Sum of NElemZ)(Total solid nodes generated
= (Sum of NElemX + 1) x (Sum of NElemY + 1) x (Sum of NElemZ + 1))
698 Xi NElemX Yi NElemY Zi NElemZ/
699 /
700 (B2) AUTO GENERATE SOLID ELEMENTS, COORDINATES & MAT TYPES FOR EXTENSIONS TO BEAM OR

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701 SLAB (EG: LOAD PLATES, COLUMN STUBS OR T-BEAM FLANGES, ETC)
-----
702 <<<<< FORMAT >>>>> (Existing coords -> X1,Y1,Z1,X2,Y2,Z2) (Length can be + or - for new
703 coords)
704 X1 Y1 Z1 X2 Y2 Z2 Length NElem Mat/
705 /
706 (B3) SOLID ELEMENTS
707 -----
708 <<<<< FORMAT >>>>> (Note that element no must follow the last shell element no)
709 ELMT INC1 INC2 INC3 INC4 INC5 INC6 INC7 INC8 [#ELMT d(ELMT) d(INC)-Xdir] [#ELMT d(ELMT)
710 d(INC)-Ydir] [#ELMT d(ELMT) d(INC)-Zdir]/
711 /
712 (C1) AUTO GENERATE TRUSS ELEMENTS & MATERIAL ASSIGNMENTS
713 -----
714 <<<<< FORMAT >>>>> <X2 > X1, or Y2 > Y1, etc>
715 Mat X1 Y1 Z1 X2 Y2 Z2 NRBarX SpacX NRBarY
716 SpacY NRBarZ SpacZ/
717 /
718 (C2) TRUSS ELEMENTS
719 -----
720 <<<<< FORMAT >>>>>
721 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC)] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC)
722 ]/
723 /
724 (C3) AUTO GENERATE SPRING SUPPORT ELEMENTS, MATERIAL ASSIGNMENTS, COORDINATES, &
725 RESTRAINTS
726 -----
727 --
728 <<<<< FORMAT >>>>>
729 Mat Length X1 Y1 Z1 X2 Y2 Z2 [ NX SX NY SY
730 NZ SZ] /
731 /
732 (D1) LINK ELEMENTS
733 -----
734 <<<<< FORMAT >>>>>
735 ELMT INC1 INC2 [ #ELMT d(ELMT) d(INC)] [#ELMT d(ELMT) d(INC) ] [#ELMT d(ELMT) d(INC) ]/
736 /
737 MATERIAL AND ELEMENT TYPE ASSIGNMENT
738 -----
739 <<<<< FORMAT >>>>> (ETYPE=1 for shell, ETYPE=2 for solid, ETYPE=3 for frame or truss)
740 Elmt No. MUST be in ascending order
741 ELMT MAT ETYPE [#ELMT d(ELMT)]-Xdir [#ELMT d(ELMT)]-Ydir [#ELMT d(ELMT)]-Zdir/
742 1 1 1/
743 2 1 1/
744 3 1 1/
745 4 1 1/
746 5 1 1/
747 6 1 1/
748 7 1 1/
749 8 1 1/
750 9 1 1/
751 10 1 1/
752 11 1 1/
753 12 1 1/
754 13 1 1/
755 14 1 1/
756 15 1 1/
757 16 1 1/
758 17 1 1/
759 18 1 1/
760 19 1 1/
761 20 1 1/
762 21 1 1/
763 22 1 1/

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757 23 1 1/  
758 24 1 1/  
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761 27 1 1/  
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766 32 1 1/  
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768 34 1 1/  
769 35 1 1/  
770 36 1 1/  
771 37 1 1/  
772 38 1 1/  
773 39 1 1/  
774 40 1 1/  
775 41 1 1/  
776 42 1 1/  
777 43 1 1/  
778 44 1 1/  
779 45 1 1/  
780 46 4 1/  
781 47 4 1/  
782 48 1 1/  
783 49 1 1/  
784 50 1 1/  
785 51 1 1/  
786 52 1 1/  
787 53 1 1/  
788 54 1 1/  
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798 64 1 1/  
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807 73 1 1/  
808 74 1 1/  
809 75 1 1/  
810 76 1 1/  
811 77 1 1/  
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814 80 1 1/  
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818 84 4 1/  
819 85 1 1/  
820 86 4 1/  
821 87 1 1/  
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 1331 597 3 1/  
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 1334 600 3 1/  
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 1336 602 3 1/  
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 1338 /

COORDINATES

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1339  
 1340  
 1341  
 1342 <<<< FORMAT >>>> (units = mm)  
 1343 TOP or C/L <BOT>  
 1344 NODE TYPE X Y Z <X Y Z> [#NODE d(NODE) d(X) d(Y) d(Z)]-Xdir [#NODE  
 d(NODE) d(X) d(Y) d(Z)]-Ydir [#NODE d(NODE) d(X) d(Y) d(Z)]-Zdir  
 1345 1 1 5100.000 175.000 125.000 5100.000 175.000 -125.000/  
 1346 2 1 5050.000 175.000 125.000 5050.000 175.000 -125.000/  
 1347 3 1 5100.000 228.667 125.000 5100.000 228.667 -125.000/  
 1348 4 1 5049.945 228.718 125.000 5049.945 228.718 -125.000/  
 1349 5 1 5000.000 175.000 125.000 5000.000 175.000 -125.000/

1350	6	1	5100.000	282.333	125.000	5100.000	282.333	-125.000/
1351	7	1	4999.891	228.770	125.000	4999.891	228.770	-125.000/
1352	8	1	5049.891	282.437	125.000	5049.891	282.437	-125.000/
1353	9	1	4999.781	282.540	125.000	4999.781	282.540	-125.000/
1354	10	1	4950.000	175.000	125.000	4950.000	175.000	-125.000/
1355	11	1	4950.023	228.659	125.000	4950.023	228.659	-125.000/
1356	12	1	5100.000	336.000	125.000	5100.000	336.000	-125.000/
1357	13	1	5049.923	335.793	125.000	5049.923	335.793	-125.000/
1358	14	1	4950.046	282.319	125.000	4950.046	282.319	-125.000/
1359	15	1	4999.846	335.585	125.000	4999.846	335.585	-125.000/
1360	16	1	4900.000	175.000	125.000	4900.000	175.000	-125.000/
1361	17	1	4900.155	228.548	125.000	4900.155	228.548	-125.000/
1362	18	1	5100.000	389.667	125.000	5100.000	389.667	-125.000/
1363	19	1	4950.174	335.449	125.000	4950.174	335.449	-125.000/
1364	20	1	5049.956	389.148	125.000	5049.956	389.148	-125.000/
1365	21	1	4900.310	282.097	125.000	4900.310	282.097	-125.000/
1366	22	1	4999.911	388.630	125.000	4999.911	388.630	-125.000/
1367	23	1	4850.000	175.000	125.000	4850.000	175.000	-125.000/
1368	24	1	4850.268	228.604	125.000	4850.268	228.604	-125.000/
1369	25	1	4900.503	335.313	125.000	4900.503	335.313	-125.000/
1370	26	1	4950.303	388.580	125.000	4950.303	388.580	-125.000/
1371	27	1	5100.000	443.333	125.000	5100.000	443.333	-125.000/
1372	28	1	4850.536	282.208	125.000	4850.536	282.208	-125.000/
1373	29	1	5049.978	443.074	125.000	5049.978	443.074	-125.000/
1374	30	1	4999.956	442.815	125.000	4999.956	442.815	-125.000/
1375	31	1	4900.696	388.530	125.000	4900.696	388.530	-125.000/
1376	32	1	4850.541	335.540	125.000	4850.541	335.540	-125.000/
1377	33	1	4800.000	175.000	125.000	4800.000	175.000	-125.000/
1378	34	1	4800.381	228.659	125.000	4800.381	228.659	-125.000/
1379	35	1	4950.152	442.790	125.000	4950.152	442.790	-125.000/
1380	36	1	4800.762	282.318	125.000	4800.762	282.318	-125.000/
1381	37	1	5100.000	497.000	125.000	5100.000	497.000	-125.000/
1382	38	1	5050.000	497.000	125.000	5050.000	497.000	-125.000/
1383	39	1	4850.547	388.872	125.000	4850.547	388.872	-125.000/
1384	40	1	4900.348	442.765	125.000	4900.348	442.765	-125.000/
1385	41	1	5000.000	497.000	125.000	5000.000	497.000	-125.000/
1386	42	1	4800.580	335.766	125.000	4800.580	335.766	-125.000/
1387	43	1	4750.000	175.000	125.000	4750.000	175.000	-125.000/
1388	44	1	4750.282	228.726	125.000	4750.282	228.726	-125.000/
1389	45	1	4950.000	497.000	125.000	4950.000	497.000	-125.000/
1390	46	1	4750.564	282.452	125.000	4750.564	282.452	-125.000/
1391	47	1	4850.273	442.936	125.000	4850.273	442.936	-125.000/
1392	48	1	4800.398	389.214	125.000	4800.398	389.214	-125.000/
1393	49	1	4900.000	497.000	125.000	4900.000	497.000	-125.000/
1394	50	1	4750.415	335.782	125.000	4750.415	335.782	-125.000/
1395	51	1	4700.000	175.000	125.000	4700.000	175.000	-125.000/
1396	52	1	4800.199	443.107	125.000	4800.199	443.107	-125.000/
1397	53	1	4700.183	228.793	125.000	4700.183	228.793	-125.000/
1398	54	1	4850.000	497.000	125.000	4850.000	497.000	-125.000/
1399	55	1	4750.266	389.112	125.000	4750.266	389.112	-125.000/
1400	56	1	4700.366	282.585	125.000	4700.366	282.585	-125.000/
1401	57	1	4700.250	335.797	125.000	4700.250	335.797	-125.000/
1402	58	1	4800.000	497.000	125.000	4800.000	497.000	-125.000/
1403	59	1	4750.133	443.056	125.000	4750.133	443.056	-125.000/
1404	60	1	4650.000	175.000	125.000	4650.000	175.000	-125.000/
1405	61	1	4650.104	228.889	125.000	4650.104	228.889	-125.000/
1406	62	1	4700.134	389.009	125.000	4700.134	389.009	-125.000/
1407	63	1	4650.209	282.777	125.000	4650.209	282.777	-125.000/
1408	64	1	4750.000	497.000	125.000	4750.000	497.000	-125.000/
1409	65	1	4650.213	336.284	125.000	4650.213	336.284	-125.000/
1410	66	1	4700.067	443.005	125.000	4700.067	443.005	-125.000/
1411	67	1	4650.217	389.791	125.000	4650.217	389.791	-125.000/
1412	68	1	4600.000	175.000	125.000	4600.000	175.000	-125.000/
1413	69	1	4600.026	228.985	125.000	4600.026	228.985	-125.000/
1414	70	1	4600.052	282.969	125.000	4600.052	282.969	-125.000/
1415	71	1	4700.000	497.000	125.000	4700.000	497.000	-125.000/



1416	72	1	4650.108	443.396	125.000	4650.108	443.396	-125.000/
1417	73	1	4600.176	336.771	125.000	4600.176	336.771	-125.000/
1418	74	1	4600.299	390.573	125.000	4600.299	390.573	-125.000/
1419	75	1	4550.000	175.000	125.000	4550.000	175.000	-125.000/
1420	76	1	4550.048	229.053	125.000	4550.048	229.053	-125.000/
1421	77	1	4650.000	497.000	125.000	4650.000	497.000	-125.000/
1422	78	1	4550.095	283.106	125.000	4550.095	283.106	-125.000/
1423	79	1	4600.150	443.786	125.000	4600.150	443.786	-125.000/
1424	80	1	4550.067	336.758	125.000	4550.067	336.758	-125.000/
1425	81	1	4550.038	390.409	125.000	4550.038	390.409	-125.000/
1426	82	1	4600.000	497.000	125.000	4600.000	497.000	-125.000/
1427	83	1	4500.000	175.000	125.000	4500.000	175.000	-125.000/
1428	84	1	4500.070	229.122	125.000	4500.070	229.122	-125.000/
1429	85	1	4500.139	283.244	125.000	4500.139	283.244	-125.000/
1430	86	1	4550.019	443.705	125.000	4550.019	443.705	-125.000/
1431	87	1	4499.958	336.745	125.000	4499.958	336.745	-125.000/
1432	88	1	4550.000	497.000	125.000	4550.000	497.000	-125.000/
1433	89	1	4499.777	390.246	125.000	4499.777	390.246	-125.000/
1434	90	1	4450.000	175.000	125.000	4450.000	175.000	-125.000/
1435	91	1	4450.116	229.163	125.000	4450.116	229.163	-125.000/
1436	92	1	4499.888	443.623	125.000	4499.888	443.623	-125.000/
1437	93	1	4450.231	283.326	125.000	4450.231	283.326	-125.000/
1438	94	1	4450.049	336.704	125.000	4450.049	336.704	-125.000/
1439	95	1	4500.000	497.000	125.000	4500.000	497.000	-125.000/
1440	96	1	4449.866	390.082	125.000	4449.866	390.082	-125.000/
1441	97	1	4400.000	175.000	125.000	4400.000	175.000	-125.000/
1442	98	1	4400.162	229.204	125.000	4400.162	229.204	-125.000/
1443	99	1	4449.933	443.541	125.000	4449.933	443.541	-125.000/
1444	100	1	4400.323	283.409	125.000	4400.323	283.409	-125.000/
1445	101	1	4400.140	336.663	125.000	4400.140	336.663	-125.000/
1446	102	1	4450.000	497.000	125.000	4450.000	497.000	-125.000/
1447	103	1	4399.956	389.918	125.000	4399.956	389.918	-125.000/
1448	104	1	4399.978	443.459	125.000	4399.978	443.459	-125.000/
1449	105	1	4350.000	175.000	125.000	4350.000	175.000	-125.000/
1450	106	1	4350.366	228.805	125.000	4350.366	228.805	-125.000/
1451	107	1	4350.732	282.610	125.000	4350.732	282.610	-125.000/
1452	108	1	4350.578	336.204	125.000	4350.578	336.204	-125.000/
1453	109	1	4400.000	497.000	125.000	4400.000	497.000	-125.000/
1454	110	1	4350.424	389.798	125.000	4350.424	389.798	-125.000/
1455	111	1	4350.212	443.399	125.000	4350.212	443.399	-125.000/
1456	112	1	4300.000	175.000	125.000	4300.000	175.000	-125.000/
1457	113	1	4300.570	228.406	125.000	4300.570	228.406	-125.000/
1458	114	1	4301.141	281.811	125.000	4301.141	281.811	-125.000/
1459	115	1	4301.016	335.745	125.000	4301.016	335.745	-125.000/
1460	116	1	4350.000	497.000	125.000	4350.000	497.000	-125.000/
1461	117	1	4300.892	389.679	125.000	4300.892	389.679	-125.000/
1462	118	1	4300.446	443.339	125.000	4300.446	443.339	-125.000/
1463	119	1	4250.000	175.000	125.000	4250.000	175.000	-125.000/
1464	120	1	4250.691	228.579	125.000	4250.691	228.579	-125.000/
1465	121	1	4251.382	282.158	125.000	4251.382	282.158	-125.000/
1466	122	1	4300.000	497.000	125.000	4300.000	497.000	-125.000/
1467	123	1	4251.094	336.044	125.000	4251.094	336.044	-125.000/
1468	124	1	4250.806	389.931	125.000	4250.806	389.931	-125.000/
1469	125	1	4250.403	443.466	125.000	4250.403	443.466	-125.000/
1470	126	1	4200.000	175.000	125.000	4200.000	175.000	-125.000/
1471	127	1	4200.811	228.752	125.000	4200.811	228.752	-125.000/
1472	128	1	4201.623	282.504	125.000	4201.623	282.504	-125.000/
1473	129	1	4250.000	497.000	125.000	4250.000	497.000	-125.000/
1474	130	1	4201.172	336.344	125.000	4201.172	336.344	-125.000/
1475	131	1	4200.721	390.184	125.000	4200.721	390.184	-125.000/
1476	132	1	4200.361	443.592	125.000	4200.361	443.592	-125.000/
1477	133	1	4150.000	175.000	125.000	4150.000	175.000	-125.000/
1478	134	1	4150.616	228.939	125.000	4150.616	228.939	-125.000/
1479	135	1	4151.232	282.879	125.000	4151.232	282.879	-125.000/
1480	136	1	4200.000	497.000	125.000	4200.000	497.000	-125.000/
1481	137	1	4150.888	336.597	125.000	4150.888	336.597	-125.000/

1482	138	1	4150.545	390.316	125.000	4150.545	390.316	-125.000/
1483	139	1	4150.272	443.658	125.000	4150.272	443.658	-125.000/
1484	140	1	4100.000	175.000	125.000	4100.000	175.000	-125.000/
1485	141	1	4100.420	229.127	125.000	4100.420	229.127	-125.000/
1486	142	1	4150.000	497.000	125.000	4150.000	497.000	-125.000/
1487	143	1	4100.841	283.254	125.000	4100.841	283.254	-125.000/
1488	144	1	4100.604	336.851	125.000	4100.604	336.851	-125.000/
1489	145	1	4100.368	390.448	125.000	4100.368	390.448	-125.000/
1490	146	1	4100.184	443.724	125.000	4100.184	443.724	-125.000/
1491	147	1	4050.000	175.000	125.000	4050.000	175.000	-125.000/
1492	148	1	4100.000	497.000	125.000	4100.000	497.000	-125.000/
1493	149	1	4050.237	229.151	125.000	4050.237	229.151	-125.000/
1494	150	1	4050.473	283.303	125.000	4050.473	283.303	-125.000/
1495	151	1	4050.306	337.101	125.000	4050.306	337.101	-125.000/
1496	152	1	4050.139	390.900	125.000	4050.139	390.900	-125.000/
1497	153	1	4050.070	443.950	125.000	4050.070	443.950	-125.000/
1498	154	1	4050.000	497.000	125.000	4050.000	497.000	-125.000/
1499	155	1	4000.000	175.000	125.000	4000.000	175.000	-125.000/
1500	156	1	4000.053	229.176	125.000	4000.053	229.176	-125.000/
1501	157	1	4000.106	283.352	125.000	4000.106	283.352	-125.000/
1502	158	1	4000.008	337.352	125.000	4000.008	337.352	-125.000/
1503	159	1	3999.910	391.352	125.000	3999.910	391.352	-125.000/
1504	160	1	3999.955	444.176	125.000	3999.955	444.176	-125.000/
1505	161	1	4000.000	497.000	125.000	4000.000	497.000	-125.000/
1506	162	1	3950.000	175.000	125.000	3950.000	175.000	-125.000/
1507	163	1	3949.945	229.288	125.000	3949.945	229.288	-125.000/
1508	164	1	3949.889	283.576	125.000	3949.889	283.576	-125.000/
1509	165	1	3949.886	337.336	125.000	3949.886	337.336	-125.000/
1510	166	1	3949.883	391.096	125.000	3949.883	391.096	-125.000/
1511	167	1	3949.942	444.048	125.000	3949.942	444.048	-125.000/
1512	168	1	3950.000	497.000	125.000	3950.000	497.000	-125.000/
1513	169	1	3900.000	175.000	125.000	3900.000	175.000	-125.000/
1514	170	1	3899.836	229.401	125.000	3899.836	229.401	-125.000/
1515	171	1	3899.673	283.801	125.000	3899.673	283.801	-125.000/
1516	172	1	3899.764	337.320	125.000	3899.764	337.320	-125.000/
1517	173	1	3899.856	390.840	125.000	3899.856	390.840	-125.000/
1518	174	1	3899.928	443.920	125.000	3899.928	443.920	-125.000/
1519	175	1	3900.000	497.000	125.000	3900.000	497.000	-125.000/
1520	176	1	3850.000	175.000	125.000	3850.000	175.000	-125.000/
1521	177	1	3849.931	229.249	125.000	3849.931	229.249	-125.000/
1522	178	1	3849.863	283.499	125.000	3849.863	283.499	-125.000/
1523	179	1	3849.855	337.260	125.000	3849.855	337.260	-125.000/
1524	180	1	3849.848	391.022	125.000	3849.848	391.022	-125.000/
1525	181	1	3849.924	444.011	125.000	3849.924	444.011	-125.000/
1526	182	1	3850.000	497.000	125.000	3850.000	497.000	-125.000/
1527	183	1	3800.000	175.000	125.000	3800.000	175.000	-125.000/
1528	184	1	3800.027	229.098	125.000	3800.027	229.098	-125.000/
1529	185	1	3800.053	283.196	125.000	3800.053	283.196	-125.000/
1530	186	1	3799.947	337.201	125.000	3799.947	337.201	-125.000/
1531	187	1	3799.840	391.205	125.000	3799.840	391.205	-125.000/
1532	188	1	3799.920	444.102	125.000	3799.920	444.102	-125.000/
1533	189	1	3800.000	497.000	125.000	3800.000	497.000	-125.000/
1534	190	1	3750.000	175.000	125.000	3750.000	175.000	-125.000/
1535	191	1	3750.189	228.994	125.000	3750.189	228.994	-125.000/
1536	192	1	3750.377	282.988	125.000	3750.377	282.988	-125.000/
1537	193	1	3750.454	336.819	125.000	3750.454	336.819	-125.000/
1538	194	1	3750.531	390.650	125.000	3750.531	390.650	-125.000/
1539	195	1	3750.265	443.825	125.000	3750.265	443.825	-125.000/
1540	196	1	3750.000	497.000	125.000	3750.000	497.000	-125.000/
1541	197	1	3700.000	175.000	125.000	3700.000	175.000	-125.000/
1542	198	1	3700.350	228.890	125.000	3700.350	228.890	-125.000/
1543	199	1	3700.701	282.780	125.000	3700.701	282.780	-125.000/
1544	200	1	3700.961	336.438	125.000	3700.961	336.438	-125.000/
1545	201	1	3701.222	390.095	125.000	3701.222	390.095	-125.000/
1546	202	1	3700.611	443.548	125.000	3700.611	443.548	-125.000/
1547	203	1	3700.000	497.000	125.000	3700.000	497.000	-125.000/

1548	204	1	3650.000	175.000	125.000	3650.000	175.000	-125.000/
1549	205	1	3650.569	228.573	125.000	3650.569	228.573	-125.000/
1550	206	1	3651.138	282.146	125.000	3651.138	282.146	-125.000/
1551	207	1	3651.313	335.766	125.000	3651.313	335.766	-125.000/
1552	208	1	3651.488	389.385	125.000	3651.488	389.385	-125.000/
1553	209	1	3650.744	443.192	125.000	3650.744	443.192	-125.000/
1554	210	1	3650.000	497.000	125.000	3650.000	497.000	-125.000/
1555	211	1	3600.000	175.000	125.000	3600.000	175.000	-125.000/
1556	212	1	3600.788	228.256	125.000	3600.788	228.256	-125.000/
1557	213	1	3601.575	281.513	125.000	3601.575	281.513	-125.000/
1558	214	1	3601.664	335.093	125.000	3601.664	335.093	-125.000/
1559	215	1	3601.754	388.674	125.000	3601.754	388.674	-125.000/
1560	216	1	3600.877	442.837	125.000	3600.877	442.837	-125.000/
1561	217	1	3600.000	497.000	125.000	3600.000	497.000	-125.000/
1562	218	1	3551.001	228.222	125.000	3551.001	228.222	-125.000/
1563	219	1	3550.000	175.000	125.000	3550.000	175.000	-125.000/
1564	220	1	3552.001	281.443	125.000	3552.001	281.443	-125.000/
1565	221	1	3552.093	335.052	125.000	3552.093	335.052	-125.000/
1566	222	1	3552.184	388.660	125.000	3552.184	388.660	-125.000/
1567	223	1	3551.092	442.830	125.000	3551.092	442.830	-125.000/
1568	224	1	3550.000	497.000	125.000	3550.000	497.000	-125.000/
1569	225	1	3501.213	228.187	125.000	3501.213	228.187	-125.000/
1570	226	1	3500.000	175.000	125.000	3500.000	175.000	-125.000/
1571	227	1	3502.427	281.374	125.000	3502.427	281.374	-125.000/
1572	228	1	3502.521	335.010	125.000	3502.521	335.010	-125.000/
1573	229	1	3502.615	388.646	125.000	3502.615	388.646	-125.000/
1574	230	1	3501.307	442.823	125.000	3501.307	442.823	-125.000/
1575	231	1	3500.000	497.000	125.000	3500.000	497.000	-125.000/
1576	232	1	3451.163	228.339	125.000	3451.163	228.339	-125.000/
1577	233	1	3450.000	175.000	125.000	3450.000	175.000	-125.000/
1578	234	1	3452.326	281.677	125.000	3452.326	281.677	-125.000/
1579	235	1	3452.511	335.328	125.000	3452.511	335.328	-125.000/
1580	236	1	3452.696	388.980	125.000	3452.696	388.980	-125.000/
1581	237	1	3451.348	442.990	125.000	3451.348	442.990	-125.000/
1582	238	1	3450.000	497.000	125.000	3450.000	497.000	-125.000/
1583	239	1	3401.113	228.490	125.000	3401.113	228.490	-125.000/
1584	240	1	3400.000	175.000	125.000	3400.000	175.000	-125.000/
1585	241	1	3402.226	281.980	125.000	3402.226	281.980	-125.000/
1586	242	1	3402.501	335.646	125.000	3402.501	335.646	-125.000/
1587	243	1	3402.777	389.313	125.000	3402.777	389.313	-125.000/
1588	244	1	3401.388	443.156	125.000	3401.388	443.156	-125.000/
1589	245	1	3400.000	497.000	125.000	3400.000	497.000	-125.000/
1590	246	1	3350.964	228.524	125.000	3350.964	228.524	-125.000/
1591	247	1	3350.000	175.000	125.000	3350.000	175.000	-125.000/
1592	248	1	3351.927	282.047	125.000	3351.927	282.047	-125.000/
1593	249	1	3352.217	335.716	125.000	3352.217	335.716	-125.000/
1594	250	1	3352.508	389.385	125.000	3352.508	389.385	-125.000/
1595	251	1	3351.254	443.192	125.000	3351.254	443.192	-125.000/
1596	252	1	3350.000	497.000	125.000	3350.000	497.000	-125.000/
1597	253	1	3300.814	228.557	125.000	3300.814	228.557	-125.000/
1598	254	1	3300.000	175.000	125.000	3300.000	175.000	-125.000/
1599	255	1	3301.628	282.115	125.000	3301.628	282.115	-125.000/
1600	256	1	3301.934	335.786	125.000	3301.934	335.786	-125.000/
1601	257	1	3302.239	389.456	125.000	3302.239	389.456	-125.000/
1602	258	1	3301.119	443.228	125.000	3301.119	443.228	-125.000/
1603	259	1	3300.000	497.000	125.000	3300.000	497.000	-125.000/
1604	260	1	3250.000	175.000	125.000	3250.000	175.000	-125.000/
1605	261	1	3250.656	228.569	125.000	3250.656	228.569	-125.000/
1606	262	1	3251.312	282.137	125.000	3251.312	282.137	-125.000/
1607	263	1	3251.539	335.806	125.000	3251.539	335.806	-125.000/
1608	264	1	3251.766	389.475	125.000	3251.766	389.475	-125.000/
1609	265	1	3250.883	443.237	125.000	3250.883	443.237	-125.000/
1610	266	1	3250.000	497.000	125.000	3250.000	497.000	-125.000/
1611	267	1	3200.000	175.000	125.000	3200.000	175.000	-125.000/
1612	268	1	3200.498	228.580	125.000	3200.498	228.580	-125.000/
1613	269	1	3200.997	282.160	125.000	3200.997	282.160	-125.000/

1614	270	1	3201.145	335.827	125.000	3201.145	335.827	-125.000/
1615	271	1	3201.293	389.493	125.000	3201.293	389.493	-125.000/
1616	272	1	3200.647	443.247	125.000	3200.647	443.247	-125.000/
1617	273	1	3200.000	497.000	125.000	3200.000	497.000	-125.000/
1618	274	1	3150.000	175.000	125.000	3150.000	175.000	-125.000/
1619	275	1	3150.516	228.548	125.000	3150.516	228.548	-125.000/
1620	276	1	3151.031	282.095	125.000	3151.031	282.095	-125.000/
1621	277	1	3151.060	335.795	125.000	3151.060	335.795	-125.000/
1622	278	1	3151.090	389.494	125.000	3151.090	389.494	-125.000/
1623	279	1	3150.545	443.247	125.000	3150.545	443.247	-125.000/
1624	280	1	3150.000	497.000	125.000	3150.000	497.000	-125.000/
1625	281	1	3100.000	175.000	125.000	3100.000	175.000	-125.000/
1626	282	1	3100.533	228.515	125.000	3100.533	228.515	-125.000/
1627	283	1	3101.066	282.031	125.000	3101.066	282.031	-125.000/
1628	284	1	3100.976	335.763	125.000	3100.976	335.763	-125.000/
1629	285	1	3100.886	389.494	125.000	3100.886	389.494	-125.000/
1630	286	1	3100.443	443.247	125.000	3100.443	443.247	-125.000/
1631	287	1	3100.000	497.000	125.000	3100.000	497.000	-125.000/
1632	288	1	3050.000	175.000	125.000	3050.000	175.000	-125.000/
1633	289	1	3050.266	228.591	125.000	3050.266	228.591	-125.000/
1634	290	1	3050.533	282.182	125.000	3050.533	282.182	-125.000/
1635	291	1	3050.488	335.881	125.000	3050.488	335.881	-125.000/
1636	292	1	3050.443	389.580	125.000	3050.443	389.580	-125.000/
1637	293	1	3050.222	443.290	125.000	3050.222	443.290	-125.000/
1638	294	1	3050.000	497.000	125.000	3050.000	497.000	-125.000/
1639	295	1	3000.000	175.000	125.000	3000.000	175.000	-125.000/
1640	296	1	3000.000	131.250	125.000	3000.000	131.250	-125.000/
1641	297	1	3000.000	228.667	125.000	3000.000	228.667	-125.000/
1642	298	1	3000.000	87.500	125.000	3000.000	87.500	-125.000/
1643	299	1	3000.000	282.333	125.000	3000.000	282.333	-125.000/
1644	300	1	3000.000	43.750	125.000	3000.000	43.750	-125.000/
1645	301	1	3000.000	336.000	125.000	3000.000	336.000	-125.000/
1646	302	1	3000.000	0.000	125.000	3000.000	0.000	-125.000/
1647	303	1	3000.000	389.667	125.000	3000.000	389.667	-125.000/
1648	304	1	3000.000	443.333	125.000	3000.000	443.333	-125.000/
1649	305	1	3000.000	497.000	125.000	3000.000	497.000	-125.000/
1650	306	1	3000.000	547.150	125.000	3000.000	547.150	-125.000/
1651	307	1	3000.000	597.300	125.000	3000.000	597.300	-125.000/
1652	308	1	2950.000	175.000	125.000	2950.000	175.000	-125.000/
1653	309	1	2950.166	131.264	125.000	2950.166	131.264	-125.000/
1654	310	1	2949.892	228.806	125.000	2949.892	228.806	-125.000/
1655	311	1	2950.332	87.529	125.000	2950.332	87.529	-125.000/
1656	312	1	3000.000	647.450	125.000	3000.000	647.450	-125.000/
1657	313	1	2949.784	282.612	125.000	2949.784	282.612	-125.000/
1658	314	1	2950.166	43.764	125.000	2950.166	43.764	-125.000/
1659	315	1	2949.776	336.292	125.000	2949.776	336.292	-125.000/
1660	316	1	2950.000	0.000	125.000	2950.000	0.000	-125.000/
1661	317	1	2949.767	389.973	125.000	2949.767	389.973	-125.000/
1662	318	1	3000.000	697.600	125.000	3000.000	697.600	-125.000/
1663	319	1	2949.884	443.486	125.000	2949.884	443.486	-125.000/
1664	320	1	2950.000	497.000	125.000	2950.000	497.000	-125.000/
1665	321	1	3000.000	747.750	125.000	3000.000	747.750	-125.000/
1666	322	1	2949.994	547.268	125.000	2949.994	547.268	-125.000/
1667	323	1	3000.000	797.900	125.000	3000.000	797.900	-125.000/
1668	324	1	2949.988	597.535	125.000	2949.988	597.535	-125.000/
1669	325	1	2900.000	175.000	125.000	2900.000	175.000	-125.000/
1670	326	1	2900.332	131.279	125.000	2900.332	131.279	-125.000/
1671	327	1	2899.784	228.946	125.000	2899.784	228.946	-125.000/
1672	328	1	2900.664	87.558	125.000	2900.664	87.558	-125.000/
1673	329	1	2949.924	648.133	125.000	2949.924	648.133	-125.000/
1674	330	1	2899.568	282.891	125.000	2899.568	282.891	-125.000/
1675	331	1	2900.332	43.779	125.000	2900.332	43.779	-125.000/
1676	332	1	3000.000	848.050	125.000	3000.000	848.050	-125.000/
1677	333	1	2899.551	336.585	125.000	2899.551	336.585	-125.000/
1678	334	1	2900.000	0.000	125.000	2900.000	0.000	-125.000/
1679	335	1	2899.534	390.279	125.000	2899.534	390.279	-125.000/

1680	336	1	2949.859	698.731	125.000	2949.859	698.731	-125.000/
1681	337	1	2899.767	443.639	125.000	2899.767	443.639	-125.000/
1682	338	1	3000.000	898.200	125.000	3000.000	898.200	-125.000/
1683	339	1	2900.000	497.000	125.000	2900.000	497.000	-125.000/
1684	340	1	2949.292	750.416	125.000	2949.292	750.416	-125.000/
1685	341	1	2899.988	547.385	125.000	2899.988	547.385	-125.000/
1686	342	1	3000.000	948.350	125.000	3000.000	948.350	-125.000/
1687	343	1	2899.975	597.770	125.000	2899.975	597.770	-125.000/
1688	344	1	2948.724	802.100	125.000	2948.724	802.100	-125.000/
1689	345	1	2850.000	175.000	125.000	2850.000	175.000	-125.000/
1690	346	1	2850.376	131.285	125.000	2850.376	131.285	-125.000/
1691	347	1	2899.847	648.816	125.000	2899.847	648.816	-125.000/
1692	348	1	2850.751	87.569	125.000	2850.751	87.569	-125.000/
1693	349	1	2849.558	228.643	125.000	2849.558	228.643	-125.000/
1694	350	1	2849.117	282.285	125.000	2849.117	282.285	-125.000/
1695	351	1	2850.376	43.785	125.000	2850.376	43.785	-125.000/
1696	352	1	3000.000	998.500	125.000	3000.000	998.500	-125.000/
1697	353	1	2849.290	336.070	125.000	2849.290	336.070	-125.000/
1698	354	1	2850.000	0.000	125.000	2850.000	0.000	-125.000/
1699	355	1	2946.741	856.711	125.000	2946.741	856.711	-125.000/
1700	356	1	2849.463	389.854	125.000	2849.463	389.854	-125.000/
1701	357	1	2899.719	699.862	125.000	2899.719	699.862	-125.000/
1702	358	1	2849.732	443.427	125.000	2849.732	443.427	-125.000/
1703	359	1	2850.000	497.000	125.000	2850.000	497.000	-125.000/
1704	360	1	3000.000	1048.650	125.000	3000.000	1048.650	-125.000/
1705	361	1	2898.584	753.081	125.000	2898.584	753.081	-125.000/
1706	362	1	2944.757	911.322	125.000	2944.757	911.322	-125.000/
1707	363	1	2850.100	547.436	125.000	2850.100	547.436	-125.000/
1708	364	1	2850.200	597.872	125.000	2850.200	597.872	-125.000/
1709	365	1	2946.862	957.249	125.000	2946.862	957.249	-125.000/
1710	366	1	2897.449	806.301	125.000	2897.449	806.301	-125.000/
1711	367	1	3000.000	1098.800	125.000	3000.000	1098.800	-125.000/
1712	368	1	2850.126	648.930	125.000	2850.126	648.930	-125.000/
1713	369	1	2800.419	131.291	125.000	2800.419	131.291	-125.000/
1714	370	1	2800.000	175.000	125.000	2800.000	175.000	-125.000/
1715	371	1	2800.838	87.581	125.000	2800.838	87.581	-125.000/
1716	372	1	2799.332	228.340	125.000	2799.332	228.340	-125.000/
1717	373	1	2800.419	43.791	125.000	2800.419	43.791	-125.000/
1718	374	1	2798.665	281.680	125.000	2798.665	281.680	-125.000/
1719	375	1	2948.966	1003.175	125.000	2948.966	1003.175	-125.000/
1720	376	1	2799.029	335.555	125.000	2799.029	335.555	-125.000/
1721	377	1	2800.000	0.000	125.000	2800.000	0.000	-125.000/
1722	378	1	2850.053	699.988	125.000	2850.053	699.988	-125.000/
1723	379	1	2799.393	389.430	125.000	2799.393	389.430	-125.000/
1724	380	1	2893.482	865.372	125.000	2893.482	865.372	-125.000/
1725	381	1	3000.000	1148.950	125.000	3000.000	1148.950	-125.000/
1726	382	1	2799.696	443.215	125.000	2799.696	443.215	-125.000/
1727	383	1	2800.000	497.000	125.000	2800.000	497.000	-125.000/
1728	384	1	2949.535	1052.236	125.000	2949.535	1052.236	-125.000/
1729	385	1	2849.329	752.683	125.000	2849.329	752.683	-125.000/
1730	386	1	2800.212	547.486	125.000	2800.212	547.486	-125.000/
1731	387	1	2889.515	924.444	125.000	2889.515	924.444	-125.000/
1732	388	1	3000.000	1199.100	125.000	3000.000	1199.100	-125.000/
1733	389	1	2848.605	805.378	125.000	2848.605	805.378	-125.000/
1734	390	1	2800.424	597.973	125.000	2800.424	597.973	-125.000/
1735	391	1	2950.104	1101.297	125.000	2950.104	1101.297	-125.000/
1736	392	1	2893.724	966.147	125.000	2893.724	966.147	-125.000/
1737	393	1	2800.406	649.043	125.000	2800.406	649.043	-125.000/
1738	394	1	2750.431	131.292	125.000	2750.431	131.292	-125.000/
1739	395	1	2750.000	175.000	125.000	2750.000	175.000	-125.000/
1740	396	1	2750.863	87.584	125.000	2750.863	87.584	-125.000/
1741	397	1	2749.324	228.243	125.000	2749.324	228.243	-125.000/
1742	398	1	2750.431	43.792	125.000	2750.431	43.792	-125.000/
1743	399	1	2748.648	281.486	125.000	2748.648	281.486	-125.000/
1744	400	1	2897.933	1007.850	125.000	2897.933	1007.850	-125.000/
1745	401	1	2846.231	861.395	125.000	2846.231	861.395	-125.000/

1746	402	1	2749.182	335.176	125.000	2749.182	335.176	-125.000/
1747	403	1	2750.000	0.000	125.000	2750.000	0.000	-125.000/
1748	404	1	2800.387	700.113	125.000	2800.387	700.113	-125.000/
1749	405	1	3000.000	1249.250	125.000	3000.000	1249.250	-125.000/
1750	406	1	2749.716	388.865	125.000	2749.716	388.865	-125.000/
1751	407	1	2950.273	1150.916	125.000	2950.273	1150.916	-125.000/
1752	408	1	2749.858	442.933	125.000	2749.858	442.933	-125.000/
1753	409	1	2899.070	1055.822	125.000	2899.070	1055.822	-125.000/
1754	410	1	2800.074	752.284	125.000	2800.074	752.284	-125.000/
1755	411	1	2750.000	497.000	125.000	2750.000	497.000	-125.000/
1756	412	1	2843.858	917.411	125.000	2843.858	917.411	-125.000/
1757	413	1	2750.440	547.245	125.000	2750.440	547.245	-125.000/
1758	414	1	2950.442	1200.535	125.000	2950.442	1200.535	-125.000/
1759	415	1	3000.000	1299.400	125.000	3000.000	1299.400	-125.000/
1760	416	1	2799.761	804.456	125.000	2799.761	804.456	-125.000/
1761	417	1	2750.880	597.490	125.000	2750.880	597.490	-125.000/
1762	418	1	2846.485	962.642	125.000	2846.485	962.642	-125.000/
1763	419	1	2900.207	1103.793	125.000	2900.207	1103.793	-125.000/
1764	420	1	2751.004	648.586	125.000	2751.004	648.586	-125.000/
1765	421	1	2700.443	131.293	125.000	2700.443	131.293	-125.000/
1766	422	1	2700.000	175.000	125.000	2700.000	175.000	-125.000/
1767	423	1	2849.112	1007.873	125.000	2849.112	1007.873	-125.000/
1768	424	1	2798.981	857.417	125.000	2798.981	857.417	-125.000/
1769	425	1	2700.887	87.586	125.000	2700.887	87.586	-125.000/
1770	426	1	2699.315	228.146	125.000	2699.315	228.146	-125.000/
1771	427	1	2700.443	43.793	125.000	2700.443	43.793	-125.000/
1772	428	1	2698.631	281.292	125.000	2698.631	281.292	-125.000/
1773	429	1	2950.182	1250.572	125.000	2950.182	1250.572	-125.000/
1774	430	1	2699.335	334.796	125.000	2699.335	334.796	-125.000/
1775	431	1	3000.000	1349.550	125.000	3000.000	1349.550	-125.000/
1776	432	1	2700.000	0.000	125.000	2700.000	0.000	-125.000/
1777	433	1	2751.127	699.682	125.000	2751.127	699.682	-125.000/
1778	434	1	2900.545	1152.881	125.000	2900.545	1152.881	-125.000/
1779	435	1	2700.039	388.300	125.000	2700.039	388.300	-125.000/
1780	436	1	2700.020	442.650	125.000	2700.020	442.650	-125.000/
1781	437	1	2798.201	910.378	125.000	2798.201	910.378	-125.000/
1782	438	1	2849.739	1056.523	125.000	2849.739	1056.523	-125.000/
1783	439	1	2751.107	751.489	125.000	2751.107	751.489	-125.000/
1784	440	1	2700.000	497.000	125.000	2700.000	497.000	-125.000/
1785	441	1	2949.922	1300.610	125.000	2949.922	1300.610	-125.000/
1786	442	1	2900.884	1201.970	125.000	2900.884	1201.970	-125.000/
1787	443	1	2700.668	547.004	125.000	2700.668	547.004	-125.000/
1788	444	1	2799.246	959.137	125.000	2799.246	959.137	-125.000/
1789	445	1	3000.000	1399.700	125.000	3000.000	1399.700	-125.000/
1790	446	1	2751.086	803.296	125.000	2751.086	803.296	-125.000/
1791	447	1	2850.366	1105.172	125.000	2850.366	1105.172	-125.000/
1792	448	1	2701.336	597.007	125.000	2701.336	597.007	-125.000/
1793	449	1	2701.602	648.129	125.000	2701.602	648.129	-125.000/
1794	450	1	2800.292	1007.896	125.000	2800.292	1007.896	-125.000/
1795	451	1	2750.467	855.984	125.000	2750.467	855.984	-125.000/
1796	452	1	2900.364	1251.894	125.000	2900.364	1251.894	-125.000/
1797	453	1	2650.447	131.293	125.000	2650.447	131.293	-125.000/
1798	454	1	2650.000	175.000	125.000	2650.000	175.000	-125.000/
1799	455	1	2949.732	1350.565	125.000	2949.732	1350.565	-125.000/
1800	456	1	2650.893	87.587	125.000	2650.893	87.587	-125.000/
1801	457	1	2649.532	228.216	125.000	2649.532	228.216	-125.000/
1802	458	1	2650.447	43.793	125.000	2650.447	43.793	-125.000/
1803	459	1	2649.064	281.432	125.000	2649.064	281.432	-125.000/
1804	460	1	2850.591	1154.444	125.000	2850.591	1154.444	-125.000/
1805	461	1	2701.868	699.250	125.000	2701.868	699.250	-125.000/
1806	462	1	2649.504	334.913	125.000	2649.504	334.913	-125.000/
1807	463	1	2650.000	0.000	125.000	2650.000	0.000	-125.000/
1808	464	1	3000.000	1449.850	125.000	3000.000	1449.850	-125.000/
1809	465	1	2649.945	388.394	125.000	2649.945	388.394	-125.000/
1810	466	1	2749.848	908.672	125.000	2749.848	908.672	-125.000/
1811	467	1	2800.408	1057.223	125.000	2800.408	1057.223	-125.000/

1812	468	1	2649.972	442.697	125.000	2649.972	442.697	-125.000/
1813	469	1	2702.140	750.693	125.000	2702.140	750.693	-125.000/
1814	470	1	2650.000	497.000	125.000	2650.000	497.000	-125.000/
1815	471	1	2899.844	1301.819	125.000	2899.844	1301.819	-125.000/
1816	472	1	2850.815	1203.716	125.000	2850.815	1203.716	-125.000/
1817	473	1	2949.542	1400.520	125.000	2949.542	1400.520	-125.000/
1818	474	1	2750.523	958.452	125.000	2750.523	958.452	-125.000/
1819	475	1	2650.736	547.041	125.000	2650.736	547.041	-125.000/
1820	476	1	2702.411	802.136	125.000	2702.411	802.136	-125.000/
1821	477	1	2800.525	1106.551	125.000	2800.525	1106.551	-125.000/
1822	478	1	3000.000	1500.000	125.000	3000.000	1500.000	-125.000/
1823	479	1	2651.472	597.082	125.000	2651.472	597.082	-125.000/
1824	480	1	2751.199	1008.233	125.000	2751.199	1008.233	-125.000/
1825	481	1	2701.953	854.551	125.000	2701.953	854.551	-125.000/
1826	482	1	2651.889	648.066	125.000	2651.889	648.066	-125.000/
1827	483	1	2850.220	1253.455	125.000	2850.220	1253.455	-125.000/
1828	484	1	2899.464	1351.579	125.000	2899.464	1351.579	-125.000/
1829	485	1	2800.636	1156.007	125.000	2800.636	1156.007	-125.000/
1830	486	1	2600.450	131.294	125.000	2600.450	131.294	-125.000/
1831	487	1	2600.000	175.000	125.000	2600.000	175.000	-125.000/
1832	488	1	2949.058	1450.260	125.000	2949.058	1450.260	-125.000/
1833	489	1	2600.900	87.588	125.000	2600.900	87.588	-125.000/
1834	490	1	2599.749	228.286	125.000	2599.749	228.286	-125.000/
1835	491	1	2599.498	281.572	125.000	2599.498	281.572	-125.000/
1836	492	1	2600.450	43.794	125.000	2600.450	43.794	-125.000/
1837	493	1	2652.305	699.051	125.000	2652.305	699.051	-125.000/
1838	494	1	2599.674	335.030	125.000	2599.674	335.030	-125.000/
1839	495	1	2600.000	0.000	125.000	2600.000	0.000	-125.000/
1840	496	1	2701.494	906.966	125.000	2701.494	906.966	-125.000/
1841	497	1	2599.850	388.488	125.000	2599.850	388.488	-125.000/
1842	498	1	2750.944	1058.017	125.000	2750.944	1058.017	-125.000/
1843	499	1	2652.499	750.682	125.000	2652.499	750.682	-125.000/
1844	500	1	2599.925	442.744	125.000	2599.925	442.744	-125.000/
1845	501	1	2849.625	1303.194	125.000	2849.625	1303.194	-125.000/
1846	502	1	2899.085	1401.339	125.000	2899.085	1401.339	-125.000/
1847	503	1	2800.747	1205.463	125.000	2800.747	1205.463	-125.000/
1848	504	1	2600.000	497.000	125.000	2600.000	497.000	-125.000/
1849	505	1	2701.801	957.767	125.000	2701.801	957.767	-125.000/
1850	506	1	2652.693	802.314	125.000	2652.693	802.314	-125.000/
1851	507	1	2948.573	1500.000	125.000	2948.573	1500.000	-125.000/
1852	508	1	2600.804	547.078	125.000	2600.804	547.078	-125.000/
1853	509	1	2750.689	1107.800	125.000	2750.689	1107.800	-125.000/
1854	510	1	2601.608	597.157	125.000	2601.608	597.157	-125.000/
1855	511	1	2702.107	1008.569	125.000	2702.107	1008.569	-125.000/
1856	512	1	2652.535	854.593	125.000	2652.535	854.593	-125.000/
1857	513	1	2848.832	1352.541	125.000	2848.832	1352.541	-125.000/
1858	514	1	2800.077	1255.015	125.000	2800.077	1255.015	-125.000/
1859	515	1	2602.175	648.004	125.000	2602.175	648.004	-125.000/
1860	516	1	2898.115	1450.670	125.000	2898.115	1450.670	-125.000/
1861	517	1	2750.455	1157.535	125.000	2750.455	1157.535	-125.000/
1862	518	1	2550.451	131.294	125.000	2550.451	131.294	-125.000/
1863	519	1	2550.000	175.000	125.000	2550.000	175.000	-125.000/
1864	520	1	2550.902	87.588	125.000	2550.902	87.588	-125.000/
1865	521	1	2549.799	228.237	125.000	2549.799	228.237	-125.000/
1866	522	1	2602.742	698.851	125.000	2602.742	698.851	-125.000/
1867	523	1	2549.598	281.474	125.000	2549.598	281.474	-125.000/
1868	524	1	2550.451	43.794	125.000	2550.451	43.794	-125.000/
1869	525	1	2652.377	906.872	125.000	2652.377	906.872	-125.000/
1870	526	1	2549.668	334.855	125.000	2549.668	334.855	-125.000/
1871	527	1	2550.000	0.000	125.000	2550.000	0.000	-125.000/
1872	528	1	2701.480	1058.810	125.000	2701.480	1058.810	-125.000/
1873	529	1	2549.737	388.236	125.000	2549.737	388.236	-125.000/
1874	530	1	2602.859	750.672	125.000	2602.859	750.672	-125.000/
1875	531	1	2799.406	1304.568	125.000	2799.406	1304.568	-125.000/
1876	532	1	2549.868	442.618	125.000	2549.868	442.618	-125.000/
1877	533	1	2848.039	1401.888	125.000	2848.039	1401.888	-125.000/

1878	534	1	2750.221	1207.269	125.000	2750.221	1207.269	-125.000/
1879	535	1	2652.161	958.192	125.000	2652.161	958.192	-125.000/
1880	536	1	2550.000	497.000	125.000	2550.000	497.000	-125.000/
1881	537	1	2897.146	1500.000	125.000	2897.146	1500.000	-125.000/
1882	538	1	2700.853	1109.050	125.000	2700.853	1109.050	-125.000/
1883	539	1	2602.975	802.492	125.000	2602.975	802.492	-125.000/
1884	540	1	2550.822	547.045	125.000	2550.822	547.045	-125.000/
1885	541	1	2551.643	597.090	125.000	2551.643	597.090	-125.000/
1886	542	1	2798.200	1353.502	125.000	2798.200	1353.502	-125.000/
1887	543	1	2651.946	1009.512	125.000	2651.946	1009.512	-125.000/
1888	544	1	2749.384	1256.564	125.000	2749.384	1256.564	-125.000/
1889	545	1	2603.117	854.636	125.000	2603.117	854.636	-125.000/
1890	546	1	2846.879	1450.944	125.000	2846.879	1450.944	-125.000/
1891	547	1	2552.185	647.978	125.000	2552.185	647.978	-125.000/
1892	548	1	2700.274	1159.063	125.000	2700.274	1159.063	-125.000/
1893	549	1	2500.452	131.294	125.000	2500.452	131.294	-125.000/
1894	550	1	2500.000	175.000	125.000	2500.000	175.000	-125.000/
1895	551	1	2500.903	87.588	125.000	2500.903	87.588	-125.000/
1896	552	1	2552.727	698.865	125.000	2552.727	698.865	-125.000/
1897	553	1	2499.849	228.188	125.000	2499.849	228.188	-125.000/
1898	554	1	2603.259	906.779	125.000	2603.259	906.779	-125.000/
1899	555	1	2499.698	281.375	125.000	2499.698	281.375	-125.000/
1900	556	1	2500.452	43.794	125.000	2500.452	43.794	-125.000/
1901	557	1	2651.085	1060.020	125.000	2651.085	1060.020	-125.000/
1902	558	1	2499.661	334.680	125.000	2499.661	334.680	-125.000/
1903	559	1	2500.000	0.000	125.000	2500.000	0.000	-125.000/
1904	560	1	2499.624	387.984	125.000	2499.624	387.984	-125.000/
1905	561	1	2748.546	1305.860	125.000	2748.546	1305.860	-125.000/
1906	562	1	2796.994	1402.436	125.000	2796.994	1402.436	-125.000/
1907	563	1	2552.979	750.606	125.000	2552.979	750.606	-125.000/
1908	564	1	2699.695	1209.075	125.000	2699.695	1209.075	-125.000/
1909	565	1	2499.812	442.492	125.000	2499.812	442.492	-125.000/
1910	566	1	2845.720	1500.000	125.000	2845.720	1500.000	-125.000/
1911	567	1	2602.522	958.618	125.000	2602.522	958.618	-125.000/
1912	568	1	2500.000	497.000	125.000	2500.000	497.000	-125.000/
1913	569	1	2650.224	1110.527	125.000	2650.224	1110.527	-125.000/
1914	570	1	2553.232	802.346	125.000	2553.232	802.346	-125.000/
1915	571	1	2500.839	547.012	125.000	2500.839	547.012	-125.000/
1916	572	1	2747.320	1354.498	125.000	2747.320	1354.498	-125.000/
1917	573	1	2501.678	597.024	125.000	2501.678	597.024	-125.000/
1918	574	1	2795.643	1451.218	125.000	2795.643	1451.218	-125.000/
1919	575	1	2601.785	1010.456	125.000	2601.785	1010.456	-125.000/
1920	576	1	2698.691	1258.113	125.000	2698.691	1258.113	-125.000/
1921	577	1	2553.383	854.692	125.000	2553.383	854.692	-125.000/
1922	578	1	2502.195	647.952	125.000	2502.195	647.952	-125.000/
1923	579	1	2649.318	1160.453	125.000	2649.318	1160.453	-125.000/
1924	580	1	2502.712	698.879	125.000	2502.712	698.879	-125.000/
1925	581	1	2553.535	907.039	125.000	2553.535	907.039	-125.000/
1926	582	1	2450.000	175.000	125.000	2450.000	175.000	-125.000/
1927	583	1	2450.204	131.369	125.000	2450.204	131.369	-125.000/
1928	584	1	2449.843	228.080	125.000	2449.843	228.080	-125.000/
1929	585	1	2450.409	87.738	125.000	2450.409	87.738	-125.000/
1930	586	1	2600.691	1061.230	125.000	2600.691	1061.230	-125.000/
1931	587	1	2449.685	281.161	125.000	2449.685	281.161	-125.000/
1932	588	1	2450.204	43.869	125.000	2450.204	43.869	-125.000/
1933	589	1	2746.093	1403.137	125.000	2746.093	1403.137	-125.000/
1934	590	1	2449.695	334.668	125.000	2449.695	334.668	-125.000/
1935	591	1	2697.687	1307.151	125.000	2697.687	1307.151	-125.000/
1936	592	1	2450.000	0.000	125.000	2450.000	0.000	-125.000/
1937	593	1	2449.705	388.175	125.000	2449.705	388.175	-125.000/
1938	594	1	2794.293	1500.000	125.000	2794.293	1500.000	-125.000/
1939	595	1	2503.100	750.540	125.000	2503.100	750.540	-125.000/
1940	596	1	2648.411	1210.379	125.000	2648.411	1210.379	-125.000/
1941	597	1	2449.853	442.588	125.000	2449.853	442.588	-125.000/
1942	598	1	2552.531	959.145	125.000	2552.531	959.145	-125.000/
1943	599	1	2450.000	497.000	125.000	2450.000	497.000	-125.000/



1944	600	1	2599.596	1112.004	125.000	2599.596	1112.004	-125.000/
1945	601	1	2503.488	802.201	125.000	2503.488	802.201	-125.000/
1946	602	1	2450.730	547.072	125.000	2450.730	547.072	-125.000/
1947	603	1	2696.439	1355.494	125.000	2696.439	1355.494	-125.000/
1948	604	1	2744.480	1451.568	125.000	2744.480	1451.568	-125.000/
1949	605	1	2647.221	1259.276	125.000	2647.221	1259.276	-125.000/
1950	606	1	2451.460	597.144	125.000	2451.460	597.144	-125.000/
1951	607	1	2551.527	1011.252	125.000	2551.527	1011.252	-125.000/
1952	608	1	2503.649	854.749	125.000	2503.649	854.749	-125.000/
1953	609	1	2598.362	1161.844	125.000	2598.362	1161.844	-125.000/
1954	610	1	2451.973	647.966	125.000	2451.973	647.966	-125.000/
1955	611	1	2503.810	907.298	125.000	2503.810	907.298	-125.000/
1956	612	1	2452.486	698.789	125.000	2452.486	698.789	-125.000/
1957	613	1	2550.029	1061.936	125.000	2550.029	1061.936	-125.000/
1958	614	1	2400.000	175.000	125.000	2400.000	175.000	-125.000/
1959	615	1	2399.957	131.444	125.000	2399.957	131.444	-125.000/
1960	616	1	2695.192	1403.837	125.000	2695.192	1403.837	-125.000/
1961	617	1	2399.836	227.973	125.000	2399.836	227.973	-125.000/
1962	618	1	2399.915	87.888	125.000	2399.915	87.888	-125.000/
1963	619	1	2399.672	280.946	125.000	2399.672	280.946	-125.000/
1964	620	1	2646.031	1308.174	125.000	2646.031	1308.174	-125.000/
1965	621	1	2399.957	43.944	125.000	2399.957	43.944	-125.000/
1966	622	1	2742.866	1500.000	125.000	2742.866	1500.000	-125.000/
1967	623	1	2399.729	334.657	125.000	2399.729	334.657	-125.000/
1968	624	1	2400.000	0.000	125.000	2400.000	0.000	-125.000/
1969	625	1	2399.787	388.367	125.000	2399.787	388.367	-125.000/
1970	626	1	2452.906	750.556	125.000	2452.906	750.556	-125.000/
1971	627	1	2597.127	1211.683	125.000	2597.127	1211.683	-125.000/
1972	628	1	2399.893	442.683	125.000	2399.893	442.683	-125.000/
1973	629	1	2502.540	959.673	125.000	2502.540	959.673	-125.000/
1974	630	1	2548.530	1112.620	125.000	2548.530	1112.620	-125.000/
1975	631	1	2400.000	497.000	125.000	2400.000	497.000	-125.000/
1976	632	1	2453.327	802.324	125.000	2453.327	802.324	-125.000/
1977	633	1	2693.316	1451.919	125.000	2693.316	1451.919	-125.000/
1978	634	1	2644.794	1356.265	125.000	2644.794	1356.265	-125.000/
1979	635	1	2400.620	547.132	125.000	2400.620	547.132	-125.000/
1980	636	1	2595.751	1260.439	125.000	2595.751	1260.439	-125.000/
1981	637	1	2501.269	1012.048	125.000	2501.269	1012.048	-125.000/
1982	638	1	2401.241	597.264	125.000	2401.241	597.264	-125.000/
1983	639	1	2453.315	854.776	125.000	2453.315	854.776	-125.000/
1984	640	1	2547.029	1162.739	125.000	2547.029	1162.739	-125.000/
1985	641	1	2401.750	647.981	125.000	2401.750	647.981	-125.000/
1986	642	1	2453.304	907.228	125.000	2453.304	907.228	-125.000/
1987	643	1	2643.557	1404.356	125.000	2643.557	1404.356	-125.000/
1988	644	1	2499.367	1062.641	125.000	2499.367	1062.641	-125.000/
1989	645	1	2402.260	698.698	125.000	2402.260	698.698	-125.000/
1990	646	1	2691.439	1500.000	125.000	2691.439	1500.000	-125.000/
1991	647	1	2350.000	175.000	125.000	2350.000	175.000	-125.000/
1992	648	1	2594.376	1309.196	125.000	2594.376	1309.196	-125.000/
1993	649	1	2349.960	228.048	125.000	2349.960	228.048	-125.000/
1994	650	1	2349.667	131.713	125.000	2349.667	131.713	-125.000/
1995	651	1	2349.335	88.426	125.000	2349.335	88.426	-125.000/
1996	652	1	2349.920	281.096	125.000	2349.920	281.096	-125.000/
1997	653	1	2349.667	44.213	125.000	2349.667	44.213	-125.000/
1998	654	1	2350.037	334.877	125.000	2350.037	334.877	-125.000/
1999	655	1	2350.000	0.000	125.000	2350.000	0.000	-125.000/
2000	656	1	2545.529	1212.858	125.000	2545.529	1212.858	-125.000/
2001	657	1	2402.713	750.573	125.000	2402.713	750.573	-125.000/
2002	658	1	2350.154	388.658	125.000	2350.154	388.658	-125.000/
2003	659	1	2451.833	959.458	125.000	2451.833	959.458	-125.000/
2004	660	1	2350.077	442.829	125.000	2350.077	442.829	-125.000/
2005	661	1	2497.464	1113.235	125.000	2497.464	1113.235	-125.000/
2006	662	1	2350.000	497.000	125.000	2350.000	497.000	-125.000/
2007	663	1	2403.166	802.448	125.000	2403.166	802.448	-125.000/
2008	664	1	2641.785	1452.178	125.000	2641.785	1452.178	-125.000/
2009	665	1	2593.149	1357.036	125.000	2593.149	1357.036	-125.000/

2010	666	1	2350.396	547.235	125.000	2350.396	547.235	-125.000/
2011	667	1	2544.047	1261.195	125.000	2544.047	1261.195	-125.000/
2012	668	1	2450.363	1011.687	125.000	2450.363	1011.687	-125.000/
2013	669	1	2402.982	854.803	125.000	2402.982	854.803	-125.000/
2014	670	1	2350.791	597.469	125.000	2350.791	597.469	-125.000/
2015	671	1	2495.697	1163.634	125.000	2495.697	1163.634	-125.000/
2016	672	1	2351.478	648.200	125.000	2351.478	648.200	-125.000/
2017	673	1	2591.922	1404.875	125.000	2591.922	1404.875	-125.000/
2018	674	1	2640.013	1500.000	125.000	2640.013	1500.000	-125.000/
2019	675	1	2402.797	907.157	125.000	2402.797	907.157	-125.000/
2020	676	1	2448.312	1062.866	125.000	2448.312	1062.866	-125.000/
2021	677	1	2352.166	698.931	125.000	2352.166	698.931	-125.000/
2022	678	1	2542.566	1309.533	125.000	2542.566	1309.533	-125.000/
2023	679	1	2300.000	175.000	125.000	2300.000	175.000	-125.000/
2024	680	1	2300.084	228.123	125.000	2300.084	228.123	-125.000/
2025	681	1	2299.377	131.982	125.000	2299.377	131.982	-125.000/
2026	682	1	2300.168	281.245	125.000	2300.168	281.245	-125.000/
2027	683	1	2298.755	88.964	125.000	2298.755	88.964	-125.000/
2028	684	1	2299.377	44.482	125.000	2299.377	44.482	-125.000/
2029	685	1	2300.344	335.098	125.000	2300.344	335.098	-125.000/
2030	686	1	2300.000	0.000	125.000	2300.000	0.000	-125.000/
2031	687	1	2493.931	1214.033	125.000	2493.931	1214.033	-125.000/
2032	688	1	2352.727	750.767	125.000	2352.727	750.767	-125.000/
2033	689	1	2300.521	388.950	125.000	2300.521	388.950	-125.000/
2034	690	1	2401.127	959.242	125.000	2401.127	959.242	-125.000/
2035	691	1	2300.260	442.975	125.000	2300.260	442.975	-125.000/
2036	692	1	2446.261	1114.045	125.000	2446.261	1114.045	-125.000/
2037	693	1	2590.254	1452.438	125.000	2590.254	1452.438	-125.000/
2038	694	1	2353.288	802.603	125.000	2353.288	802.603	-125.000/
2039	695	1	2300.000	497.000	125.000	2300.000	497.000	-125.000/
2040	696	1	2541.196	1357.302	125.000	2541.196	1357.302	-125.000/
2041	697	1	2300.171	547.338	125.000	2300.171	547.338	-125.000/
2042	698	1	2492.344	1261.951	125.000	2492.344	1261.951	-125.000/
2043	699	1	2399.456	1011.327	125.000	2399.456	1011.327	-125.000/
2044	700	1	2353.098	854.796	125.000	2353.098	854.796	-125.000/
2045	701	1	2300.342	597.675	125.000	2300.342	597.675	-125.000/
2046	702	1	2444.075	1164.435	125.000	2444.075	1164.435	-125.000/
2047	703	1	2301.207	648.419	125.000	2301.207	648.419	-125.000/
2048	704	1	2588.586	1500.000	125.000	2588.586	1500.000	-125.000/
2049	705	1	2539.826	1405.072	125.000	2539.826	1405.072	-125.000/
2050	706	1	2352.908	906.989	125.000	2352.908	906.989	-125.000/
2051	707	1	2397.257	1063.091	125.000	2397.257	1063.091	-125.000/
2052	708	1	2490.757	1309.869	125.000	2490.757	1309.869	-125.000/
2053	709	1	2302.072	699.164	125.000	2302.072	699.164	-125.000/
2054	710	1	2250.000	175.000	125.000	2250.000	175.000	-125.000/
2055	711	1	2249.888	228.258	125.000	2249.888	228.258	-125.000/
2056	712	1	2248.218	133.058	125.000	2248.218	133.058	-125.000/
2057	713	1	2249.775	281.517	125.000	2249.775	281.517	-125.000/
2058	714	1	2441.889	1214.824	125.000	2441.889	1214.824	-125.000/
2059	715	1	2249.932	335.211	125.000	2249.932	335.211	-125.000/
2060	716	1	2248.218	45.558	125.000	2248.218	45.558	-125.000/
2061	717	1	2246.435	91.116	125.000	2246.435	91.116	-125.000/
2062	718	1	2250.000	0.000	125.000	2250.000	0.000	-125.000/
2063	719	1	2302.740	750.961	125.000	2302.740	750.961	-125.000/
2064	720	1	2250.088	388.904	125.000	2250.088	388.904	-125.000/
2065	721	1	2350.993	959.139	125.000	2350.993	959.139	-125.000/
2066	722	1	2538.493	1452.536	125.000	2538.493	1452.536	-125.000/
2067	723	1	2250.044	442.952	125.000	2250.044	442.952	-125.000/
2068	724	1	2395.058	1114.855	125.000	2395.058	1114.855	-125.000/
2069	725	1	2489.244	1357.569	125.000	2489.244	1357.569	-125.000/
2070	726	1	2303.409	802.759	125.000	2303.409	802.759	-125.000/
2071	727	1	2250.000	497.000	125.000	2250.000	497.000	-125.000/
2072	728	1	2440.381	1262.624	125.000	2440.381	1262.624	-125.000/
2073	729	1	2250.319	547.542	125.000	2250.319	547.542	-125.000/
2074	730	1	2349.079	1011.288	125.000	2349.079	1011.288	-125.000/
2075	731	1	2303.214	854.790	125.000	2303.214	854.790	-125.000/

2076	732	1	2250.639	598.084	125.000	2250.639	598.084	-125.000/
2077	733	1	2392.453	1165.235	125.000	2392.453	1165.235	-125.000/
2078	734	1	2537.159	1500.000	125.000	2537.159	1500.000	-125.000/
2079	735	1	2487.731	1405.269	125.000	2487.731	1405.269	-125.000/
2080	736	1	2251.531	648.882	125.000	2251.531	648.882	-125.000/
2081	737	1	2303.018	906.821	125.000	2303.018	906.821	-125.000/
2082	738	1	2438.873	1310.423	125.000	2438.873	1310.423	-125.000/
2083	739	1	2346.321	1063.144	125.000	2346.321	1063.144	-125.000/
2084	740	1	2252.423	699.679	125.000	2252.423	699.679	-125.000/
2085	741	1	2200.000	175.000	125.000	2200.000	175.000	-125.000/
2086	742	1	2199.691	228.394	125.000	2199.691	228.394	-125.000/
2087	743	1	2199.382	281.789	125.000	2199.382	281.789	-125.000/
2088	744	1	2389.847	1215.616	125.000	2389.847	1215.616	-125.000/
2089	745	1	2197.058	134.134	125.000	2197.058	134.134	-125.000/
2090	746	1	2253.195	751.390	125.000	2253.195	751.390	-125.000/
2091	747	1	2199.519	335.323	125.000	2199.519	335.323	-125.000/
2092	748	1	2200.000	0.000	125.000	2200.000	0.000	-125.000/
2093	749	1	2197.058	46.634	125.000	2197.058	46.634	-125.000/
2094	750	1	2300.859	959.035	125.000	2300.859	959.035	-125.000/
2095	751	1	2194.115	93.268	125.000	2194.115	93.268	-125.000/
2096	752	1	2199.656	388.858	125.000	2199.656	388.858	-125.000/
2097	753	1	2486.731	1452.635	125.000	2486.731	1452.635	-125.000/
2098	754	1	2343.564	1114.999	125.000	2343.564	1114.999	-125.000/
2099	755	1	2199.828	442.929	125.000	2199.828	442.929	-125.000/
2100	756	1	2437.554	1357.994	125.000	2437.554	1357.994	-125.000/
2101	757	1	2253.966	803.101	125.000	2253.966	803.101	-125.000/
2102	758	1	2200.000	497.000	125.000	2200.000	497.000	-125.000/
2103	759	1	2388.418	1263.296	125.000	2388.418	1263.296	-125.000/
2104	760	1	2200.468	547.747	125.000	2200.468	547.747	-125.000/
2105	761	1	2298.701	1011.249	125.000	2298.701	1011.249	-125.000/
2106	762	1	2253.771	854.985	125.000	2253.771	854.985	-125.000/
2107	763	1	2200.936	598.493	125.000	2200.936	598.493	-125.000/
2108	764	1	2485.732	1500.000	125.000	2485.732	1500.000	-125.000/
2109	765	1	2340.568	1165.407	125.000	2340.568	1165.407	-125.000/
2110	766	1	2436.235	1405.564	125.000	2436.235	1405.564	-125.000/
2111	767	1	2201.855	649.344	125.000	2201.855	649.344	-125.000/
2112	768	1	2253.575	906.870	125.000	2253.575	906.870	-125.000/
2113	769	1	2386.989	1310.977	125.000	2386.989	1310.977	-125.000/
2114	770	1	2295.385	1063.196	125.000	2295.385	1063.196	-125.000/
2115	771	1	2202.774	700.195	125.000	2202.774	700.195	-125.000/
2116	772	1	2150.000	175.000	125.000	2150.000	175.000	-125.000/
2117	773	1	2149.597	228.480	125.000	2149.597	228.480	-125.000/
2118	774	1	2337.573	1215.816	125.000	2337.573	1215.816	-125.000/
2119	775	1	2149.193	281.960	125.000	2149.193	281.960	-125.000/
2120	776	1	2203.649	751.819	125.000	2203.649	751.819	-125.000/
2121	777	1	2250.976	958.851	125.000	2250.976	958.851	-125.000/
2122	778	1	2150.000	0.000	125.000	2150.000	0.000	-125.000/
2123	779	1	2149.153	335.536	125.000	2149.153	335.536	-125.000/
2124	780	1	2435.270	1452.782	125.000	2435.270	1452.782	-125.000/
2125	781	1	2142.418	138.438	125.000	2142.418	138.438	-125.000/
2126	782	1	2149.112	389.112	125.000	2149.112	389.112	-125.000/
2127	783	1	2142.418	50.938	125.000	2142.418	50.938	-125.000/
2128	784	1	2385.864	1358.418	125.000	2385.864	1358.418	-125.000/
2129	785	1	2292.069	1115.143	125.000	2292.069	1115.143	-125.000/
2130	786	1	2149.556	443.056	125.000	2149.556	443.056	-125.000/
2131	787	1	2204.523	803.442	125.000	2204.523	803.442	-125.000/
2132	788	1	2134.836	101.877	125.000	2134.836	101.877	-125.000/
2133	789	1	2150.000	497.000	125.000	2150.000	497.000	-125.000/
2134	790	1	2336.343	1263.583	125.000	2336.343	1263.583	-125.000/
2135	791	1	2248.378	1010.832	125.000	2248.378	1010.832	-125.000/
2136	792	1	2150.390	547.899	125.000	2150.390	547.899	-125.000/
2137	793	1	2204.327	855.181	125.000	2204.327	855.181	-125.000/
2138	794	1	2434.305	1500.000	125.000	2434.305	1500.000	-125.000/
2139	795	1	2150.781	598.797	125.000	2150.781	598.797	-125.000/
2140	796	1	2288.683	1165.580	125.000	2288.683	1165.580	-125.000/
2141	797	1	2384.740	1405.859	125.000	2384.740	1405.859	-125.000/

2142	798	1	2151.795	650.090	125.000	2151.795	650.090	-125.000/
2143	799	1	2204.132	906.919	125.000	2204.132	906.919	-125.000/
2144	800	1	2335.114	1311.351	125.000	2335.114	1311.351	-125.000/
2145	801	1	2244.485	1062.331	125.000	2244.485	1062.331	-125.000/
2146	802	1	2152.810	701.383	125.000	2152.810	701.383	-125.000/
2147	803	1	2100.000	175.000	125.000	2100.000	175.000	-125.000/
2148	804	1	2099.502	228.566	125.000	2099.502	228.566	-125.000/
2149	805	1	2285.298	1216.016	125.000	2285.298	1216.016	-125.000/
2150	806	1	2383.809	1452.929	125.000	2383.809	1452.929	-125.000/
2151	807	1	2153.679	753.115	125.000	2153.679	753.115	-125.000/
2152	808	1	2099.004	282.131	125.000	2099.004	282.131	-125.000/
2153	809	1	2201.093	958.667	125.000	2201.093	958.667	-125.000/
2154	810	1	2100.000	0.000	125.000	2100.000	0.000	-125.000/
2155	811	1	2098.786	335.749	125.000	2098.786	335.749	-125.000/
2156	812	1	2334.559	1358.689	125.000	2334.559	1358.689	-125.000/
2157	813	1	2098.569	389.366	125.000	2098.569	389.366	-125.000/
2158	814	1	2240.593	1113.829	125.000	2240.593	1113.829	-125.000/
2159	815	1	2154.547	804.848	125.000	2154.547	804.848	-125.000/
2160	816	1	2087.778	142.743	125.000	2087.778	142.743	-125.000/
2161	817	1	2099.284	443.183	125.000	2099.284	443.183	-125.000/
2162	818	1	2087.778	55.243	125.000	2087.778	55.243	-125.000/
2163	819	1	2100.000	497.000	125.000	2100.000	497.000	-125.000/
2164	820	1	2284.269	1263.871	125.000	2284.269	1263.871	-125.000/
2165	821	1	2198.055	1010.415	125.000	2198.055	1010.415	-125.000/
2166	822	1	2100.313	548.051	125.000	2100.313	548.051	-125.000/
2167	823	1	2382.879	1500.000	125.000	2382.879	1500.000	-125.000/
2168	824	1	2154.703	856.076	125.000	2154.703	856.076	-125.000/
2169	825	1	2075.556	110.485	125.000	2075.556	110.485	-125.000/
2170	826	1	2334.004	1406.027	125.000	2334.004	1406.027	-125.000/
2171	827	1	2100.626	599.102	125.000	2100.626	599.102	-125.000/
2172	828	1	2236.712	1164.808	125.000	2236.712	1164.808	-125.000/
2173	829	1	2154.860	907.305	125.000	2154.860	907.305	-125.000/
2174	830	1	2101.736	650.836	125.000	2101.736	650.836	-125.000/
2175	831	1	2283.239	1311.725	125.000	2283.239	1311.725	-125.000/
2176	832	1	2193.586	1061.465	125.000	2193.586	1061.465	-125.000/
2177	833	1	2102.846	702.570	125.000	2102.846	702.570	-125.000/
2178	834	1	2333.250	1453.013	125.000	2333.250	1453.013	-125.000/
2179	835	1	2050.000	175.000	125.000	2050.000	175.000	-125.000/
2180	836	1	2232.832	1215.787	125.000	2232.832	1215.787	-125.000/
2181	837	1	2152.036	958.226	125.000	2152.036	958.226	-125.000/
2182	838	1	2049.268	228.625	125.000	2049.268	228.625	-125.000/
2183	839	1	2103.709	754.412	125.000	2103.709	754.412	-125.000/
2184	840	1	2048.535	282.250	125.000	2048.535	282.250	-125.000/
2185	841	1	2050.000	0.000	125.000	2050.000	0.000	-125.000/
2186	842	1	2283.253	1358.960	125.000	2283.253	1358.960	-125.000/
2187	843	1	2048.564	335.839	125.000	2048.564	335.839	-125.000/
2188	844	1	2042.431	138.435	125.000	2042.431	138.435	-125.000/
2189	845	1	2189.117	1112.516	125.000	2189.117	1112.516	-125.000/
2190	846	1	2048.593	389.429	125.000	2048.593	389.429	-125.000/
2191	847	1	2042.431	50.935	125.000	2042.431	50.935	-125.000/
2192	848	1	2104.571	806.253	125.000	2104.571	806.253	-125.000/
2193	849	1	2049.297	443.214	125.000	2049.297	443.214	-125.000/
2194	850	1	2034.863	101.870	125.000	2034.863	101.870	-125.000/
2195	851	1	2149.212	1009.148	125.000	2149.212	1009.148	-125.000/
2196	852	1	2050.000	497.000	125.000	2050.000	497.000	-125.000/
2197	853	1	2232.647	1264.104	125.000	2232.647	1264.104	-125.000/
2198	854	1	2332.496	1500.000	125.000	2332.496	1500.000	-125.000/
2199	855	1	2105.080	856.972	125.000	2105.080	856.972	-125.000/
2200	856	1	2050.245	548.653	125.000	2050.245	548.653	-125.000/
2201	857	1	2283.268	1406.195	125.000	2283.268	1406.195	-125.000/
2202	858	1	2184.741	1164.037	125.000	2184.741	1164.037	-125.000/
2203	859	1	2050.490	600.305	125.000	2050.490	600.305	-125.000/
2204	860	1	2105.588	907.690	125.000	2105.588	907.690	-125.000/
2205	861	1	2232.462	1312.420	125.000	2232.462	1312.420	-125.000/
2206	862	1	2051.226	652.788	125.000	2051.226	652.788	-125.000/
2207	863	1	2143.380	1059.939	125.000	2143.380	1059.939	-125.000/

2208	864	1	2282.690	1453.097	125.000	2282.690	1453.097	-125.000/
2209	865	1	2051.963	705.270	125.000	2051.963	705.270	-125.000/
2210	866	1	2102.979	957.785	125.000	2102.979	957.785	-125.000/
2211	867	1	2180.365	1215.558	125.000	2180.365	1215.558	-125.000/
2212	868	1	2000.000	175.000	125.000	2000.000	175.000	-125.000/
2213	869	1	1999.033	228.685	125.000	1999.033	228.685	-125.000/
2214	870	1	2233.193	1359.648	125.000	2233.193	1359.648	-125.000/
2215	871	1	2053.035	757.501	125.000	2053.035	757.501	-125.000/
2216	872	1	1997.085	134.127	125.000	1997.085	134.127	-125.000/
2217	873	1	1998.066	282.370	125.000	1998.066	282.370	-125.000/
2218	874	1	2000.000	0.000	125.000	2000.000	0.000	-125.000/
2219	875	1	1997.085	46.627	125.000	1997.085	46.627	-125.000/
2220	876	1	1998.342	335.930	125.000	1998.342	335.930	-125.000/
2221	877	1	2137.548	1110.731	125.000	2137.548	1110.731	-125.000/
2222	878	1	1994.170	93.254	125.000	1994.170	93.254	-125.000/
2223	879	1	1998.618	389.491	125.000	1998.618	389.491	-125.000/
2224	880	1	2054.107	809.732	125.000	2054.107	809.732	-125.000/
2225	881	1	1999.309	443.246	125.000	1999.309	443.246	-125.000/
2226	882	1	2100.370	1007.880	125.000	2100.370	1007.880	-125.000/
2227	883	1	2282.113	1500.000	125.000	2282.113	1500.000	-125.000/
2228	884	1	2181.025	1264.337	125.000	2181.025	1264.337	-125.000/
2229	885	1	2000.000	497.000	125.000	2000.000	497.000	-125.000/
2230	886	1	2233.923	1406.877	125.000	2233.923	1406.877	-125.000/
2231	887	1	2055.951	859.931	125.000	2055.951	859.931	-125.000/
2232	888	1	2000.177	549.254	125.000	2000.177	549.254	-125.000/
2233	889	1	2132.345	1163.037	125.000	2132.345	1163.037	-125.000/
2234	890	1	2000.353	601.509	125.000	2000.353	601.509	-125.000/
2235	891	1	2057.796	910.129	125.000	2057.796	910.129	-125.000/
2236	892	1	2181.685	1313.116	125.000	2181.685	1313.116	-125.000/
2237	893	1	2093.174	1058.413	125.000	2093.174	1058.413	-125.000/
2238	894	1	2000.716	654.739	125.000	2000.716	654.739	-125.000/
2239	895	1	2234.414	1453.438	125.000	2234.414	1453.438	-125.000/
2240	896	1	2056.308	957.768	125.000	2056.308	957.768	-125.000/
2241	897	1	2001.080	707.970	125.000	2001.080	707.970	-125.000/
2242	898	1	2183.132	1360.337	125.000	2183.132	1360.337	-125.000/
2243	899	1	2127.143	1215.344	125.000	2127.143	1215.344	-125.000/
2244	900	1	1950.000	175.000	125.000	1950.000	175.000	-125.000/
2245	901	1	1949.195	228.619	125.000	1949.195	228.619	-125.000/
2246	902	1	1948.290	133.040	125.000	1948.290	133.040	-125.000/
2247	903	1	2002.361	760.591	125.000	2002.361	760.591	-125.000/
2248	904	1	1948.390	282.238	125.000	1948.390	282.238	-125.000/
2249	905	1	1948.290	45.540	125.000	1948.290	45.540	-125.000/
2250	906	1	1946.580	91.079	125.000	1946.580	91.079	-125.000/
2251	907	1	1950.000	0.000	125.000	1950.000	0.000	-125.000/
2252	908	1	2085.978	1108.946	125.000	2085.978	1108.946	-125.000/
2253	909	1	1948.604	335.879	125.000	1948.604	335.879	-125.000/
2254	910	1	2054.820	1005.408	125.000	2054.820	1005.408	-125.000/
2255	911	1	2234.905	1500.000	125.000	2234.905	1500.000	-125.000/
2256	912	1	1948.817	389.520	125.000	1948.817	389.520	-125.000/
2257	913	1	2003.643	813.211	125.000	2003.643	813.211	-125.000/
2258	914	1	1949.409	443.260	125.000	1949.409	443.260	-125.000/
2259	915	1	2129.365	1265.224	125.000	2129.365	1265.224	-125.000/
2260	916	1	2184.579	1407.559	125.000	2184.579	1407.559	-125.000/
2261	917	1	1950.000	497.000	125.000	1950.000	497.000	-125.000/
2262	918	1	2006.823	862.890	125.000	2006.823	862.890	-125.000/
2263	919	1	1949.768	550.116	125.000	1949.768	550.116	-125.000/
2264	920	1	2010.004	912.568	125.000	2010.004	912.568	-125.000/
2265	921	1	2079.949	1162.037	125.000	2079.949	1162.037	-125.000/
2266	922	1	2044.790	1054.228	125.000	2044.790	1054.228	-125.000/
2267	923	1	1949.535	603.233	125.000	1949.535	603.233	-125.000/
2268	924	1	2131.588	1315.105	125.000	2131.588	1315.105	-125.000/
2269	925	1	2186.138	1453.779	125.000	2186.138	1453.779	-125.000/
2270	926	1	1949.407	657.257	125.000	1949.407	657.257	-125.000/
2271	927	1	2009.637	957.752	125.000	2009.637	957.752	-125.000/
2272	928	1	2134.768	1362.137	125.000	2134.768	1362.137	-125.000/
2273	929	1	1949.278	711.281	125.000	1949.278	711.281	-125.000/

2274	930	1	2187.697	1500.000	125.000	2187.697	1500.000	-125.000/
2275	931	1	2009.270	1002.935	125.000	2009.270	1002.935	-125.000/
2276	932	1	2073.920	1215.129	125.000	2073.920	1215.129	-125.000/
2277	933	1	1900.000	175.000	125.000	1900.000	175.000	-125.000/
2278	934	1	1899.495	131.952	125.000	1899.495	131.952	-125.000/
2279	935	1	1899.357	228.553	125.000	1899.357	228.553	-125.000/
2280	936	1	1898.991	88.904	125.000	1898.991	88.904	-125.000/
2281	937	1	2034.761	1103.049	125.000	2034.761	1103.049	-125.000/
2282	938	1	1898.714	282.106	125.000	1898.714	282.106	-125.000/
2283	939	1	1899.495	44.452	125.000	1899.495	44.452	-125.000/
2284	940	1	1900.000	0.000	125.000	1900.000	0.000	-125.000/
2285	941	1	1949.928	766.152	125.000	1949.928	766.152	-125.000/
2286	942	1	1898.865	335.828	125.000	1898.865	335.828	-125.000/
2287	943	1	1899.016	389.550	125.000	1899.016	389.550	-125.000/
2288	944	1	2137.948	1409.169	125.000	2137.948	1409.169	-125.000/
2289	945	1	1899.508	443.275	125.000	1899.508	443.275	-125.000/
2290	946	1	2077.705	1266.112	125.000	2077.705	1266.112	-125.000/
2291	947	1	1950.578	821.024	125.000	1950.578	821.024	-125.000/
2292	948	1	1900.000	497.000	125.000	1900.000	497.000	-125.000/
2293	949	1	1957.747	870.738	125.000	1957.747	870.738	-125.000/
2294	950	1	1964.915	920.451	125.000	1964.915	920.451	-125.000/
2295	951	1	1899.359	550.979	125.000	1899.359	550.979	-125.000/
2296	952	1	2140.801	1454.585	125.000	2140.801	1454.585	-125.000/
2297	953	1	1996.406	1050.044	125.000	1996.406	1050.044	-125.000/
2298	954	1	1969.986	960.111	125.000	1969.986	960.111	-125.000/
2299	955	1	2081.490	1317.095	125.000	2081.490	1317.095	-125.000/
2300	956	1	1898.717	604.957	125.000	1898.717	604.957	-125.000/
2301	957	1	2022.822	1160.036	125.000	2022.822	1160.036	-125.000/
2302	958	1	1975.056	999.770	125.000	1975.056	999.770	-125.000/
2303	959	1	1898.097	659.774	125.000	1898.097	659.774	-125.000/
2304	960	1	2086.404	1363.938	125.000	2086.404	1363.938	-125.000/
2305	961	1	2143.655	1500.000	125.000	2143.655	1500.000	-125.000/
2306	962	1	1897.477	714.591	125.000	1897.477	714.591	-125.000/
2307	963	1	1850.000	175.000	125.000	1850.000	175.000	-125.000/
2308	964	1	1983.543	1097.152	125.000	1983.543	1097.152	-125.000/
2309	965	1	1849.661	131.694	125.000	1849.661	131.694	-125.000/
2310	966	1	1849.417	228.483	125.000	1849.417	228.483	-125.000/
2311	967	1	1849.322	88.388	125.000	1849.322	88.388	-125.000/
2312	968	1	2091.317	1410.780	125.000	2091.317	1410.780	-125.000/
2313	969	1	1848.833	281.965	125.000	1848.833	281.965	-125.000/
2314	970	1	1849.661	44.194	125.000	1849.661	44.194	-125.000/
2315	971	1	1850.000	0.000	125.000	1850.000	0.000	-125.000/
2316	972	1	1848.854	335.771	125.000	1848.854	335.771	-125.000/
2317	973	1	1897.495	771.714	125.000	1897.495	771.714	-125.000/
2318	974	1	1848.875	389.576	125.000	1848.875	389.576	-125.000/
2319	975	1	1957.034	1038.728	125.000	1957.034	1038.728	-125.000/
2320	976	1	2010.884	1217.022	125.000	2010.884	1217.022	-125.000/
2321	977	1	1849.438	443.288	125.000	1849.438	443.288	-125.000/
2322	978	1	1940.842	996.605	125.000	1940.842	996.605	-125.000/
2323	979	1	1850.000	497.000	125.000	1850.000	497.000	-125.000/
2324	980	1	2095.465	1455.390	125.000	2095.465	1455.390	-125.000/
2325	981	1	1930.335	962.470	125.000	1930.335	962.470	-125.000/
2326	982	1	2022.444	1269.557	125.000	2022.444	1269.557	-125.000/
2327	983	1	1908.671	878.586	125.000	1908.671	878.586	-125.000/
2328	984	1	1919.827	928.335	125.000	1919.827	928.335	-125.000/
2329	985	1	1897.514	828.837	125.000	1897.514	828.837	-125.000/
2330	986	1	1848.939	551.421	125.000	1848.939	551.421	-125.000/
2331	987	1	2034.005	1322.092	125.000	2034.005	1322.092	-125.000/
2332	988	1	2099.613	1500.000	125.000	2099.613	1500.000	-125.000/
2333	989	1	1847.877	605.843	125.000	1847.877	605.843	-125.000/
2334	990	1	2041.192	1367.888	125.000	2041.192	1367.888	-125.000/
2335	991	1	1965.695	1158.034	125.000	1965.695	1158.034	-125.000/
2336	992	1	1939.011	1077.687	125.000	1939.011	1077.687	-125.000/
2337	993	1	1845.850	662.139	125.000	1845.850	662.139	-125.000/
2338	994	1	2048.378	1413.684	125.000	2048.378	1413.684	-125.000/
2339	995	1	1917.661	1027.413	125.000	1917.661	1027.413	-125.000/

2340	996	1	1800.000	175.000	125.000	1800.000	175.000	-125.000/
2341	997	1	1799.826	131.436	125.000	1799.826	131.436	-125.000/
2342	998	1	1799.477	228.412	125.000	1799.477	228.412	-125.000/
2343	999	1	1843.823	718.435	125.000	1843.823	718.435	-125.000/
2344	1000	1	1799.652	87.871	125.000	1799.652	87.871	-125.000/
2345	1001	1	1798.953	281.824	125.000	1798.953	281.824	-125.000/
2346	1002	1	1799.826	43.936	125.000	1799.826	43.936	-125.000/
2347	1003	1	1800.000	0.000	125.000	1800.000	0.000	-125.000/
2348	1004	1	1798.843	335.713	125.000	1798.843	335.713	-125.000/
2349	1005	1	2053.533	1456.842	125.000	2053.533	1456.842	-125.000/
2350	1006	1	1896.469	990.032	125.000	1896.469	990.032	-125.000/
2351	1007	1	1798.734	389.602	125.000	1798.734	389.602	-125.000/
2352	1008	1	1799.367	443.301	125.000	1799.367	443.301	-125.000/
2353	1009	1	1800.000	497.000	125.000	1800.000	497.000	-125.000/
2354	1010	1	1875.276	952.650	125.000	1875.276	952.650	-125.000/
2355	1011	1	1838.567	781.229	125.000	1838.567	781.229	-125.000/
2356	1012	1	2058.688	1500.000	125.000	2058.688	1500.000	-125.000/
2357	1013	1	1967.184	1273.002	125.000	1967.184	1273.002	-125.000/
2358	1014	1	1986.521	1327.089	125.000	1986.521	1327.089	-125.000/
2359	1015	1	1947.847	1218.916	125.000	1947.847	1218.916	-125.000/
2360	1016	1	1798.519	551.864	125.000	1798.519	551.864	-125.000/
2361	1017	1	1894.480	1058.221	125.000	1894.480	1058.221	-125.000/
2362	1018	1	1854.294	898.337	125.000	1854.294	898.337	-125.000/
2363	1019	1	1995.980	1371.839	125.000	1995.980	1371.839	-125.000/
2364	1020	1	1912.642	1134.174	125.000	1912.642	1134.174	-125.000/
2365	1021	1	1797.038	606.728	125.000	1797.038	606.728	-125.000/
2366	1022	1	2005.439	1416.589	125.000	2005.439	1416.589	-125.000/
2367	1023	1	1833.311	844.023	125.000	1833.311	844.023	-125.000/
2368	1024	1	1793.604	664.504	125.000	1793.604	664.504	-125.000/
2369	1025	1	2011.601	1458.294	125.000	2011.601	1458.294	-125.000/
2370	1026	1	1862.603	1017.594	125.000	1862.603	1017.594	-125.000/
2371	1027	1	1750.000	175.000	125.000	1750.000	175.000	-125.000/
2372	1028	1	1749.817	131.363	125.000	1749.817	131.363	-125.000/
2373	1029	1	1749.745	228.541	125.000	1749.745	228.541	-125.000/
2374	1030	1	1749.635	87.726	125.000	1749.635	87.726	-125.000/
2375	1031	1	1749.491	282.082	125.000	1749.491	282.082	-125.000/
2376	1032	1	1749.817	43.863	125.000	1749.817	43.863	-125.000/
2377	1033	1	1749.352	335.761	125.000	1749.352	335.761	-125.000/
2378	1034	1	1750.000	0.000	125.000	1750.000	0.000	-125.000/
2379	1035	1	1790.170	722.279	125.000	1790.170	722.279	-125.000/
2380	1036	1	2017.764	1500.000	125.000	2017.764	1500.000	-125.000/
2381	1037	1	1749.214	389.440	125.000	1749.214	389.440	-125.000/
2382	1038	1	1948.914	1341.422	125.000	1948.914	1341.422	-125.000/
2383	1039	1	1749.607	443.220	125.000	1749.607	443.220	-125.000/
2384	1040	1	1930.738	1298.597	125.000	1930.738	1298.597	-125.000/
2385	1041	1	1958.429	1381.688	125.000	1958.429	1381.688	-125.000/
2386	1042	1	1750.000	497.000	125.000	1750.000	497.000	-125.000/
2387	1043	1	1912.563	1255.771	125.000	1912.563	1255.771	-125.000/
2388	1044	1	1830.726	976.966	125.000	1830.726	976.966	-125.000/
2389	1045	1	1886.274	1190.661	125.000	1886.274	1190.661	-125.000/
2390	1046	1	1967.945	1421.953	125.000	1967.945	1421.953	-125.000/
2391	1047	1	1748.856	551.467	125.000	1748.856	551.467	-125.000/
2392	1048	1	1859.590	1110.313	125.000	1859.590	1110.313	-125.000/
2393	1049	1	1779.639	790.744	125.000	1779.639	790.744	-125.000/
2394	1050	1	1747.712	605.933	125.000	1747.712	605.933	-125.000/
2395	1051	1	1973.912	1460.977	125.000	1973.912	1460.977	-125.000/
2396	1052	1	1799.917	918.087	125.000	1799.917	918.087	-125.000/
2397	1053	1	1745.300	661.374	125.000	1745.300	661.374	-125.000/
2398	1054	1	1979.880	1500.000	125.000	1979.880	1500.000	-125.000/
2399	1055	1	1822.875	1065.399	125.000	1822.875	1065.399	-125.000/
2400	1056	1	1700.000	175.000	125.000	1700.000	175.000	-125.000/
2401	1057	1	1911.307	1355.756	125.000	1911.307	1355.756	-125.000/
2402	1058	1	1700.014	228.670	125.000	1700.014	228.670	-125.000/
2403	1059	1	1769.108	859.209	125.000	1769.108	859.209	-125.000/
2404	1060	1	1699.809	131.290	125.000	1699.809	131.290	-125.000/
2405	1061	1	1742.888	716.815	125.000	1742.888	716.815	-125.000/

2406	1062	1	1699.617	87.580	125.000	1699.617	87.580	-125.000/
2407	1063	1	1700.028	282.339	125.000	1700.028	282.339	-125.000/
2408	1064	1	1699.809	43.790	125.000	1699.809	43.790	-125.000/
2409	1065	1	1865.246	1234.710	125.000	1865.246	1234.710	-125.000/
2410	1066	1	1920.879	1391.537	125.000	1920.879	1391.537	-125.000/
2411	1067	1	1699.861	335.808	125.000	1699.861	335.808	-125.000/
2412	1068	1	1700.000	0.000	125.000	1700.000	0.000	-125.000/
2413	1069	1	1894.293	1324.191	125.000	1894.293	1324.191	-125.000/
2414	1070	1	1699.694	389.277	125.000	1699.694	389.277	-125.000/
2415	1071	1	1930.451	1427.318	125.000	1930.451	1427.318	-125.000/
2416	1072	1	1699.847	443.139	125.000	1699.847	443.139	-125.000/
2417	1073	1	1877.278	1292.626	125.000	1877.278	1292.626	-125.000/
2418	1074	1	1700.000	497.000	125.000	1700.000	497.000	-125.000/
2419	1075	1	1936.223	1463.659	125.000	1936.223	1463.659	-125.000/
2420	1076	1	1736.632	773.405	125.000	1736.632	773.405	-125.000/
2421	1077	1	1786.160	1020.484	125.000	1786.160	1020.484	-125.000/
2422	1078	1	1824.700	1162.406	125.000	1824.700	1162.406	-125.000/
2423	1079	1	1699.193	551.069	125.000	1699.193	551.069	-125.000/
2424	1080	1	1941.995	1500.000	125.000	1941.995	1500.000	-125.000/
2425	1081	1	1698.386	605.138	125.000	1698.386	605.138	-125.000/
2426	1082	1	1883.143	1366.264	125.000	1883.143	1366.264	-125.000/
2427	1083	1	1871.922	1339.491	125.000	1871.922	1339.491	-125.000/
2428	1084	1	1730.376	829.996	125.000	1730.376	829.996	-125.000/
2429	1085	1	1860.701	1312.718	125.000	1860.701	1312.718	-125.000/
2430	1086	1	1890.631	1399.015	125.000	1890.631	1399.015	-125.000/
2431	1087	1	1696.996	658.245	125.000	1696.996	658.245	-125.000/
2432	1088	1	1844.218	1278.759	125.000	1844.218	1278.759	-125.000/
2433	1089	1	1898.119	1431.767	125.000	1898.119	1431.767	-125.000/
2434	1090	1	1817.929	1213.649	125.000	1817.929	1213.649	-125.000/
2435	1091	1	1695.606	711.352	125.000	1695.606	711.352	-125.000/
2436	1092	1	1783.148	1113.203	125.000	1783.148	1113.203	-125.000/
2437	1093	1	1745.044	967.009	125.000	1745.044	967.009	-125.000/
2438	1094	1	1902.582	1465.884	125.000	1902.582	1465.884	-125.000/
2439	1095	1	1650.000	175.000	125.000	1650.000	175.000	-125.000/
2440	1096	1	1650.077	228.616	125.000	1650.077	228.616	-125.000/
2441	1097	1	1649.825	131.258	125.000	1649.825	131.258	-125.000/
2442	1098	1	1649.650	87.515	125.000	1649.650	87.515	-125.000/
2443	1099	1	1650.154	282.232	125.000	1650.154	282.232	-125.000/
2444	1100	1	1649.825	43.758	125.000	1649.825	43.758	-125.000/
2445	1101	1	1650.004	335.477	125.000	1650.004	335.477	-125.000/
2446	1102	1	1650.000	0.000	125.000	1650.000	0.000	-125.000/
2447	1103	1	1693.625	756.067	125.000	1693.625	756.067	-125.000/
2448	1104	1	1844.124	1332.810	125.000	1844.124	1332.810	-125.000/
2449	1105	1	1833.168	1304.840	125.000	1833.168	1304.840	-125.000/
2450	1106	1	1649.854	388.723	125.000	1649.854	388.723	-125.000/
2451	1107	1	1907.046	1500.000	125.000	1907.046	1500.000	-125.000/
2452	1108	1	1849.552	1354.791	125.000	1849.552	1354.791	-125.000/
2453	1109	1	1854.980	1376.771	125.000	1854.980	1376.771	-125.000/
2454	1110	1	1649.927	442.861	125.000	1649.927	442.861	-125.000/
2455	1111	1	1811.157	1264.892	125.000	1811.157	1264.892	-125.000/
2456	1112	1	1650.000	497.000	125.000	1650.000	497.000	-125.000/
2457	1113	1	1691.644	800.782	125.000	1691.644	800.782	-125.000/
2458	1114	1	1860.383	1406.494	125.000	1860.383	1406.494	-125.000/
2459	1115	1	1649.610	551.575	125.000	1649.610	551.575	-125.000/
2460	1116	1	1865.786	1436.216	125.000	1865.786	1436.216	-125.000/
2461	1117	1	1778.141	1184.991	125.000	1778.141	1184.991	-125.000/
2462	1118	1	1741.595	1064.001	125.000	1741.595	1064.001	-125.000/
2463	1119	1	1703.928	913.535	125.000	1703.928	913.535	-125.000/
2464	1120	1	1822.118	1330.922	125.000	1822.118	1330.922	-125.000/
2465	1121	1	1649.220	606.149	125.000	1649.220	606.149	-125.000/
2466	1122	1	1805.635	1296.963	125.000	1805.635	1296.963	-125.000/
2467	1123	1	1868.942	1468.108	125.000	1868.942	1468.108	-125.000/
2468	1124	1	1825.410	1355.900	125.000	1825.410	1355.900	-125.000/
2469	1125	1	1778.123	1227.981	125.000	1778.123	1227.981	-125.000/
2470	1126	1	1648.602	660.729	125.000	1648.602	660.729	-125.000/
2471	1127	1	1828.702	1380.879	125.000	1828.702	1380.879	-125.000/



2472	1128	1	1872.097	1500.000	125.000	1872.097	1500.000	-125.000/
2473	1129	1	1676.751	865.441	125.000	1676.751	865.441	-125.000/
2474	1130	1	1832.442	1409.921	125.000	1832.442	1409.921	-125.000/
2475	1131	1	1647.983	715.308	125.000	1647.983	715.308	-125.000/
2476	1132	1	1742.869	1146.429	125.000	1742.869	1146.429	-125.000/
2477	1133	1	1800.113	1329.033	125.000	1800.113	1329.033	-125.000/
2478	1134	1	1778.104	1270.971	125.000	1778.104	1270.971	-125.000/
2479	1135	1	1600.000	175.000	125.000	1600.000	175.000	-125.000/
2480	1136	1	1836.182	1438.963	125.000	1836.182	1438.963	-125.000/
2481	1137	1	1600.140	228.562	125.000	1600.140	228.562	-125.000/
2482	1138	1	1599.841	131.225	125.000	1599.841	131.225	-125.000/
2483	1139	1	1600.281	282.124	125.000	1600.281	282.124	-125.000/
2484	1140	1	1599.682	87.451	125.000	1599.682	87.451	-125.000/
2485	1141	1	1648.779	766.328	125.000	1648.779	766.328	-125.000/
2486	1142	1	1599.841	43.725	125.000	1599.841	43.725	-125.000/
2487	1143	1	1600.148	335.146	125.000	1600.148	335.146	-125.000/
2488	1144	1	1801.268	1357.010	125.000	1801.268	1357.010	-125.000/
2489	1145	1	1600.000	0.000	125.000	1600.000	0.000	-125.000/
2490	1146	1	1600.014	388.168	125.000	1600.014	388.168	-125.000/
2491	1147	1	1838.070	1469.481	125.000	1838.070	1469.481	-125.000/
2492	1148	1	1649.574	817.348	125.000	1649.574	817.348	-125.000/
2493	1149	1	1775.708	1301.868	125.000	1775.708	1301.868	-125.000/
2494	1150	1	1600.007	442.584	125.000	1600.007	442.584	-125.000/
2495	1151	1	1690.171	1015.931	125.000	1690.171	1015.931	-125.000/
2496	1152	1	1802.424	1384.986	125.000	1802.424	1384.986	-125.000/
2497	1153	1	1600.000	497.000	125.000	1600.000	497.000	-125.000/
2498	1154	1	1707.597	1107.866	125.000	1707.597	1107.866	-125.000/
2499	1155	1	1839.959	1500.000	125.000	1839.959	1500.000	-125.000/
2500	1156	1	1600.027	552.080	125.000	1600.027	552.080	-125.000/
2501	1157	1	1804.501	1413.347	125.000	1804.501	1413.347	-125.000/
2502	1158	1	1773.312	1332.766	125.000	1773.312	1332.766	-125.000/
2503	1159	1	1731.581	1207.577	125.000	1731.581	1207.577	-125.000/
2504	1160	1	1600.054	607.161	125.000	1600.054	607.161	-125.000/
2505	1161	1	1738.317	1242.313	125.000	1738.317	1242.313	-125.000/
2506	1162	1	1806.577	1441.709	125.000	1806.577	1441.709	-125.000/
2507	1163	1	1774.268	1360.737	125.000	1774.268	1360.737	-125.000/
2508	1164	1	1745.052	1277.050	125.000	1745.052	1277.050	-125.000/
2509	1165	1	1600.207	663.212	125.000	1600.207	663.212	-125.000/
2510	1166	1	1807.199	1470.854	125.000	1807.199	1470.854	-125.000/
2511	1167	1	1775.225	1388.709	125.000	1775.225	1388.709	-125.000/
2512	1168	1	1745.781	1306.774	125.000	1745.781	1306.774	-125.000/
2513	1169	1	1600.360	719.264	125.000	1600.360	719.264	-125.000/
2514	1170	1	1702.590	1179.654	125.000	1702.590	1179.654	-125.000/
2515	1171	1	1603.932	776.589	125.000	1603.932	776.589	-125.000/
2516	1172	1	1776.665	1416.552	125.000	1776.665	1416.552	-125.000/
2517	1173	1	1807.821	1500.000	125.000	1807.821	1500.000	-125.000/
2518	1174	1	1746.511	1336.498	125.000	1746.511	1336.498	-125.000/
2519	1175	1	1709.733	1227.054	125.000	1709.733	1227.054	-125.000/
2520	1176	1	1550.000	175.000	125.000	1550.000	175.000	-125.000/
2521	1177	1	1550.119	228.282	125.000	1550.119	228.282	-125.000/
2522	1178	1	1549.698	131.169	125.000	1549.698	131.169	-125.000/
2523	1179	1	1638.747	967.861	125.000	1638.747	967.861	-125.000/
2524	1180	1	1550.239	281.565	125.000	1550.239	281.565	-125.000/
2525	1181	1	1549.396	87.337	125.000	1549.396	87.337	-125.000/
2526	1182	1	1623.126	900.887	125.000	1623.126	900.887	-125.000/
2527	1183	1	1549.698	43.669	125.000	1549.698	43.669	-125.000/
2528	1184	1	1550.148	334.625	125.000	1550.148	334.625	-125.000/
2529	1185	1	1607.504	833.914	125.000	1607.504	833.914	-125.000/
2530	1186	1	1550.000	0.000	125.000	1550.000	0.000	-125.000/
2531	1187	1	1714.879	1259.039	125.000	1714.879	1259.039	-125.000/
2532	1188	1	1659.523	1072.982	125.000	1659.523	1072.982	-125.000/
2533	1189	1	1778.106	1444.395	125.000	1778.106	1444.395	-125.000/
2534	1190	1	1550.056	387.685	125.000	1550.056	387.685	-125.000/
2535	1191	1	1747.268	1364.465	125.000	1747.268	1364.465	-125.000/
2536	1192	1	1720.026	1291.025	125.000	1720.026	1291.025	-125.000/
2537	1193	1	1550.028	442.343	125.000	1550.028	442.343	-125.000/

2538	1194	1	1673.599	1151.732	125.000	1673.599	1151.732	-125.000/
2539	1195	1	1550.000	497.000	125.000	1550.000	497.000	-125.000/
2540	1196	1	1778.230	1472.198	125.000	1778.230	1472.198	-125.000/
2541	1197	1	1748.025	1392.432	125.000	1748.025	1392.432	-125.000/
2542	1198	1	1720.391	1317.842	125.000	1720.391	1317.842	-125.000/
2543	1199	1	1682.534	1208.213	125.000	1682.534	1208.213	-125.000/
2544	1200	1	1549.746	552.633	125.000	1549.746	552.633	-125.000/
2545	1201	1	1748.830	1419.757	125.000	1748.830	1419.757	-125.000/
2546	1202	1	1720.755	1344.660	125.000	1720.755	1344.660	-125.000/
2547	1203	1	1778.354	1500.000	125.000	1778.354	1500.000	-125.000/
2548	1204	1	1687.884	1246.530	125.000	1687.884	1246.530	-125.000/
2549	1205	1	1549.491	608.267	125.000	1549.491	608.267	-125.000/
2550	1206	1	1691.442	1275.765	125.000	1691.442	1275.765	-125.000/
2551	1207	1	1749.634	1447.082	125.000	1749.634	1447.082	-125.000/
2552	1208	1	1721.134	1371.192	125.000	1721.134	1371.192	-125.000/
2553	1209	1	1548.980	665.005	125.000	1548.980	665.005	-125.000/
2554	1210	1	1695.000	1305.000	125.000	1695.000	1305.000	-125.000/
2555	1211	1	1655.335	1189.372	125.000	1655.335	1189.372	-125.000/
2556	1212	1	1721.513	1397.723	125.000	1721.513	1397.723	-125.000/
2557	1213	1	1548.469	721.744	125.000	1548.469	721.744	-125.000/
2558	1214	1	1749.261	1473.541	125.000	1749.261	1473.541	-125.000/
2559	1215	1	1611.449	1038.098	125.000	1611.449	1038.098	-125.000/
2560	1216	1	1695.000	1328.911	125.000	1695.000	1328.911	-125.000/
2561	1217	1	1662.477	1236.771	125.000	1662.477	1236.771	-125.000/
2562	1218	1	1500.000	175.000	125.000	1500.000	175.000	-125.000/
2563	1219	1	1628.875	1130.034	125.000	1628.875	1130.034	-125.000/
2564	1220	1	1500.099	228.003	125.000	1500.099	228.003	-125.000/
2565	1221	1	1499.555	131.112	125.000	1499.555	131.112	-125.000/
2566	1222	1	1549.997	780.533	125.000	1549.997	780.533	-125.000/
2567	1223	1	1500.197	281.005	125.000	1500.197	281.005	-125.000/
2568	1224	1	1721.915	1423.772	125.000	1721.915	1423.772	-125.000/
2569	1225	1	1499.110	87.223	125.000	1499.110	87.223	-125.000/
2570	1226	1	1499.555	43.612	125.000	1499.555	43.612	-125.000/
2571	1227	1	1695.000	1352.823	125.000	1695.000	1352.823	-125.000/
2572	1228	1	1500.148	334.104	125.000	1500.148	334.104	-125.000/
2573	1229	1	1748.888	1500.000	125.000	1748.888	1500.000	-125.000/
2574	1230	1	1500.000	0.000	125.000	1500.000	0.000	-125.000/
2575	1231	1	1500.098	387.202	125.000	1500.098	387.202	-125.000/
2576	1232	1	1662.964	1270.886	125.000	1662.964	1270.886	-125.000/
2577	1233	1	1500.049	442.101	125.000	1500.049	442.101	-125.000/
2578	1234	1	1551.526	839.321	125.000	1551.526	839.321	-125.000/
2579	1235	1	1722.317	1449.821	125.000	1722.317	1449.821	-125.000/
2580	1236	1	1695.000	1377.919	125.000	1695.000	1377.919	-125.000/
2581	1237	1	1500.000	497.000	125.000	1500.000	497.000	-125.000/
2582	1238	1	1558.406	904.303	125.000	1558.406	904.303	-125.000/
2583	1239	1	1663.452	1305.000	125.000	1663.452	1305.000	-125.000/
2584	1240	1	1637.070	1227.012	125.000	1637.070	1227.012	-125.000/
2585	1241	1	1722.130	1474.911	125.000	1722.130	1474.911	-125.000/
2586	1242	1	1695.000	1403.015	125.000	1695.000	1403.015	-125.000/
2587	1243	1	1499.464	553.186	125.000	1499.464	553.186	-125.000/
2588	1244	1	1565.286	969.285	125.000	1565.286	969.285	-125.000/
2589	1245	1	1664.488	1332.027	125.000	1664.488	1332.027	-125.000/
2590	1246	1	1498.929	609.373	125.000	1498.929	609.373	-125.000/
2591	1247	1	1613.010	1174.767	125.000	1613.010	1174.767	-125.000/
2592	1248	1	1695.000	1427.788	125.000	1695.000	1427.788	-125.000/
2593	1249	1	1721.944	1500.000	125.000	1721.944	1500.000	-125.000/
2594	1250	1	1665.525	1359.055	125.000	1665.525	1359.055	-125.000/
2595	1251	1	1634.487	1266.006	125.000	1634.487	1266.006	-125.000/
2596	1252	1	1670.438	1380.887	125.000	1670.438	1380.887	-125.000/
2597	1253	1	1497.753	666.798	125.000	1497.753	666.798	-125.000/
2598	1254	1	1695.000	1452.561	125.000	1695.000	1452.561	-125.000/
2599	1255	1	1584.151	1108.336	125.000	1584.151	1108.336	-125.000/
2600	1256	1	1675.350	1402.720	125.000	1675.350	1402.720	-125.000/
2601	1257	1	1496.577	724.224	125.000	1496.577	724.224	-125.000/
2602	1258	1	1695.000	1476.280	125.000	1695.000	1476.280	-125.000/
2603	1259	1	1631.903	1305.000	125.000	1631.903	1305.000	-125.000/

2604	1260	1	1450.000	175.000	125.000	1450.000	175.000	-125.000/
2605	1261	1	1670.438	1424.243	125.000	1670.438	1424.243	-125.000/
2606	1262	1	1450.136	228.079	125.000	1450.136	228.079	-125.000/
2607	1263	1	1449.672	131.150	125.000	1449.672	131.150	-125.000/
2608	1264	1	1450.273	281.157	125.000	1450.273	281.157	-125.000/
2609	1265	1	1449.345	87.301	125.000	1449.345	87.301	-125.000/
2610	1266	1	1449.672	43.650	125.000	1449.672	43.650	-125.000/
2611	1267	1	1450.264	334.398	125.000	1450.264	334.398	-125.000/
2612	1268	1	1695.000	1500.000	125.000	1695.000	1500.000	-125.000/
2613	1269	1	1450.000	0.000	125.000	1450.000	0.000	-125.000/
2614	1270	1	1633.977	1335.144	125.000	1633.977	1335.144	-125.000/
2615	1271	1	1496.063	784.477	125.000	1496.063	784.477	-125.000/
2616	1272	1	1597.145	1219.501	125.000	1597.145	1219.501	-125.000/
2617	1273	1	1450.255	387.638	125.000	1450.255	387.638	-125.000/
2618	1274	1	1655.700	1402.425	125.000	1655.700	1402.425	-125.000/
2619	1275	1	1545.733	1036.865	125.000	1545.733	1036.865	-125.000/
2620	1276	1	1645.875	1383.856	125.000	1645.875	1383.856	-125.000/
2621	1277	1	1450.127	442.319	125.000	1450.127	442.319	-125.000/
2622	1278	1	1665.525	1445.766	125.000	1665.525	1445.766	-125.000/
2623	1279	1	1636.050	1365.287	125.000	1636.050	1365.287	-125.000/
2624	1280	1	1450.000	497.000	125.000	1450.000	497.000	-125.000/
2625	1281	1	1570.685	1160.163	125.000	1570.685	1160.163	-125.000/
2626	1282	1	1495.548	844.729	125.000	1495.548	844.729	-125.000/
2627	1283	1	1448.829	553.160	125.000	1448.829	553.160	-125.000/
2628	1284	1	1593.374	1262.251	125.000	1593.374	1262.251	-125.000/
2629	1285	1	1645.875	1420.698	125.000	1645.875	1420.698	-125.000/
2630	1286	1	1664.488	1472.883	125.000	1664.488	1472.883	-125.000/
2631	1287	1	1447.658	609.320	125.000	1447.658	609.320	-125.000/
2632	1288	1	1493.686	907.719	125.000	1493.686	907.719	-125.000/
2633	1289	1	1663.452	1500.000	125.000	1663.452	1500.000	-125.000/
2634	1290	1	1445.841	666.599	125.000	1445.841	666.599	-125.000/
2635	1291	1	1636.050	1438.972	125.000	1636.050	1438.972	-125.000/
2636	1292	1	1589.603	1305.000	125.000	1589.603	1305.000	-125.000/
2637	1293	1	1622.191	1402.088	125.000	1622.191	1402.088	-125.000/
2638	1294	1	1557.220	1211.990	125.000	1557.220	1211.990	-125.000/
2639	1295	1	1526.180	1104.444	125.000	1526.180	1104.444	-125.000/
2640	1296	1	1491.825	970.710	125.000	1491.825	970.710	-125.000/
2641	1297	1	1594.055	1344.239	125.000	1594.055	1344.239	-125.000/
2642	1298	1	1444.025	723.878	125.000	1444.025	723.878	-125.000/
2643	1299	1	1633.977	1469.486	125.000	1633.977	1469.486	-125.000/
2644	1300	1	1400.000	175.000	125.000	1400.000	175.000	-125.000/
2645	1301	1	1400.174	228.155	125.000	1400.174	228.155	-125.000/
2646	1302	1	1399.789	131.189	125.000	1399.789	131.189	-125.000/
2647	1303	1	1400.348	281.309	125.000	1400.348	281.309	-125.000/
2648	1304	1	1399.579	87.378	125.000	1399.579	87.378	-125.000/
2649	1305	1	1399.789	43.689	125.000	1399.789	43.689	-125.000/
2650	1306	1	1400.380	334.692	125.000	1400.380	334.692	-125.000/
2651	1307	1	1400.000	0.000	125.000	1400.000	0.000	-125.000/
2652	1308	1	1598.507	1383.479	125.000	1598.507	1383.479	-125.000/
2653	1309	1	1400.412	388.074	125.000	1400.412	388.074	-125.000/
2654	1310	1	1441.412	783.725	125.000	1441.412	783.725	-125.000/
2655	1311	1	1400.206	442.537	125.000	1400.206	442.537	-125.000/
2656	1312	1	1552.261	1258.495	125.000	1552.261	1258.495	-125.000/
2657	1313	1	1631.903	1500.000	125.000	1631.903	1500.000	-125.000/
2658	1314	1	1400.000	497.000	125.000	1400.000	497.000	-125.000/
2659	1315	1	1517.596	1157.430	125.000	1517.596	1157.430	-125.000/
2660	1316	1	1598.507	1420.321	125.000	1598.507	1420.321	-125.000/
2661	1317	1	1480.017	1035.631	125.000	1480.017	1035.631	-125.000/
2662	1318	1	1398.194	553.134	125.000	1398.194	553.134	-125.000/
2663	1319	1	1438.799	843.572	125.000	1438.799	843.572	-125.000/
2664	1320	1	1547.302	1305.000	125.000	1547.302	1305.000	-125.000/
2665	1321	1	1396.387	609.268	125.000	1396.387	609.268	-125.000/
2666	1322	1	1594.055	1460.160	125.000	1594.055	1460.160	-125.000/
2667	1323	1	1554.133	1353.335	125.000	1554.133	1353.335	-125.000/
2668	1324	1	1509.013	1210.416	125.000	1509.013	1210.416	-125.000/
2669	1325	1	1393.930	666.399	125.000	1393.930	666.399	-125.000/

2670	1326	1	1433.464	905.922	125.000	1433.464	905.922	-125.000/
2671	1327	1	1560.963	1401.670	125.000	1560.963	1401.670	-125.000/
2672	1328	1	1468.210	1100.553	125.000	1468.210	1100.553	-125.000/
2673	1329	1	1391.472	723.531	125.000	1391.472	723.531	-125.000/
2674	1330	1	1350.000	175.000	125.000	1350.000	175.000	-125.000/
2675	1331	1	1350.283	228.116	125.000	1350.283	228.116	-125.000/
2676	1332	1	1349.696	131.167	125.000	1349.696	131.167	-125.000/
2677	1333	1	1350.567	281.233	125.000	1350.567	281.233	-125.000/
2678	1334	1	1349.392	87.333	125.000	1349.392	87.333	-125.000/
2679	1335	1	1589.603	1500.000	125.000	1589.603	1500.000	-125.000/
2680	1336	1	1349.696	43.667	125.000	1349.696	43.667	-125.000/
2681	1337	1	1350.671	334.735	125.000	1350.671	334.735	-125.000/
2682	1338	1	1350.000	0.000	125.000	1350.000	0.000	-125.000/
2683	1339	1	1350.776	388.238	125.000	1350.776	388.238	-125.000/
2684	1340	1	1502.828	1257.708	125.000	1502.828	1257.708	-125.000/
2685	1341	1	1428.130	968.273	125.000	1428.130	968.273	-125.000/
2686	1342	1	1350.388	442.619	125.000	1350.388	442.619	-125.000/
2687	1343	1	1386.761	782.973	125.000	1386.761	782.973	-125.000/
2688	1344	1	1350.000	497.000	125.000	1350.000	497.000	-125.000/
2689	1345	1	1464.508	1154.697	125.000	1464.508	1154.697	-125.000/
2690	1346	1	1554.133	1450.835	125.000	1554.133	1450.835	-125.000/
2691	1347	1	1347.884	552.609	125.000	1347.884	552.609	-125.000/
2692	1348	1	1496.644	1305.000	125.000	1496.644	1305.000	-125.000/
2693	1349	1	1382.050	842.415	125.000	1382.050	842.415	-125.000/
2694	1350	1	1345.768	608.218	125.000	1345.768	608.218	-125.000/
2695	1351	1	1460.806	1208.841	125.000	1460.806	1208.841	-125.000/
2696	1352	1	1414.698	1036.046	125.000	1414.698	1036.046	-125.000/
2697	1353	1	1342.796	664.587	125.000	1342.796	664.587	-125.000/
2698	1354	1	1497.614	1353.267	125.000	1497.614	1353.267	-125.000/
2699	1355	1	1547.302	1500.000	125.000	1547.302	1500.000	-125.000/
2700	1356	1	1373.242	904.125	125.000	1373.242	904.125	-125.000/
2701	1357	1	1339.824	720.955	125.000	1339.824	720.955	-125.000/
2702	1358	1	1300.393	228.078	125.000	1300.393	228.078	-125.000/
2703	1359	1	1300.000	175.000	125.000	1300.000	175.000	-125.000/
2704	1360	1	1299.602	131.144	125.000	1299.602	131.144	-125.000/
2705	1361	1	1300.785	281.157	125.000	1300.785	281.157	-125.000/
2706	1362	1	1299.205	87.288	125.000	1299.205	87.288	-125.000/
2707	1363	1	1300.963	334.779	125.000	1300.963	334.779	-125.000/
2708	1364	1	1299.602	43.644	125.000	1299.602	43.644	-125.000/
2709	1365	1	1453.395	1256.921	125.000	1453.395	1256.921	-125.000/
2710	1366	1	1300.000	0.000	125.000	1300.000	0.000	-125.000/
2711	1367	1	1498.583	1401.534	125.000	1498.583	1401.534	-125.000/
2712	1368	1	1301.140	388.401	125.000	1301.140	388.401	-125.000/
2713	1369	1	1300.570	442.700	125.000	1300.570	442.700	-125.000/
2714	1370	1	1401.266	1103.820	125.000	1401.266	1103.820	-125.000/
2715	1371	1	1300.000	497.000	125.000	1300.000	497.000	-125.000/
2716	1372	1	1334.060	779.036	125.000	1334.060	779.036	-125.000/
2717	1373	1	1364.435	965.836	125.000	1364.435	965.836	-125.000/
2718	1374	1	1408.102	1157.890	125.000	1408.102	1157.890	-125.000/
2719	1375	1	1297.575	552.084	125.000	1297.575	552.084	-125.000/
2720	1376	1	1497.614	1450.767	125.000	1497.614	1450.767	-125.000/
2721	1377	1	1445.985	1305.000	125.000	1445.985	1305.000	-125.000/
2722	1378	1	1414.939	1211.960	125.000	1414.939	1211.960	-125.000/
2723	1379	1	1295.149	607.168	125.000	1295.149	607.168	-125.000/
2724	1380	1	1328.297	837.117	125.000	1328.297	837.117	-125.000/
2725	1381	1	1496.644	1500.000	125.000	1496.644	1500.000	-125.000/
2726	1382	1	1291.663	662.774	125.000	1291.663	662.774	-125.000/
2727	1383	1	1441.094	1353.199	125.000	1441.094	1353.199	-125.000/
2728	1384	1	1410.423	1258.480	125.000	1410.423	1258.480	-125.000/
2729	1385	1	1349.378	1036.461	125.000	1349.378	1036.461	-125.000/
2730	1386	1	1250.594	228.172	125.000	1250.594	228.172	-125.000/
2731	1387	1	1250.000	175.000	125.000	1250.000	175.000	-125.000/
2732	1388	1	1251.188	281.344	125.000	1251.188	281.344	-125.000/
2733	1389	1	1288.177	718.379	125.000	1288.177	718.379	-125.000/
2734	1390	1	1249.829	131.272	125.000	1249.829	131.272	-125.000/
2735	1391	1	1317.643	895.800	125.000	1317.643	895.800	-125.000/

2736	1392	1	1249.658	87.544	125.000	1249.658	87.544	-125.000/
2737	1393	1	1251.322	335.091	125.000	1251.322	335.091	-125.000/
2738	1394	1	1249.829	43.772	125.000	1249.829	43.772	-125.000/
2739	1395	1	1250.000	0.000	125.000	1250.000	0.000	-125.000/
2740	1396	1	1251.456	388.839	125.000	1251.456	388.839	-125.000/
2741	1397	1	1250.728	442.919	125.000	1250.728	442.919	-125.000/
2742	1398	1	1405.907	1305.000	125.000	1405.907	1305.000	-125.000/
2743	1399	1	1250.000	497.000	125.000	1250.000	497.000	-125.000/
2744	1400	1	1436.204	1401.398	125.000	1436.204	1401.398	-125.000/
2745	1401	1	1281.360	775.099	125.000	1281.360	775.099	-125.000/
2746	1402	1	1247.547	551.440	125.000	1247.547	551.440	-125.000/
2747	1403	1	1306.989	954.483	125.000	1306.989	954.483	-125.000/
2748	1404	1	1369.073	1215.078	125.000	1369.073	1215.078	-125.000/
2749	1405	1	1441.094	1450.699	125.000	1441.094	1450.699	-125.000/
2750	1406	1	1351.697	1161.083	125.000	1351.697	1161.083	-125.000/
2751	1407	1	1402.680	1344.119	125.000	1402.680	1344.119	-125.000/
2752	1408	1	1245.093	605.880	125.000	1245.093	605.880	-125.000/
2753	1409	1	1334.321	1107.087	125.000	1334.321	1107.087	-125.000/
2754	1410	1	1274.543	831.818	125.000	1274.543	831.818	-125.000/
2755	1411	1	1445.985	1500.000	125.000	1445.985	1500.000	-125.000/
2756	1412	1	1367.451	1260.039	125.000	1367.451	1260.039	-125.000/
2757	1413	1	1241.792	660.528	125.000	1241.792	660.528	-125.000/
2758	1414	1	1399.453	1383.238	125.000	1399.453	1383.238	-125.000/
2759	1415	1	1238.490	715.175	125.000	1238.490	715.175	-125.000/
2760	1416	1	1200.795	228.266	125.000	1200.795	228.266	-125.000/
2761	1417	1	1201.590	281.532	125.000	1201.590	281.532	-125.000/
2762	1418	1	1200.000	175.000	125.000	1200.000	175.000	-125.000/
2763	1419	1	1200.055	131.400	125.000	1200.055	131.400	-125.000/
2764	1420	1	1200.110	87.800	125.000	1200.110	87.800	-125.000/
2765	1421	1	1365.829	1305.000	125.000	1365.829	1305.000	-125.000/
2766	1422	1	1201.681	335.404	125.000	1201.681	335.404	-125.000/
2767	1423	1	1200.055	43.900	125.000	1200.055	43.900	-125.000/
2768	1424	1	1342.205	1227.232	125.000	1342.205	1227.232	-125.000/
2769	1425	1	1262.043	887.474	125.000	1262.043	887.474	-125.000/
2770	1426	1	1200.000	0.000	125.000	1200.000	0.000	-125.000/
2771	1427	1	1201.771	389.276	125.000	1201.771	389.276	-125.000/
2772	1428	1	1399.453	1420.080	125.000	1399.453	1420.080	-125.000/
2773	1429	1	1286.997	1016.325	125.000	1286.997	1016.325	-125.000/
2774	1430	1	1200.886	443.138	125.000	1200.886	443.138	-125.000/
2775	1431	1	1364.266	1335.039	125.000	1364.266	1335.039	-125.000/
2776	1432	1	1321.939	1189.456	125.000	1321.939	1189.456	-125.000/
2777	1433	1	1200.000	497.000	125.000	1200.000	497.000	-125.000/
2778	1434	1	1231.963	770.097	125.000	1231.963	770.097	-125.000/
2779	1435	1	1402.680	1460.040	125.000	1402.680	1460.040	-125.000/
2780	1436	1	1338.810	1266.116	125.000	1338.810	1266.116	-125.000/
2781	1437	1	1197.518	550.796	125.000	1197.518	550.796	-125.000/
2782	1438	1	1376.269	1401.795	125.000	1376.269	1401.795	-125.000/
2783	1439	1	1301.673	1151.680	125.000	1301.673	1151.680	-125.000/
2784	1440	1	1362.702	1365.078	125.000	1362.702	1365.078	-125.000/
2785	1441	1	1405.907	1500.000	125.000	1405.907	1500.000	-125.000/
2786	1442	1	1249.543	943.130	125.000	1249.543	943.130	-125.000/
2787	1443	1	1195.037	604.592	125.000	1195.037	604.592	-125.000/
2788	1444	1	1225.435	825.019	125.000	1225.435	825.019	-125.000/
2789	1445	1	1335.415	1305.000	125.000	1335.415	1305.000	-125.000/
2790	1446	1	1315.336	1239.385	125.000	1315.336	1239.385	-125.000/
2791	1447	1	1353.085	1383.510	125.000	1353.085	1383.510	-125.000/
2792	1448	1	1191.920	658.282	125.000	1191.920	658.282	-125.000/
2793	1449	1	1267.004	1078.167	125.000	1267.004	1078.167	-125.000/
2794	1450	1	1334.633	1331.879	125.000	1334.633	1331.879	-125.000/
2795	1451	1	1362.702	1438.763	125.000	1362.702	1438.763	-125.000/
2796	1452	1	1310.168	1272.192	125.000	1310.168	1272.192	-125.000/
2797	1453	1	1215.983	876.371	125.000	1215.983	876.371	-125.000/
2798	1454	1	1333.851	1358.759	125.000	1333.851	1358.759	-125.000/
2799	1455	1	1188.804	711.971	125.000	1188.804	711.971	-125.000/
2800	1456	1	1292.181	1217.829	125.000	1292.181	1217.829	-125.000/
2801	1457	1	1353.085	1420.352	125.000	1353.085	1420.352	-125.000/

2802	1458	1	1150.715	228.389	125.000	1150.715	228.389	-125.000/
2803	1459	1	1150.337	131.678	125.000	1150.337	131.678	-125.000/
2804	1460	1	1150.000	175.000	125.000	1150.000	175.000	-125.000/
2805	1461	1	1151.429	281.778	125.000	1151.429	281.778	-125.000/
2806	1462	1	1150.674	88.355	125.000	1150.674	88.355	-125.000/
2807	1463	1	1343.468	1401.942	125.000	1343.468	1401.942	-125.000/
2808	1464	1	1150.337	44.178	125.000	1150.337	44.178	-125.000/
2809	1465	1	1151.424	335.562	125.000	1151.424	335.562	-125.000/
2810	1466	1	1364.266	1469.381	125.000	1364.266	1469.381	-125.000/
2811	1467	1	1150.000	0.000	125.000	1150.000	0.000	-125.000/
2812	1468	1	1151.418	389.347	125.000	1151.418	389.347	-125.000/
2813	1469	1	1150.709	443.173	125.000	1150.709	443.173	-125.000/
2814	1470	1	1329.043	1380.361	125.000	1329.043	1380.361	-125.000/
2815	1471	1	1305.000	1305.000	125.000	1305.000	1305.000	-125.000/
2816	1472	1	1224.615	996.188	125.000	1224.615	996.188	-125.000/
2817	1473	1	1182.565	765.096	125.000	1182.565	765.096	-125.000/
2818	1474	1	1365.829	1500.000	125.000	1365.829	1500.000	-125.000/
2819	1475	1	1150.000	497.000	125.000	1150.000	497.000	-125.000/
2820	1476	1	1269.025	1196.273	125.000	1269.025	1196.273	-125.000/
2821	1477	1	1206.531	927.723	125.000	1206.531	927.723	-125.000/
2822	1478	1	1284.024	1254.089	125.000	1284.024	1254.089	-125.000/
2823	1479	1	1305.000	1328.720	125.000	1305.000	1328.720	-125.000/
2824	1480	1	1324.234	1401.963	125.000	1324.234	1401.963	-125.000/
2825	1481	1	1147.584	550.420	125.000	1147.584	550.420	-125.000/
2826	1482	1	1245.685	1128.883	125.000	1245.685	1128.883	-125.000/
2827	1483	1	1329.043	1423.717	125.000	1329.043	1423.717	-125.000/
2828	1484	1	1305.000	1352.439	125.000	1305.000	1352.439	-125.000/
2829	1485	1	1333.851	1445.470	125.000	1333.851	1445.470	-125.000/
2830	1486	1	1176.327	818.221	125.000	1176.327	818.221	-125.000/
2831	1487	1	1145.167	603.841	125.000	1145.167	603.841	-125.000/
2832	1488	1	1305.000	1377.212	125.000	1305.000	1377.212	-125.000/
2833	1489	1	1334.633	1472.735	125.000	1334.633	1472.735	-125.000/
2834	1490	1	1275.868	1290.349	125.000	1275.868	1290.349	-125.000/
2835	1491	1	1257.880	1235.985	125.000	1257.880	1235.985	-125.000/
2836	1492	1	1142.385	657.237	125.000	1142.385	657.237	-125.000/
2837	1493	1	1305.000	1401.985	125.000	1305.000	1401.985	-125.000/
2838	1494	1	1190.485	971.168	125.000	1190.485	971.168	-125.000/
2839	1495	1	1169.923	865.269	125.000	1169.923	865.269	-125.000/
2840	1496	1	1335.415	1500.000	125.000	1335.415	1500.000	-125.000/
2841	1497	1	1275.005	1319.174	125.000	1275.005	1319.174	-125.000/
2842	1498	1	1305.000	1427.081	125.000	1305.000	1427.081	-125.000/
2843	1499	1	1139.603	710.634	125.000	1139.603	710.634	-125.000/
2844	1500	1	1199.687	1049.246	125.000	1199.687	1049.246	-125.000/
2845	1501	1	1100.618	131.955	125.000	1100.618	131.955	-125.000/
2846	1502	1	1101.237	88.911	125.000	1101.237	88.911	-125.000/
2847	1503	1	1100.634	228.512	125.000	1100.634	228.512	-125.000/
2848	1504	1	1100.000	175.000	125.000	1100.000	175.000	-125.000/
2849	1505	1	1101.268	282.024	125.000	1101.268	282.024	-125.000/
2850	1506	1	1100.618	44.455	125.000	1100.618	44.455	-125.000/
2851	1507	1	1274.142	1347.999	125.000	1274.142	1347.999	-125.000/
2852	1508	1	1101.167	335.721	125.000	1101.167	335.721	-125.000/
2853	1509	1	1224.366	1179.598	125.000	1224.366	1179.598	-125.000/
2854	1510	1	1100.000	0.000	125.000	1100.000	0.000	-125.000/
2855	1511	1	1305.000	1452.177	125.000	1305.000	1452.177	-125.000/
2856	1512	1	1101.066	389.417	125.000	1101.066	389.417	-125.000/
2857	1513	1	1163.519	912.317	125.000	1163.519	912.317	-125.000/
2858	1514	1	1276.173	1373.770	125.000	1276.173	1373.770	-125.000/
2859	1515	1	1246.736	1275.697	125.000	1246.736	1275.697	-125.000/
2860	1516	1	1134.933	763.058	125.000	1134.933	763.058	-125.000/
2861	1517	1	1100.533	443.208	125.000	1100.533	443.208	-125.000/
2862	1518	1	1305.000	1476.089	125.000	1305.000	1476.089	-125.000/
2863	1519	1	1100.000	497.000	125.000	1100.000	497.000	-125.000/
2864	1520	1	1278.205	1399.541	125.000	1278.205	1399.541	-125.000/
2865	1521	1	1174.439	1014.613	125.000	1174.439	1014.613	-125.000/
2866	1522	1	1156.355	946.148	125.000	1156.355	946.148	-125.000/
2867	1523	1	1245.010	1309.628	125.000	1245.010	1309.628	-125.000/

2868	1524	1	1189.697	1106.085	125.000	1189.697	1106.085	-125.000/
2869	1525	1	1305.000	1500.000	125.000	1305.000	1500.000	-125.000/
2870	1526	1	1097.649	550.044	125.000	1097.649	550.044	-125.000/
2871	1527	1	1278.163	1424.771	125.000	1278.163	1424.771	-125.000/
2872	1528	1	1130.262	815.483	125.000	1130.262	815.483	-125.000/
2873	1529	1	1215.588	1223.105	125.000	1215.588	1223.105	-125.000/
2874	1530	1	1095.297	603.089	125.000	1095.297	603.089	-125.000/
2875	1531	1	1278.120	1450.001	125.000	1278.120	1450.001	-125.000/
2876	1532	1	1243.283	1343.560	125.000	1243.283	1343.560	-125.000/
2877	1533	1	1149.190	979.980	125.000	1149.190	979.980	-125.000/
2878	1534	1	1126.631	862.120	125.000	1126.631	862.120	-125.000/
2879	1535	1	1247.346	1370.329	125.000	1247.346	1370.329	-125.000/
2880	1536	1	1092.850	656.193	125.000	1092.850	656.193	-125.000/
2881	1537	1	1278.088	1475.001	125.000	1278.088	1475.001	-125.000/
2882	1538	1	1251.410	1397.098	125.000	1251.410	1397.098	-125.000/
2883	1539	1	1179.706	1162.924	125.000	1179.706	1162.924	-125.000/
2884	1540	1	1206.811	1266.611	125.000	1206.811	1266.611	-125.000/
2885	1541	1	1123.001	908.757	125.000	1123.001	908.757	-125.000/
2886	1542	1	1090.403	709.297	125.000	1090.403	709.297	-125.000/
2887	1543	1	1278.056	1500.000	125.000	1278.056	1500.000	-125.000/
2888	1544	1	1251.325	1422.462	125.000	1251.325	1422.462	-125.000/
2889	1545	1	1053.553	91.069	125.000	1053.553	91.069	-125.000/
2890	1546	1	1051.776	133.035	125.000	1051.776	133.035	-125.000/
2891	1547	1	1146.027	1049.193	125.000	1146.027	1049.193	-125.000/
2892	1548	1	1050.625	228.550	125.000	1050.625	228.550	-125.000/
2893	1549	1	1050.000	175.000	125.000	1050.000	175.000	-125.000/
2894	1550	1	1051.251	282.099	125.000	1051.251	282.099	-125.000/
2895	1551	1	1051.776	45.535	125.000	1051.776	45.535	-125.000/
2896	1552	1	1051.198	335.746	125.000	1051.198	335.746	-125.000/
2897	1553	1	1119.889	943.967	125.000	1119.889	943.967	-125.000/
2898	1554	1	1251.240	1447.826	125.000	1251.240	1447.826	-125.000/
2899	1555	1	1050.000	0.000	125.000	1050.000	0.000	-125.000/
2900	1556	1	1051.145	389.392	125.000	1051.145	389.392	-125.000/
2901	1557	1	1087.300	761.021	125.000	1087.300	761.021	-125.000/
2902	1558	1	1205.604	1307.143	125.000	1205.604	1307.143	-125.000/
2903	1559	1	1131.402	1014.186	125.000	1131.402	1014.186	-125.000/
2904	1560	1	1050.572	443.196	125.000	1050.572	443.196	-125.000/
2905	1561	1	1228.016	1397.213	125.000	1228.016	1397.213	-125.000/
2906	1562	1	1173.296	1210.225	125.000	1173.296	1210.225	-125.000/
2907	1563	1	1251.176	1473.913	125.000	1251.176	1473.913	-125.000/
2908	1564	1	1050.000	497.000	125.000	1050.000	497.000	-125.000/
2909	1565	1	1116.777	979.178	125.000	1116.777	979.178	-125.000/
2910	1566	1	1216.206	1372.444	125.000	1216.206	1372.444	-125.000/
2911	1567	1	1084.197	812.744	125.000	1084.197	812.744	-125.000/
2912	1568	1	1138.676	1101.136	125.000	1138.676	1101.136	-125.000/
2913	1569	1	1204.396	1347.675	125.000	1204.396	1347.675	-125.000/
2914	1570	1	1226.055	1421.336	125.000	1226.055	1421.336	-125.000/
2915	1571	1	1047.619	549.903	125.000	1047.619	549.903	-125.000/
2916	1572	1	1251.112	1500.000	125.000	1251.112	1500.000	-125.000/
2917	1573	1	1083.339	858.970	125.000	1083.339	858.970	-125.000/
2918	1574	1	1045.237	602.806	125.000	1045.237	602.806	-125.000/
2919	1575	1	1224.094	1445.459	125.000	1224.094	1445.459	-125.000/
2920	1576	1	1166.886	1257.525	125.000	1166.886	1257.525	-125.000/
2921	1577	1	1204.622	1397.327	125.000	1204.622	1397.327	-125.000/
2922	1578	1	1082.482	905.196	125.000	1082.482	905.196	-125.000/
2923	1579	1	1043.088	656.127	125.000	1043.088	656.127	-125.000/
2924	1580	1	1131.324	1153.079	125.000	1131.324	1153.079	-125.000/
2925	1581	1	1222.870	1472.729	125.000	1222.870	1472.729	-125.000/
2926	1582	1	1083.423	941.786	125.000	1083.423	941.786	-125.000/
2927	1583	1	1166.197	1304.658	125.000	1166.197	1304.658	-125.000/
2928	1584	1	1200.785	1420.210	125.000	1200.785	1420.210	-125.000/
2929	1585	1	1040.938	709.448	125.000	1040.938	709.448	-125.000/
2930	1586	1	1185.065	1374.559	125.000	1185.065	1374.559	-125.000/
2931	1587	1	1005.869	93.228	125.000	1005.869	93.228	-125.000/
2932	1588	1	1084.364	978.376	125.000	1084.364	978.376	-125.000/
2933	1589	1	1002.934	134.114	125.000	1002.934	134.114	-125.000/

2934	1590	1	1088.366	1013.758	125.000	1088.366	1013.758	-125.000/
2935	1591	1	1221.646	1500.000	125.000	1221.646	1500.000	-125.000/
2936	1592	1	1002.934	46.614	125.000	1002.934	46.614	-125.000/
2937	1593	1	1000.617	228.587	125.000	1000.617	228.587	-125.000/
2938	1594	1	1000.000	175.000	125.000	1000.000	175.000	-125.000/
2939	1595	1	1001.234	282.174	125.000	1001.234	282.174	-125.000/
2940	1596	1	1092.368	1049.140	125.000	1092.368	1049.140	-125.000/
2941	1597	1	1001.229	335.771	125.000	1001.229	335.771	-125.000/
2942	1598	1	1039.557	761.973	125.000	1039.557	761.973	-125.000/
2943	1599	1	1000.000	0.000	125.000	1000.000	0.000	-125.000/
2944	1600	1	1196.948	1443.092	125.000	1196.948	1443.092	-125.000/
2945	1601	1	1126.282	1200.843	125.000	1126.282	1200.843	-125.000/
2946	1602	1	1001.224	389.367	125.000	1001.224	389.367	-125.000/
2947	1603	1	1165.509	1351.790	125.000	1165.509	1351.790	-125.000/
2948	1604	1	1000.612	443.184	125.000	1000.612	443.184	-125.000/
2949	1605	1	1038.176	814.499	125.000	1038.176	814.499	-125.000/
2950	1606	1	1176.311	1405.195	125.000	1176.311	1405.195	-125.000/
2951	1607	1	1000.000	497.000	125.000	1000.000	497.000	-125.000/
2952	1608	1	1194.563	1471.546	125.000	1194.563	1471.546	-125.000/
2953	1609	1	1087.654	1096.187	125.000	1087.654	1096.187	-125.000/
2954	1610	1	1040.008	862.057	125.000	1040.008	862.057	-125.000/
2955	1611	1	997.589	549.762	125.000	997.589	549.762	-125.000/
2956	1612	1	1121.240	1248.608	125.000	1121.240	1248.608	-125.000/
2957	1613	1	1056.855	975.541	125.000	1056.855	975.541	-125.000/
2958	1614	1	1049.348	942.578	125.000	1049.348	942.578	-125.000/
2959	1615	1	1041.840	909.616	125.000	1041.840	909.616	-125.000/
2960	1616	1	1192.179	1500.000	125.000	1192.179	1500.000	-125.000/
2961	1617	1	995.177	602.524	125.000	995.177	602.524	-125.000/
2962	1618	1	1167.557	1435.832	125.000	1167.557	1435.832	-125.000/
2963	1619	1	1151.838	1390.181	125.000	1151.838	1390.181	-125.000/
2964	1620	1	1082.941	1143.234	125.000	1082.941	1143.234	-125.000/
2965	1621	1	1052.139	1006.481	125.000	1052.139	1006.481	-125.000/
2966	1622	1	993.325	656.061	125.000	993.325	656.061	-125.000/
2967	1623	1	1119.735	1295.535	125.000	1119.735	1295.535	-125.000/
2968	1624	1	965.156	101.857	125.000	965.156	101.857	-125.000/
2969	1625	1	957.578	138.428	125.000	957.578	138.428	-125.000/
2970	1626	1	1163.799	1467.916	125.000	1163.799	1467.916	-125.000/
2971	1627	1	991.472	709.599	125.000	991.472	709.599	-125.000/
2972	1628	1	1047.423	1037.422	125.000	1047.423	1037.422	-125.000/
2973	1629	1	957.578	50.928	125.000	957.578	50.928	-125.000/
2974	1630	1	1079.267	1191.462	125.000	1079.267	1191.462	-125.000/
2975	1631	1	1029.347	972.705	125.000	1029.347	972.705	-125.000/
2976	1632	1	1118.230	1342.461	125.000	1118.230	1342.461	-125.000/
2977	1633	1	950.404	228.697	125.000	950.404	228.697	-125.000/
2978	1634	1	950.000	175.000	125.000	950.000	175.000	-125.000/
2979	1635	1	991.814	762.926	125.000	991.814	762.926	-125.000/
2980	1636	1	950.807	282.394	125.000	950.807	282.394	-125.000/
2981	1637	1	950.750	335.888	125.000	950.750	335.888	-125.000/
2982	1638	1	950.000	0.000	125.000	950.000	0.000	-125.000/
2983	1639	1	950.693	389.382	125.000	950.693	389.382	-125.000/
2984	1640	1	1138.167	1428.571	125.000	1138.167	1428.571	-125.000/
2985	1641	1	1015.273	943.370	125.000	1015.273	943.370	-125.000/
2986	1642	1	1160.041	1500.000	125.000	1160.041	1500.000	-125.000/
2987	1643	1	992.155	816.253	125.000	992.155	816.253	-125.000/
2988	1644	1	950.347	443.191	125.000	950.347	443.191	-125.000/
2989	1645	1	1041.278	1084.508	125.000	1041.278	1084.508	-125.000/
2990	1646	1	996.677	865.144	125.000	996.677	865.144	-125.000/
2991	1647	1	950.000	497.000	125.000	950.000	497.000	-125.000/
2992	1648	1	1075.593	1239.690	125.000	1075.593	1239.690	-125.000/
2993	1649	1	1001.199	914.035	125.000	1001.199	914.035	-125.000/
2994	1650	1	1015.913	999.205	125.000	1015.913	999.205	-125.000/
2995	1651	1	947.477	549.915	125.000	947.477	549.915	-125.000/
2996	1652	1	1109.233	1383.224	125.000	1109.233	1383.224	-125.000/
2997	1653	1	1133.035	1464.286	125.000	1133.035	1464.286	-125.000/
2998	1654	1	1035.133	1131.593	125.000	1035.133	1131.593	-125.000/
2999	1655	1	924.444	110.485	125.000	924.444	110.485	-125.000/



3000	1656	1	944.955	602.830	125.000	944.955	602.830	-125.000/
3001	1657	1	1073.272	1286.411	125.000	1073.272	1286.411	-125.000/
3002	1658	1	943.053	656.674	125.000	943.053	656.674	-125.000/
3003	1659	1	1002.479	1025.704	125.000	1002.479	1025.704	-125.000/
3004	1660	1	1127.903	1500.000	125.000	1127.903	1500.000	-125.000/
3005	1661	1	912.222	142.743	125.000	912.222	142.743	-125.000/
3006	1662	1	986.437	968.258	125.000	986.437	968.258	-125.000/
3007	1663	1	912.222	55.243	125.000	912.222	55.243	-125.000/
3008	1664	1	1100.237	1423.987	125.000	1100.237	1423.987	-125.000/
3009	1665	1	1031.712	1181.094	125.000	1031.712	1181.094	-125.000/
3010	1666	1	1070.951	1333.132	125.000	1070.951	1333.132	-125.000/
3011	1667	1	941.151	710.517	125.000	941.151	710.517	-125.000/
3012	1668	1	942.154	766.300	125.000	942.154	766.300	-125.000/
3013	1669	1	900.000	175.000	125.000	900.000	175.000	-125.000/
3014	1670	1	900.190	228.807	125.000	900.190	228.807	-125.000/
3015	1671	1	900.381	282.614	125.000	900.381	282.614	-125.000/
3016	1672	1	994.902	1072.828	125.000	994.902	1072.828	-125.000/
3017	1673	1	900.272	336.005	125.000	900.272	336.005	-125.000/
3018	1674	1	900.000	0.000	125.000	900.000	0.000	-125.000/
3019	1675	1	1096.595	1461.993	125.000	1096.595	1461.993	-125.000/
3020	1676	1	900.162	389.397	125.000	900.162	389.397	-125.000/
3021	1677	1	1028.290	1230.594	125.000	1028.290	1230.594	-125.000/
3022	1678	1	943.158	822.083	125.000	943.158	822.083	-125.000/
3023	1679	1	1066.629	1376.267	125.000	1066.629	1376.267	-125.000/
3024	1680	1	900.081	443.198	125.000	900.081	443.198	-125.000/
3025	1681	1	950.059	879.697	125.000	950.059	879.697	-125.000/
3026	1682	1	900.000	497.000	125.000	900.000	497.000	-125.000/
3027	1683	1	956.961	937.312	125.000	956.961	937.312	-125.000/
3028	1684	1	897.366	550.068	125.000	897.366	550.068	-125.000/
3029	1685	1	987.325	1119.952	125.000	987.325	1119.952	-125.000/
3030	1686	1	1026.808	1278.641	125.000	1026.808	1278.641	-125.000/
3031	1687	1	1092.954	1500.000	125.000	1092.954	1500.000	-125.000/
3032	1688	1	957.601	993.146	125.000	957.601	993.146	-125.000/
3033	1689	1	1062.307	1419.403	125.000	1062.307	1419.403	-125.000/
3034	1690	1	894.733	603.136	125.000	894.733	603.136	-125.000/
3035	1691	1	1025.325	1326.689	125.000	1025.325	1326.689	-125.000/
3036	1692	1	984.156	1170.725	125.000	984.156	1170.725	-125.000/
3037	1693	1	892.781	657.286	125.000	892.781	657.286	-125.000/
3038	1694	1	865.052	101.855	125.000	865.052	101.855	-125.000/
3039	1695	1	1060.156	1459.701	125.000	1060.156	1459.701	-125.000/
3040	1696	1	857.526	138.427	125.000	857.526	138.427	-125.000/
3041	1697	1	947.822	1048.901	125.000	947.822	1048.901	-125.000/
3042	1698	1	890.829	711.435	125.000	890.829	711.435	-125.000/
3043	1699	1	857.526	50.927	125.000	857.526	50.927	-125.000/
3044	1700	1	1023.067	1371.279	125.000	1023.067	1371.279	-125.000/
3045	1701	1	892.494	769.674	125.000	892.494	769.674	-125.000/
3046	1702	1	980.987	1221.497	125.000	980.987	1221.497	-125.000/
3047	1703	1	850.000	175.000	125.000	850.000	175.000	-125.000/
3048	1704	1	850.185	228.827	125.000	850.185	228.827	-125.000/
3049	1705	1	850.370	282.654	125.000	850.370	282.654	-125.000/
3050	1706	1	850.353	336.261	125.000	850.353	336.261	-125.000/
3051	1707	1	850.000	0.000	125.000	850.000	0.000	-125.000/
3052	1708	1	1058.005	1500.000	125.000	1058.005	1500.000	-125.000/
3053	1709	1	850.337	389.868	125.000	850.337	389.868	-125.000/
3054	1710	1	894.160	827.913	125.000	894.160	827.913	-125.000/
3055	1711	1	903.442	894.251	125.000	903.442	894.251	-125.000/
3056	1712	1	850.168	443.434	125.000	850.168	443.434	-125.000/
3057	1713	1	912.724	960.588	125.000	912.724	960.588	-125.000/
3058	1714	1	850.000	497.000	125.000	850.000	497.000	-125.000/
3059	1715	1	980.343	1270.872	125.000	980.343	1270.872	-125.000/
3060	1716	1	1020.809	1415.869	125.000	1020.809	1415.869	-125.000/
3061	1717	1	938.043	1104.656	125.000	938.043	1104.656	-125.000/
3062	1718	1	847.107	549.940	125.000	847.107	549.940	-125.000/
3063	1719	1	979.699	1320.246	125.000	979.699	1320.246	-125.000/
3064	1720	1	1020.465	1457.934	125.000	1020.465	1457.934	-125.000/
3065	1721	1	844.214	602.881	125.000	844.214	602.881	-125.000/

3066	1722	1	935.045	1158.768	125.000	935.045	1158.768	-125.000/
3067	1723	1	900.742	1024.975	125.000	900.742	1024.975	-125.000/
3068	1724	1	841.753	656.929	125.000	841.753	656.929	-125.000/
3069	1725	1	979.505	1366.290	125.000	979.505	1366.290	-125.000/
3070	1726	1	1020.120	1500.000	125.000	1020.120	1500.000	-125.000/
3071	1727	1	839.293	710.977	125.000	839.293	710.977	-125.000/
3072	1728	1	805.661	93.224	125.000	805.661	93.224	-125.000/
3073	1729	1	932.046	1212.880	125.000	932.046	1212.880	-125.000/
3074	1730	1	802.830	134.112	125.000	802.830	134.112	-125.000/
3075	1731	1	802.830	46.612	125.000	802.830	46.612	-125.000/
3076	1732	1	800.000	175.000	125.000	800.000	175.000	-125.000/
3077	1733	1	800.179	228.847	125.000	800.179	228.847	-125.000/
3078	1734	1	800.359	282.694	125.000	800.359	282.694	-125.000/
3079	1735	1	839.088	768.589	125.000	839.088	768.589	-125.000/
3080	1736	1	979.311	1412.335	125.000	979.311	1412.335	-125.000/
3081	1737	1	800.435	336.517	125.000	800.435	336.517	-125.000/
3082	1738	1	800.000	0.000	125.000	800.000	0.000	-125.000/
3083	1739	1	800.511	390.340	125.000	800.511	390.340	-125.000/
3084	1740	1	932.379	1263.786	125.000	932.379	1263.786	-125.000/
3085	1741	1	800.256	443.670	125.000	800.256	443.670	-125.000/
3086	1742	1	888.761	1089.361	125.000	888.761	1089.361	-125.000/
3087	1743	1	838.882	826.200	125.000	838.882	826.200	-125.000/
3088	1744	1	800.000	497.000	125.000	800.000	497.000	-125.000/
3089	1745	1	980.773	1456.167	125.000	980.773	1456.167	-125.000/
3090	1746	1	843.755	890.424	125.000	843.755	890.424	-125.000/
3091	1747	1	796.847	549.813	125.000	796.847	549.813	-125.000/
3092	1748	1	932.712	1314.692	125.000	932.712	1314.692	-125.000/
3093	1749	1	848.628	954.648	125.000	848.628	954.648	-125.000/
3094	1750	1	885.933	1146.812	125.000	885.933	1146.812	-125.000/
3095	1751	1	982.236	1500.000	125.000	982.236	1500.000	-125.000/
3096	1752	1	793.695	602.625	125.000	793.695	602.625	-125.000/
3097	1753	1	934.074	1362.170	125.000	934.074	1362.170	-125.000/
3098	1754	1	790.726	656.572	125.000	790.726	656.572	-125.000/
3099	1755	1	883.105	1204.263	125.000	883.105	1204.263	-125.000/
3100	1756	1	840.854	1018.045	125.000	840.854	1018.045	-125.000/
3101	1757	1	935.436	1409.648	125.000	935.436	1409.648	-125.000/
3102	1758	1	787.758	710.519	125.000	787.758	710.519	-125.000/
3103	1759	1	753.323	91.067	125.000	753.323	91.067	-125.000/
3104	1760	1	751.661	133.033	125.000	751.661	133.033	-125.000/
3105	1761	1	750.000	175.000	125.000	750.000	175.000	-125.000/
3106	1762	1	750.225	228.879	125.000	750.225	228.879	-125.000/
3107	1763	1	751.661	45.533	125.000	751.661	45.533	-125.000/
3108	1764	1	750.451	282.759	125.000	750.451	282.759	-125.000/
3109	1765	1	884.416	1256.701	125.000	884.416	1256.701	-125.000/
3110	1766	1	750.517	336.546	125.000	750.517	336.546	-125.000/
3111	1767	1	750.000	0.000	125.000	750.000	0.000	-125.000/
3112	1768	1	938.374	1454.824	125.000	938.374	1454.824	-125.000/
3113	1769	1	750.584	390.332	125.000	750.584	390.332	-125.000/
3114	1770	1	785.681	767.504	125.000	785.681	767.504	-125.000/
3115	1771	1	750.292	443.666	125.000	750.292	443.666	-125.000/
3116	1772	1	750.000	497.000	125.000	750.000	497.000	-125.000/
3117	1773	1	833.079	1081.442	125.000	833.079	1081.442	-125.000/
3118	1774	1	885.726	1309.139	125.000	885.726	1309.139	-125.000/
3119	1775	1	941.312	1500.000	125.000	941.312	1500.000	-125.000/
3120	1776	1	783.605	824.488	125.000	783.605	824.488	-125.000/
3121	1777	1	746.543	549.431	125.000	746.543	549.431	-125.000/
3122	1778	1	784.069	886.598	125.000	784.069	886.598	-125.000/
3123	1779	1	888.644	1358.051	125.000	888.644	1358.051	-125.000/
3124	1780	1	832.376	1140.060	125.000	832.376	1140.060	-125.000/
3125	1781	1	743.085	601.861	125.000	743.085	601.861	-125.000/
3126	1782	1	784.533	948.708	125.000	784.533	948.708	-125.000/
3127	1783	1	891.562	1406.962	125.000	891.562	1406.962	-125.000/
3128	1784	1	739.523	655.443	125.000	739.523	655.443	-125.000/
3129	1785	1	831.673	1198.677	125.000	831.673	1198.677	-125.000/
3130	1786	1	895.975	1453.481	125.000	895.975	1453.481	-125.000/
3131	1787	1	735.961	709.025	125.000	735.961	709.025	-125.000/

3132	1788	1	780.965	1011.116	125.000	780.965	1011.116	-125.000/
3133	1789	1	834.253	1251.984	125.000	834.253	1251.984	-125.000/
3134	1790	1	700.492	131.954	125.000	700.492	131.954	-125.000/
3135	1791	1	700.985	88.909	125.000	700.985	88.909	-125.000/
3136	1792	1	700.000	175.000	125.000	700.000	175.000	-125.000/
3137	1793	1	700.271	228.912	125.000	700.271	228.912	-125.000/
3138	1794	1	700.543	282.823	125.000	700.543	282.823	-125.000/
3139	1795	1	700.492	44.454	125.000	700.492	44.454	-125.000/
3140	1796	1	700.599	336.574	125.000	700.599	336.574	-125.000/
3141	1797	1	700.000	0.000	125.000	700.000	0.000	-125.000/
3142	1798	1	900.387	1500.000	125.000	900.387	1500.000	-125.000/
3143	1799	1	700.656	390.325	125.000	700.656	390.325	-125.000/
3144	1800	1	732.888	765.237	125.000	732.888	765.237	-125.000/
3145	1801	1	700.328	443.662	125.000	700.328	443.662	-125.000/
3146	1802	1	836.832	1305.291	125.000	836.832	1305.291	-125.000/
3147	1803	1	700.000	497.000	125.000	700.000	497.000	-125.000/
3148	1804	1	777.398	1073.524	125.000	777.398	1073.524	-125.000/
3149	1805	1	729.815	821.448	125.000	729.815	821.448	-125.000/
3150	1806	1	840.969	1355.140	125.000	840.969	1355.140	-125.000/
3151	1807	1	696.238	549.049	125.000	696.238	549.049	-125.000/
3152	1808	1	778.820	1133.307	125.000	778.820	1133.307	-125.000/
3153	1809	1	692.476	601.097	125.000	692.476	601.097	-125.000/
3154	1810	1	728.584	882.536	125.000	728.584	882.536	-125.000/
3155	1811	1	845.105	1404.988	125.000	845.105	1404.988	-125.000/
3156	1812	1	850.725	1452.494	125.000	850.725	1452.494	-125.000/
3157	1813	1	688.320	654.314	125.000	688.320	654.314	-125.000/
3158	1814	1	780.242	1193.091	125.000	780.242	1193.091	-125.000/
3159	1815	1	727.352	943.625	125.000	727.352	943.625	-125.000/
3160	1816	1	856.345	1500.000	125.000	856.345	1500.000	-125.000/
3161	1817	1	784.090	1247.267	125.000	784.090	1247.267	-125.000/
3162	1818	1	684.165	707.531	125.000	684.165	707.531	-125.000/
3163	1819	1	650.500	228.731	125.000	650.500	228.731	-125.000/
3164	1820	1	650.264	131.687	125.000	650.264	131.687	-125.000/
3165	1821	1	650.000	175.000	125.000	650.000	175.000	-125.000/
3166	1822	1	651.000	282.463	125.000	651.000	282.463	-125.000/
3167	1823	1	650.527	88.375	125.000	650.527	88.375	-125.000/
3168	1824	1	650.264	44.187	125.000	650.264	44.187	-125.000/
3169	1825	1	651.077	336.329	125.000	651.077	336.329	-125.000/
3170	1826	1	650.000	0.000	125.000	650.000	0.000	-125.000/
3171	1827	1	651.154	390.196	125.000	651.154	390.196	-125.000/
3172	1828	1	723.836	1005.898	125.000	723.836	1005.898	-125.000/
3173	1829	1	787.938	1301.443	125.000	787.938	1301.443	-125.000/
3174	1830	1	650.577	443.598	125.000	650.577	443.598	-125.000/
3175	1831	1	680.095	762.970	125.000	680.095	762.970	-125.000/
3176	1832	1	650.000	497.000	125.000	650.000	497.000	-125.000/
3177	1833	1	793.294	1352.229	125.000	793.294	1352.229	-125.000/
3178	1834	1	645.981	548.714	125.000	645.981	548.714	-125.000/
3179	1835	1	720.319	1068.171	125.000	720.319	1068.171	-125.000/
3180	1836	1	676.026	818.408	125.000	676.026	818.408	-125.000/
3181	1837	1	798.649	1403.014	125.000	798.649	1403.014	-125.000/
3182	1838	1	641.961	600.429	125.000	641.961	600.429	-125.000/
3183	1839	1	723.722	1128.773	125.000	723.722	1128.773	-125.000/
3184	1840	1	805.476	1451.507	125.000	805.476	1451.507	-125.000/
3185	1841	1	673.099	878.475	125.000	673.099	878.475	-125.000/
3186	1842	1	812.303	1500.000	125.000	812.303	1500.000	-125.000/
3187	1843	1	637.447	652.821	125.000	637.447	652.821	-125.000/
3188	1844	1	727.125	1189.374	125.000	727.125	1189.374	-125.000/
3189	1845	1	670.171	938.541	125.000	670.171	938.541	-125.000/
3190	1846	1	732.408	1244.479	125.000	732.408	1244.479	-125.000/
3191	1847	1	632.932	705.213	125.000	632.932	705.213	-125.000/
3192	1848	1	600.729	228.551	125.000	600.729	228.551	-125.000/
3193	1849	1	601.458	282.102	125.000	601.458	282.102	-125.000/
3194	1850	1	600.000	175.000	125.000	600.000	175.000	-125.000/
3195	1851	1	600.035	131.420	125.000	600.035	131.420	-125.000/
3196	1852	1	600.070	87.841	125.000	600.070	87.841	-125.000/
3197	1853	1	601.555	336.084	125.000	601.555	336.084	-125.000/

3198	1854	1	600.035	43.920	125.000	600.035	43.920	-125.000/
3199	1855	1	600.000	0.000	125.000	600.000	0.000	-125.000/
3200	1856	1	601.653	390.066	125.000	601.653	390.066	-125.000/
3201	1857	1	737.691	1299.583	125.000	737.691	1299.583	-125.000/
3202	1858	1	600.826	443.533	125.000	600.826	443.533	-125.000/
3203	1859	1	666.706	1000.680	125.000	666.706	1000.680	-125.000/
3204	1860	1	628.139	759.642	125.000	628.139	759.642	-125.000/
3205	1861	1	600.000	497.000	125.000	600.000	497.000	-125.000/
3206	1862	1	743.864	1350.611	125.000	743.864	1350.611	-125.000/
3207	1863	1	750.036	1401.640	125.000	750.036	1401.640	-125.000/
3208	1864	1	595.723	548.380	125.000	595.723	548.380	-125.000/
3209	1865	1	623.347	814.071	125.000	623.347	814.071	-125.000/
3210	1866	1	663.241	1062.818	125.000	663.241	1062.818	-125.000/
3211	1867	1	757.565	1450.820	125.000	757.565	1450.820	-125.000/
3212	1868	1	591.446	599.760	125.000	591.446	599.760	-125.000/
3213	1869	1	668.625	1124.238	125.000	668.625	1124.238	-125.000/
3214	1870	1	765.095	1500.000	125.000	765.095	1500.000	-125.000/
3215	1871	1	618.438	872.729	125.000	618.438	872.729	-125.000/
3216	1872	1	586.573	651.328	125.000	586.573	651.328	-125.000/
3217	1873	1	674.008	1185.658	125.000	674.008	1185.658	-125.000/
3218	1874	1	680.726	1241.690	125.000	680.726	1241.690	-125.000/
3219	1875	1	581.699	702.896	125.000	581.699	702.896	-125.000/
3220	1876	1	551.929	281.860	125.000	551.929	281.860	-125.000/
3221	1877	1	550.965	228.430	125.000	550.965	228.430	-125.000/
3222	1878	1	613.529	931.387	125.000	613.529	931.387	-125.000/
3223	1879	1	550.000	175.000	125.000	550.000	175.000	-125.000/
3224	1880	1	549.841	131.324	125.000	549.841	131.324	-125.000/
3225	1881	1	551.968	335.704	125.000	551.968	335.704	-125.000/
3226	1882	1	549.682	87.648	125.000	549.682	87.648	-125.000/
3227	1883	1	549.841	43.824	125.000	549.841	43.824	-125.000/
3228	1884	1	552.007	389.549	125.000	552.007	389.549	-125.000/
3229	1885	1	687.444	1297.723	125.000	687.444	1297.723	-125.000/
3230	1886	1	550.000	0.000	125.000	550.000	0.000	-125.000/
3231	1887	1	551.004	443.275	125.000	551.004	443.275	-125.000/
3232	1888	1	694.434	1348.994	125.000	694.434	1348.994	-125.000/
3233	1889	1	576.184	756.315	125.000	576.184	756.315	-125.000/
3234	1890	1	550.000	497.000	125.000	550.000	497.000	-125.000/
3235	1891	1	701.423	1400.266	125.000	701.423	1400.266	-125.000/
3236	1892	1	605.873	995.037	125.000	605.873	995.037	-125.000/
3237	1893	1	545.556	547.699	125.000	545.556	547.699	-125.000/
3238	1894	1	709.655	1450.133	125.000	709.655	1450.133	-125.000/
3239	1895	1	570.668	809.734	125.000	570.668	809.734	-125.000/
3240	1896	1	717.887	1500.000	125.000	717.887	1500.000	-125.000/
3241	1897	1	541.112	598.398	125.000	541.112	598.398	-125.000/
3242	1898	1	598.217	1058.688	125.000	598.217	1058.688	-125.000/
3243	1899	1	536.165	648.965	125.000	536.165	648.965	-125.000/
3244	1900	1	563.777	866.983	125.000	563.777	866.983	-125.000/
3245	1901	1	608.992	1122.056	125.000	608.992	1122.056	-125.000/
3246	1902	1	619.767	1185.424	125.000	619.767	1185.424	-125.000/
3247	1903	1	628.066	1241.243	125.000	628.066	1241.243	-125.000/
3248	1904	1	531.219	699.531	125.000	531.219	699.531	-125.000/
3249	1905	1	502.401	281.617	125.000	502.401	281.617	-125.000/
3250	1906	1	501.200	228.308	125.000	501.200	228.308	-125.000/
3251	1907	1	500.000	175.000	125.000	500.000	175.000	-125.000/
3252	1908	1	502.381	335.324	125.000	502.381	335.324	-125.000/
3253	1909	1	499.647	131.227	125.000	499.647	131.227	-125.000/
3254	1910	1	499.294	87.454	125.000	499.294	87.454	-125.000/
3255	1911	1	499.647	43.727	125.000	499.647	43.727	-125.000/
3256	1912	1	636.365	1297.063	125.000	636.365	1297.063	-125.000/
3257	1913	1	502.361	389.032	125.000	502.361	389.032	-125.000/
3258	1914	1	500.000	0.000	125.000	500.000	0.000	-125.000/
3259	1915	1	556.887	924.232	125.000	556.887	924.232	-125.000/
3260	1916	1	501.181	443.016	125.000	501.181	443.016	-125.000/
3261	1917	1	643.966	1348.679	125.000	643.966	1348.679	-125.000/
3262	1918	1	525.754	751.339	125.000	525.754	751.339	-125.000/
3263	1919	1	500.000	497.000	125.000	500.000	497.000	-125.000/

3264	1920	1	651.567	1400.295	125.000	651.567	1400.295	-125.000/
3265	1921	1	495.389	547.018	125.000	495.389	547.018	-125.000/
3266	1922	1	659.536	1450.148	125.000	659.536	1450.148	-125.000/
3267	1923	1	520.290	803.146	125.000	520.290	803.146	-125.000/
3268	1924	1	667.504	1500.000	125.000	667.504	1500.000	-125.000/
3269	1925	1	545.040	989.395	125.000	545.040	989.395	-125.000/
3270	1926	1	490.778	597.036	125.000	490.778	597.036	-125.000/
3271	1927	1	513.492	856.719	125.000	513.492	856.719	-125.000/
3272	1928	1	485.758	646.601	125.000	485.758	646.601	-125.000/
3273	1929	1	565.526	1185.190	125.000	565.526	1185.190	-125.000/
3274	1930	1	549.359	1119.874	125.000	549.359	1119.874	-125.000/
3275	1931	1	575.406	1240.797	125.000	575.406	1240.797	-125.000/
3276	1932	1	480.738	696.166	125.000	480.738	696.166	-125.000/
3277	1933	1	452.241	281.832	125.000	452.241	281.832	-125.000/
3278	1934	1	451.120	228.416	125.000	451.120	228.416	-125.000/
3279	1935	1	450.000	175.000	125.000	450.000	175.000	-125.000/
3280	1936	1	452.350	335.476	125.000	452.350	335.476	-125.000/
3281	1937	1	449.548	131.215	125.000	449.548	131.215	-125.000/
3282	1938	1	533.193	1054.558	125.000	533.193	1054.558	-125.000/
3283	1939	1	449.096	87.430	125.000	449.096	87.430	-125.000/
3284	1940	1	506.695	910.292	125.000	506.695	910.292	-125.000/
3285	1941	1	585.287	1296.403	125.000	585.287	1296.403	-125.000/
3286	1942	1	449.548	43.715	125.000	449.548	43.715	-125.000/
3287	1943	1	452.458	389.120	125.000	452.458	389.120	-125.000/
3288	1944	1	450.000	0.000	125.000	450.000	0.000	-125.000/
3289	1945	1	451.229	443.060	125.000	451.229	443.060	-125.000/
3290	1946	1	593.499	1348.364	125.000	593.499	1348.364	-125.000/
3291	1947	1	475.325	746.362	125.000	475.325	746.362	-125.000/
3292	1948	1	450.000	497.000	125.000	450.000	497.000	-125.000/
3293	1949	1	601.711	1400.325	125.000	601.711	1400.325	-125.000/
3294	1950	1	609.416	1450.162	125.000	609.416	1450.162	-125.000/
3295	1951	1	445.427	546.564	125.000	445.427	546.564	-125.000/
3296	1952	1	496.412	966.469	125.000	496.412	966.469	-125.000/
3297	1953	1	469.912	796.558	125.000	469.912	796.558	-125.000/
3298	1954	1	617.121	1500.000	125.000	617.121	1500.000	-125.000/
3299	1955	1	440.853	596.127	125.000	440.853	596.127	-125.000/
3300	1956	1	463.207	846.456	125.000	463.207	846.456	-125.000/
3301	1957	1	436.052	644.770	125.000	436.052	644.770	-125.000/
3302	1958	1	486.130	1022.646	125.000	486.130	1022.646	-125.000/
3303	1959	1	517.147	1193.859	125.000	517.147	1193.859	-125.000/
3304	1960	1	502.935	1137.357	125.000	502.935	1137.357	-125.000/
3305	1961	1	526.511	1246.624	125.000	526.511	1246.624	-125.000/
3306	1962	1	431.250	693.412	125.000	431.250	693.412	-125.000/
3307	1963	1	402.081	282.047	125.000	402.081	282.047	-125.000/
3308	1964	1	456.503	896.353	125.000	456.503	896.353	-125.000/
3309	1965	1	401.040	228.523	125.000	401.040	228.523	-125.000/
3310	1966	1	488.724	1080.855	125.000	488.724	1080.855	-125.000/
3311	1967	1	400.000	175.000	125.000	400.000	175.000	-125.000/
3312	1968	1	402.318	335.627	125.000	402.318	335.627	-125.000/
3313	1969	1	535.876	1299.388	125.000	535.876	1299.388	-125.000/
3314	1970	1	399.449	131.203	125.000	399.449	131.203	-125.000/
3315	1971	1	398.898	87.407	125.000	398.898	87.407	-125.000/
3316	1972	1	402.555	389.208	125.000	402.555	389.208	-125.000/
3317	1973	1	399.449	43.703	125.000	399.449	43.703	-125.000/
3318	1974	1	400.000	0.000	125.000	400.000	0.000	-125.000/
3319	1975	1	543.771	1350.238	125.000	543.771	1350.238	-125.000/
3320	1976	1	401.278	443.104	125.000	401.278	443.104	-125.000/
3321	1977	1	426.334	742.153	125.000	426.334	742.153	-125.000/
3322	1978	1	551.666	1401.088	125.000	551.666	1401.088	-125.000/
3323	1979	1	400.000	497.000	125.000	400.000	497.000	-125.000/
3324	1980	1	447.785	943.543	125.000	447.785	943.543	-125.000/
3325	1981	1	558.680	1450.544	125.000	558.680	1450.544	-125.000/
3326	1982	1	421.417	790.894	125.000	421.417	790.894	-125.000/
3327	1983	1	395.464	546.109	125.000	395.464	546.109	-125.000/
3328	1984	1	565.695	1500.000	125.000	565.695	1500.000	-125.000/
3329	1985	1	456.969	1049.882	125.000	456.969	1049.882	-125.000/

3330	1986	1	390.929	595.219	125.000	390.929	595.219	-125.000/
3331	1987	1	415.598	838.810	125.000	415.598	838.810	-125.000/
3332	1988	1	439.067	990.733	125.000	439.067	990.733	-125.000/
3333	1989	1	386.346	642.939	125.000	386.346	642.939	-125.000/
3334	1990	1	468.768	1202.528	125.000	468.768	1202.528	-125.000/
3335	1991	1	409.780	886.725	125.000	409.780	886.725	-125.000/
3336	1992	1	456.512	1154.840	125.000	456.512	1154.840	-125.000/
3337	1993	1	477.617	1252.451	125.000	477.617	1252.451	-125.000/
3338	1994	1	381.763	690.659	125.000	381.763	690.659	-125.000/
3339	1995	1	444.255	1107.152	125.000	444.255	1107.152	-125.000/
3340	1996	1	486.465	1302.374	125.000	486.465	1302.374	-125.000/
3341	1997	1	351.924	282.133	125.000	351.924	282.133	-125.000/
3342	1998	1	350.962	228.567	125.000	350.962	228.567	-125.000/
3343	1999	1	350.000	175.000	125.000	350.000	175.000	-125.000/
3344	2000	1	425.214	1018.908	125.000	425.214	1018.908	-125.000/
3345	2001	1	352.126	335.753	125.000	352.126	335.753	-125.000/
3346	2002	1	349.552	131.229	125.000	349.552	131.229	-125.000/
3347	2003	1	349.104	87.457	125.000	349.104	87.457	-125.000/
3348	2004	1	349.552	43.729	125.000	349.552	43.729	-125.000/
3349	2005	1	352.328	389.373	125.000	352.328	389.373	-125.000/
3350	2006	1	350.000	0.000	125.000	350.000	0.000	-125.000/
3351	2007	1	494.043	1352.112	125.000	494.043	1352.112	-125.000/
3352	2008	1	377.342	737.945	125.000	377.342	737.945	-125.000/
3353	2009	1	351.164	443.186	125.000	351.164	443.186	-125.000/
3354	2010	1	403.459	932.280	125.000	403.459	932.280	-125.000/
3355	2011	1	427.808	1077.118	125.000	427.808	1077.118	-125.000/
3356	2012	1	501.621	1401.851	125.000	501.621	1401.851	-125.000/
3357	2013	1	350.000	497.000	125.000	350.000	497.000	-125.000/
3358	2014	1	507.944	1450.925	125.000	507.944	1450.925	-125.000/
3359	2015	1	372.922	785.231	125.000	372.922	785.231	-125.000/
3360	2016	1	345.816	545.449	125.000	345.816	545.449	-125.000/
3361	2017	1	411.361	1047.083	125.000	411.361	1047.083	-125.000/
3362	2018	1	397.139	977.835	125.000	397.139	977.835	-125.000/
3363	2019	1	514.268	1500.000	125.000	514.268	1500.000	-125.000/
3364	2020	1	341.633	593.898	125.000	341.633	593.898	-125.000/
3365	2021	1	367.990	831.164	125.000	367.990	831.164	-125.000/
3366	2022	1	388.933	1011.401	125.000	388.933	1011.401	-125.000/
3367	2023	1	337.611	641.108	125.000	337.611	641.108	-125.000/
3368	2024	1	363.057	877.098	125.000	363.057	877.098	-125.000/
3369	2025	1	412.861	1161.203	125.000	412.861	1161.203	-125.000/
3370	2026	1	403.147	1114.891	125.000	403.147	1114.891	-125.000/
3371	2027	1	422.575	1207.516	125.000	422.575	1207.516	-125.000/
3372	2028	1	430.239	1256.126	125.000	430.239	1256.126	-125.000/
3373	2029	1	333.589	688.318	125.000	333.589	688.318	-125.000/
3374	2030	1	391.937	1079.929	125.000	391.937	1079.929	-125.000/
3375	2031	1	437.902	1304.737	125.000	437.902	1304.737	-125.000/
3376	2032	1	380.727	1044.967	125.000	380.727	1044.967	-125.000/
3377	2033	1	359.134	921.017	125.000	359.134	921.017	-125.000/
3378	2034	1	300.884	228.610	125.000	300.884	228.610	-125.000/
3379	2035	1	301.768	282.219	125.000	301.768	282.219	-125.000/
3380	2036	1	300.000	175.000	125.000	300.000	175.000	-125.000/
3381	2037	1	299.655	131.254	125.000	299.655	131.254	-125.000/
3382	2038	1	301.935	335.878	125.000	301.935	335.878	-125.000/
3383	2039	1	299.310	87.508	125.000	299.310	87.508	-125.000/
3384	2040	1	299.655	43.754	125.000	299.655	43.754	-125.000/
3385	2041	1	444.665	1353.600	125.000	444.665	1353.600	-125.000/
3386	2042	1	302.102	389.538	125.000	302.102	389.538	-125.000/
3387	2043	1	300.000	0.000	125.000	300.000	0.000	-125.000/
3388	2044	1	329.530	734.875	125.000	329.530	734.875	-125.000/
3389	2045	1	301.051	443.269	125.000	301.051	443.269	-125.000/
3390	2046	1	451.427	1402.462	125.000	451.427	1402.462	-125.000/
3391	2047	1	355.210	964.937	125.000	355.210	964.937	-125.000/
3392	2048	1	300.000	497.000	125.000	300.000	497.000	-125.000/
3393	2049	1	325.471	781.431	125.000	325.471	781.431	-125.000/
3394	2050	1	457.134	1451.231	125.000	457.134	1451.231	-125.000/
3395	2051	1	296.168	544.788	125.000	296.168	544.788	-125.000/

3396	2052	1	352.651	1003.894	125.000	352.651	1003.894	-125.000/
3397	2053	1	321.779	826.549	125.000	321.779	826.549	-125.000/
3398	2054	1	462.841	1500.000	125.000	462.841	1500.000	-125.000/
3399	2055	1	292.336	592.576	125.000	292.336	592.576	-125.000/
3400	2056	1	350.092	1042.851	125.000	350.092	1042.851	-125.000/
3401	2057	1	356.065	1082.741	125.000	356.065	1082.741	-125.000/
3402	2058	1	362.039	1122.630	125.000	362.039	1122.630	-125.000/
3403	2059	1	318.087	871.666	125.000	318.087	871.666	-125.000/
3404	2060	1	288.876	639.277	125.000	288.876	639.277	-125.000/
3405	2061	1	369.211	1167.567	125.000	369.211	1167.567	-125.000/
3406	2062	1	376.383	1212.503	125.000	376.383	1212.503	-125.000/
3407	2063	1	382.861	1259.802	125.000	382.861	1259.802	-125.000/
3408	2064	1	315.585	915.366	125.000	315.585	915.366	-125.000/
3409	2065	1	285.415	685.977	125.000	285.415	685.977	-125.000/
3410	2066	1	389.339	1307.100	125.000	389.339	1307.100	-125.000/
3411	2067	1	250.825	228.646	125.000	250.825	228.646	-125.000/
3412	2068	1	251.649	282.291	125.000	251.649	282.291	-125.000/
3413	2069	1	250.000	175.000	125.000	250.000	175.000	-125.000/
3414	2070	1	281.718	731.804	125.000	281.718	731.804	-125.000/
3415	2071	1	249.744	131.248	125.000	249.744	131.248	-125.000/
3416	2072	1	395.286	1355.087	125.000	395.286	1355.087	-125.000/
3417	2073	1	251.971	335.925	125.000	251.971	335.925	-125.000/
3418	2074	1	313.082	959.065	125.000	313.082	959.065	-125.000/
3419	2075	1	249.487	87.497	125.000	249.487	87.497	-125.000/
3420	2076	1	249.744	43.748	125.000	249.744	43.748	-125.000/
3421	2077	1	252.293	389.558	125.000	252.293	389.558	-125.000/
3422	2078	1	250.000	0.000	125.000	250.000	0.000	-125.000/
3423	2079	1	251.146	443.279	125.000	251.146	443.279	-125.000/
3424	2080	1	401.233	1403.074	125.000	401.233	1403.074	-125.000/
3425	2081	1	311.341	999.850	125.000	311.341	999.850	-125.000/
3426	2082	1	278.021	777.632	125.000	278.021	777.632	-125.000/
3427	2083	1	250.000	497.000	125.000	250.000	497.000	-125.000/
3428	2084	1	406.323	1451.537	125.000	406.323	1451.537	-125.000/
3429	2085	1	246.641	544.461	125.000	246.641	544.461	-125.000/
3430	2086	1	275.569	821.934	125.000	275.569	821.934	-125.000/
3431	2087	1	309.601	1040.634	125.000	309.601	1040.634	-125.000/
3432	2088	1	314.043	1082.472	125.000	314.043	1082.472	-125.000/
3433	2089	1	411.414	1500.000	125.000	411.414	1500.000	-125.000/
3434	2090	1	243.281	591.921	125.000	243.281	591.921	-125.000/
3435	2091	1	318.485	1124.311	125.000	318.485	1124.311	-125.000/
3436	2092	1	273.117	866.235	125.000	273.117	866.235	-125.000/
3437	2093	1	324.010	1169.341	125.000	324.010	1169.341	-125.000/
3438	2094	1	240.380	638.215	125.000	240.380	638.215	-125.000/
3439	2095	1	329.535	1214.371	125.000	329.535	1214.371	-125.000/
3440	2096	1	272.035	909.714	125.000	272.035	909.714	-125.000/
3441	2097	1	335.033	1261.355	125.000	335.033	1261.355	-125.000/
3442	2098	1	237.478	684.508	125.000	237.478	684.508	-125.000/
3443	2099	1	270.954	953.193	125.000	270.954	953.193	-125.000/
3444	2100	1	340.531	1308.338	125.000	340.531	1308.338	-125.000/
3445	2101	1	234.573	729.907	125.000	234.573	729.907	-125.000/
3446	2102	1	345.616	1355.834	125.000	345.616	1355.834	-125.000/
3447	2103	1	270.032	995.805	125.000	270.032	995.805	-125.000/
3448	2104	1	200.765	228.681	125.000	200.765	228.681	-125.000/
3449	2105	1	201.531	282.363	125.000	201.531	282.363	-125.000/
3450	2106	1	200.000	175.000	125.000	200.000	175.000	-125.000/
3451	2107	1	199.832	131.243	125.000	199.832	131.243	-125.000/
3452	2108	1	202.007	335.971	125.000	202.007	335.971	-125.000/
3453	2109	1	199.665	87.485	125.000	199.665	87.485	-125.000/
3454	2110	1	199.832	43.743	125.000	199.832	43.743	-125.000/
3455	2111	1	202.484	389.579	125.000	202.484	389.579	-125.000/
3456	2112	1	200.000	0.000	125.000	200.000	0.000	-125.000/
3457	2113	1	231.669	775.305	125.000	231.669	775.305	-125.000/
3458	2114	1	350.700	1403.330	125.000	350.700	1403.330	-125.000/
3459	2115	1	201.242	443.290	125.000	201.242	443.290	-125.000/
3460	2116	1	269.110	1038.417	125.000	269.110	1038.417	-125.000/
3461	2117	1	200.000	497.000	125.000	200.000	497.000	-125.000/

3462	2118	1	230.346	819.002	125.000	230.346	819.002	-125.000/
3463	2119	1	272.020	1082.204	125.000	272.020	1082.204	-125.000/
3464	2120	1	355.344	1451.665	125.000	355.344	1451.665	-125.000/
3465	2121	1	197.113	544.133	125.000	197.113	544.133	-125.000/
3466	2122	1	274.930	1125.992	125.000	274.930	1125.992	-125.000/
3467	2123	1	229.022	862.699	125.000	229.022	862.699	-125.000/
3468	2124	1	359.987	1500.000	125.000	359.987	1500.000	-125.000/
3469	2125	1	278.808	1171.115	125.000	278.808	1171.115	-125.000/
3470	2126	1	194.227	591.267	125.000	194.227	591.267	-125.000/
3471	2127	1	228.844	905.444	125.000	228.844	905.444	-125.000/
3472	2128	1	282.687	1216.238	125.000	282.687	1216.238	-125.000/
3473	2129	1	191.884	637.153	125.000	191.884	637.153	-125.000/
3474	2130	1	228.666	948.189	125.000	228.666	948.189	-125.000/
3475	2131	1	287.205	1262.907	125.000	287.205	1262.907	-125.000/
3476	2132	1	189.541	683.039	125.000	189.541	683.039	-125.000/
3477	2133	1	291.723	1309.576	125.000	291.723	1309.576	-125.000/
3478	2134	1	227.263	992.622	125.000	227.263	992.622	-125.000/
3479	2135	1	187.429	728.009	125.000	187.429	728.009	-125.000/
3480	2136	1	295.945	1356.582	125.000	295.945	1356.582	-125.000/
3481	2137	1	150.546	228.680	125.000	150.546	228.680	-125.000/
3482	2138	1	225.861	1037.055	125.000	225.861	1037.055	-125.000/
3483	2139	1	150.000	175.000	125.000	150.000	175.000	-125.000/
3484	2140	1	151.093	282.359	125.000	151.093	282.359	-125.000/
3485	2141	1	149.753	131.229	125.000	149.753	131.229	-125.000/
3486	2142	1	185.317	772.978	125.000	185.317	772.978	-125.000/
3487	2143	1	151.440	336.006	125.000	151.440	336.006	-125.000/
3488	2144	1	149.507	87.459	125.000	149.507	87.459	-125.000/
3489	2145	1	149.753	43.729	125.000	149.753	43.729	-125.000/
3490	2146	1	151.786	389.652	125.000	151.786	389.652	-125.000/
3491	2147	1	150.000	0.000	125.000	150.000	0.000	-125.000/
3492	2148	1	300.167	1403.587	125.000	300.167	1403.587	-125.000/
3493	2149	1	227.787	1081.878	125.000	227.787	1081.878	-125.000/
3494	2150	1	150.893	443.326	125.000	150.893	443.326	-125.000/
3495	2151	1	185.122	816.070	125.000	185.122	816.070	-125.000/
3496	2152	1	150.000	497.000	125.000	150.000	497.000	-125.000/
3497	2153	1	229.713	1126.702	125.000	229.713	1126.702	-125.000/
3498	2154	1	184.927	859.162	125.000	184.927	859.162	-125.000/
3499	2155	1	304.364	1451.793	125.000	304.364	1451.793	-125.000/
3500	2156	1	147.769	543.799	125.000	147.769	543.799	-125.000/
3501	2157	1	185.652	901.174	125.000	185.652	901.174	-125.000/
3502	2158	1	232.562	1172.242	125.000	232.562	1172.242	-125.000/
3503	2159	1	308.561	1500.000	125.000	308.561	1500.000	-125.000/
3504	2160	1	145.539	590.598	125.000	145.539	590.598	-125.000/
3505	2161	1	186.378	943.185	125.000	186.378	943.185	-125.000/
3506	2162	1	235.411	1217.782	125.000	235.411	1217.782	-125.000/
3507	2163	1	143.762	636.332	125.000	143.762	636.332	-125.000/
3508	2164	1	239.051	1264.204	125.000	239.051	1264.204	-125.000/
3509	2165	1	184.495	989.439	125.000	184.495	989.439	-125.000/
3510	2166	1	141.985	682.065	125.000	141.985	682.065	-125.000/
3511	2167	1	242.691	1310.625	125.000	242.691	1310.625	-125.000/
3512	2168	1	140.734	726.773	125.000	140.734	726.773	-125.000/
3513	2169	1	182.613	1035.693	125.000	182.613	1035.693	-125.000/
3514	2170	1	246.274	1357.527	125.000	246.274	1357.527	-125.000/
3515	2171	1	139.483	771.481	125.000	139.483	771.481	-125.000/
3516	2172	1	183.554	1081.553	125.000	183.554	1081.553	-125.000/
3517	2173	1	100.328	228.678	125.000	100.328	228.678	-125.000/
3518	2174	1	100.000	175.000	125.000	100.000	175.000	-125.000/
3519	2175	1	100.655	282.355	125.000	100.655	282.355	-125.000/
3520	2176	1	99.675	131.216	125.000	99.675	131.216	-125.000/
3521	2177	1	140.131	814.078	125.000	140.131	814.078	-125.000/
3522	2178	1	99.349	87.432	125.000	99.349	87.432	-125.000/
3523	2179	1	100.872	336.040	125.000	100.872	336.040	-125.000/
3524	2180	1	99.675	43.716	125.000	99.675	43.716	-125.000/
3525	2181	1	100.000	0.000	125.000	100.000	0.000	-125.000/
3526	2182	1	101.089	389.725	125.000	101.089	389.725	-125.000/
3527	2183	1	249.858	1404.429	125.000	249.858	1404.429	-125.000/



3528	2184	1	140.780	856.675	125.000	140.780	856.675	-125.000/
3529	2185	1	100.545	443.362	125.000	100.545	443.362	-125.000/
3530	2186	1	184.496	1127.413	125.000	184.496	1127.413	-125.000/
3531	2187	1	144.606	895.245	125.000	144.606	895.245	-125.000/
3532	2188	1	148.431	933.814	125.000	148.431	933.814	-125.000/
3533	2189	1	100.000	497.000	125.000	100.000	497.000	-125.000/
3534	2190	1	253.496	1452.214	125.000	253.496	1452.214	-125.000/
3535	2191	1	186.316	1173.369	125.000	186.316	1173.369	-125.000/
3536	2192	1	98.426	543.465	125.000	98.426	543.465	-125.000/
3537	2193	1	96.851	589.930	125.000	96.851	589.930	-125.000/
3538	2194	1	257.134	1500.000	125.000	257.134	1500.000	-125.000/
3539	2195	1	188.136	1219.326	125.000	188.136	1219.326	-125.000/
3540	2196	1	143.850	984.232	125.000	143.850	984.232	-125.000/
3541	2197	1	95.640	635.510	125.000	95.640	635.510	-125.000/
3542	2198	1	190.897	1265.500	125.000	190.897	1265.500	-125.000/
3543	2199	1	94.429	681.091	125.000	94.429	681.091	-125.000/
3544	2200	1	139.268	1034.650	125.000	139.268	1034.650	-125.000/
3545	2201	1	94.038	725.538	125.000	94.038	725.538	-125.000/
3546	2202	1	193.658	1311.674	125.000	193.658	1311.674	-125.000/
3547	2203	1	93.648	769.984	125.000	93.648	769.984	-125.000/
3548	2204	1	138.948	1081.603	125.000	138.948	1081.603	-125.000/
3549	2205	1	196.604	1358.473	125.000	196.604	1358.473	-125.000/
3550	2206	1	95.141	812.086	125.000	95.141	812.086	-125.000/
3551	2207	1	110.485	924.444	125.000	110.485	924.444	-125.000/
3552	2208	1	103.559	889.316	125.000	103.559	889.316	-125.000/
3553	2209	1	96.633	854.187	125.000	96.633	854.187	-125.000/
3554	2210	1	50.000	175.000	125.000	50.000	175.000	-125.000/
3555	2211	1	50.164	228.672	125.000	50.164	228.672	-125.000/
3556	2212	1	49.837	131.233	125.000	49.837	131.233	-125.000/
3557	2213	1	50.328	282.344	125.000	50.328	282.344	-125.000/
3558	2214	1	49.675	87.466	125.000	49.675	87.466	-125.000/
3559	2215	1	49.837	43.733	125.000	49.837	43.733	-125.000/
3560	2216	1	50.436	336.020	125.000	50.436	336.020	-125.000/
3561	2217	1	138.628	1128.556	125.000	138.628	1128.556	-125.000/
3562	2218	1	199.549	1405.271	125.000	199.549	1405.271	-125.000/
3563	2219	1	50.000	0.000	125.000	50.000	0.000	-125.000/
3564	2220	1	50.545	389.696	125.000	50.545	389.696	-125.000/
3565	2221	1	50.272	443.348	125.000	50.272	443.348	-125.000/
3566	2222	1	139.654	1174.621	125.000	139.654	1174.621	-125.000/
3567	2223	1	50.000	497.000	125.000	50.000	497.000	-125.000/
3568	2224	1	103.205	979.025	125.000	103.205	979.025	-125.000/
3569	2225	1	202.628	1452.636	125.000	202.628	1452.636	-125.000/
3570	2226	1	49.213	543.028	125.000	49.213	543.028	-125.000/
3571	2227	1	140.680	1220.686	125.000	140.680	1220.686	-125.000/
3572	2228	1	48.426	589.056	125.000	48.426	589.056	-125.000/
3573	2229	1	205.707	1500.000	125.000	205.707	1500.000	-125.000/
3574	2230	1	47.820	634.642	125.000	47.820	634.642	-125.000/
3575	2231	1	142.851	1266.836	125.000	142.851	1266.836	-125.000/
3576	2232	1	95.924	1033.607	125.000	95.924	1033.607	-125.000/
3577	2233	1	47.214	680.227	125.000	47.214	680.227	-125.000/
3578	2234	1	47.019	725.246	125.000	47.019	725.246	-125.000/
3579	2235	1	145.022	1312.985	125.000	145.022	1312.985	-125.000/
3580	2236	1	94.342	1081.653	125.000	94.342	1081.653	-125.000/
3581	2237	1	46.824	770.265	125.000	46.824	770.265	-125.000/
3582	2238	1	147.262	1359.478	125.000	147.262	1359.478	-125.000/
3583	2239	1	47.570	814.111	125.000	47.570	814.111	-125.000/
3584	2240	1	92.761	1129.699	125.000	92.761	1129.699	-125.000/
3585	2241	1	48.317	857.957	125.000	48.317	857.957	-125.000/
3586	2242	1	51.780	898.317	125.000	51.780	898.317	-125.000/
3587	2243	1	0.000	175.000	125.000	0.000	175.000	-125.000/
3588	2244	1	0.000	131.250	125.000	0.000	131.250	-125.000/
3589	2245	1	0.000	228.667	125.000	0.000	228.667	-125.000/
3590	2246	1	0.000	87.500	125.000	0.000	87.500	-125.000/
3591	2247	1	0.000	282.333	125.000	0.000	282.333	-125.000/
3592	2248	1	149.501	1405.972	125.000	149.501	1405.972	-125.000/
3593	2249	1	0.000	43.750	125.000	0.000	43.750	-125.000/

3594	2250	1	55.243	938.677	125.000	55.243	938.677	-125.000/
3595	2251	1	0.000	336.000	125.000	0.000	336.000	-125.000/
3596	2252	1	0.000	0.000	125.000	0.000	0.000	-125.000/
3597	2253	1	0.000	389.667	125.000	0.000	389.667	-125.000/
3598	2254	1	92.992	1175.873	125.000	92.992	1175.873	-125.000/
3599	2255	1	0.000	443.333	125.000	0.000	443.333	-125.000/
3600	2256	1	0.000	497.000	125.000	0.000	497.000	-125.000/
3601	2257	1	151.890	1452.986	125.000	151.890	1452.986	-125.000/
3602	2258	1	0.000	542.591	125.000	0.000	542.591	-125.000/
3603	2259	1	51.602	988.763	125.000	51.602	988.763	-125.000/
3604	2260	1	93.223	1222.047	125.000	93.223	1222.047	-125.000/
3605	2261	1	0.000	588.182	125.000	0.000	588.182	-125.000/
3606	2262	1	154.280	1500.000	125.000	154.280	1500.000	-125.000/
3607	2263	1	0.000	633.773	125.000	0.000	633.773	-125.000/
3608	2264	1	94.805	1268.171	125.000	94.805	1268.171	-125.000/
3609	2265	1	0.000	679.364	125.000	0.000	679.364	-125.000/
3610	2266	1	47.962	1038.849	125.000	47.962	1038.849	-125.000/
3611	2267	1	0.000	724.955	125.000	0.000	724.955	-125.000/
3612	2268	1	96.386	1314.295	125.000	96.386	1314.295	-125.000/
3613	2269	1	47.171	1085.667	125.000	47.171	1085.667	-125.000/
3614	2270	1	0.000	770.545	125.000	0.000	770.545	-125.000/
3615	2271	1	0.000	816.136	125.000	0.000	816.136	-125.000/
3616	2272	1	97.919	1360.484	125.000	97.919	1360.484	-125.000/
3617	2273	1	46.380	1132.486	125.000	46.380	1132.486	-125.000/
3618	2274	1	0.000	861.727	125.000	0.000	861.727	-125.000/
3619	2275	1	-50.000	175.000	125.000	-50.000	175.000	-125.000/
3620	2276	1	99.452	1406.673	125.000	99.452	1406.673	-125.000/
3621	2277	1	-50.222	228.710	125.000	-50.222	228.710	-125.000/
3622	2278	1	-50.443	282.420	125.000	-50.443	282.420	-125.000/
3623	2279	1	46.496	1178.368	125.000	46.496	1178.368	-125.000/
3624	2280	1	0.000	907.318	125.000	0.000	907.318	-125.000/
3625	2281	1	-50.488	336.119	125.000	-50.488	336.119	-125.000/
3626	2282	1	-50.533	389.818	125.000	-50.533	389.818	-125.000/
3627	2283	1	-50.266	443.409	125.000	-50.266	443.409	-125.000/
3628	2284	1	0.000	952.909	125.000	0.000	952.909	-125.000/
3629	2285	1	101.153	1453.337	125.000	101.153	1453.337	-125.000/
3630	2286	1	-50.000	497.000	125.000	-50.000	497.000	-125.000/
3631	2287	1	46.612	1224.251	125.000	46.612	1224.251	-125.000/
3632	2288	1	0.000	998.500	125.000	0.000	998.500	-125.000/
3633	2289	1	102.854	1500.000	125.000	102.854	1500.000	-125.000/
3634	2290	1	47.402	1270.108	125.000	47.402	1270.108	-125.000/
3635	2291	1	0.000	1044.091	125.000	0.000	1044.091	-125.000/
3636	2292	1	48.193	1315.966	125.000	48.193	1315.966	-125.000/
3637	2293	1	0.000	1089.682	125.000	0.000	1089.682	-125.000/
3638	2294	1	48.960	1361.856	125.000	48.960	1361.856	-125.000/
3639	2295	1	0.000	1135.273	125.000	0.000	1135.273	-125.000/
3640	2296	1	0.000	1180.864	125.000	0.000	1180.864	-125.000/
3641	2297	1	49.726	1407.746	125.000	49.726	1407.746	-125.000/
3642	2298	1	-100.000	175.000	125.000	-100.000	175.000	-125.000/
3643	2299	1	-100.443	228.753	125.000	-100.443	228.753	-125.000/
3644	2300	1	-100.886	282.506	125.000	-100.886	282.506	-125.000/
3645	2301	1	-100.976	336.237	125.000	-100.976	336.237	-125.000/
3646	2302	1	-101.066	389.969	125.000	-101.066	389.969	-125.000/
3647	2303	1	0.000	1226.455	125.000	0.000	1226.455	-125.000/
3648	2304	1	-100.533	443.485	125.000	-100.533	443.485	-125.000/
3649	2305	1	50.576	1453.873	125.000	50.576	1453.873	-125.000/
3650	2306	1	-100.000	497.000	125.000	-100.000	497.000	-125.000/
3651	2307	1	0.000	1272.045	125.000	0.000	1272.045	-125.000/
3652	2308	1	51.427	1500.000	125.000	51.427	1500.000	-125.000/
3653	2309	1	0.000	1317.636	125.000	0.000	1317.636	-125.000/
3654	2310	1	0.000	1363.227	125.000	0.000	1363.227	-125.000/
3655	2311	1	0.000	1408.818	125.000	0.000	1408.818	-125.000/
3656	2312	1	-150.000	175.000	125.000	-150.000	175.000	-125.000/
3657	2313	1	-150.545	228.753	125.000	-150.545	228.753	-125.000/
3658	2314	1	-151.090	282.506	125.000	-151.090	282.506	-125.000/
3659	2315	1	-151.060	336.205	125.000	-151.060	336.205	-125.000/

3660	2316	1	-151.031	389.905	125.000	-151.031	389.905	-125.000/
3661	2317	1	-150.516	443.452	125.000	-150.516	443.452	-125.000/
3662	2318	1	0.000	1454.409	125.000	0.000	1454.409	-125.000/
3663	2319	1	-150.000	497.000	125.000	-150.000	497.000	-125.000/
3664	2320	1	0.000	1500.000	125.000	0.000	1500.000	-125.000/
3665	2321	1	-200.000	175.000	125.000	-200.000	175.000	-125.000/
3666	2322	1	-200.647	228.753	125.000	-200.647	228.753	-125.000/
3667	2323	1	-201.293	282.507	125.000	-201.293	282.507	-125.000/
3668	2324	1	-201.145	336.173	125.000	-201.145	336.173	-125.000/
3669	2325	1	-200.997	389.840	125.000	-200.997	389.840	-125.000/
3670	2326	1	-200.498	443.420	125.000	-200.498	443.420	-125.000/
3671	2327	1	-200.000	497.000	125.000	-200.000	497.000	-125.000/
3672	2328	1	-250.000	175.000	125.000	-250.000	175.000	-125.000/
3673	2329	1	-250.883	228.763	125.000	-250.883	228.763	-125.000/
3674	2330	1	-251.766	282.525	125.000	-251.766	282.525	-125.000/
3675	2331	1	-251.539	336.194	125.000	-251.539	336.194	-125.000/
3676	2332	1	-251.312	389.863	125.000	-251.312	389.863	-125.000/
3677	2333	1	-250.656	443.431	125.000	-250.656	443.431	-125.000/
3678	2334	1	-250.000	497.000	125.000	-250.000	497.000	-125.000/
3679	2335	1	-300.000	175.000	125.000	-300.000	175.000	-125.000/
3680	2336	1	-301.119	228.772	125.000	-301.119	228.772	-125.000/
3681	2337	1	-302.239	282.544	125.000	-302.239	282.544	-125.000/
3682	2338	1	-301.934	336.214	125.000	-301.934	336.214	-125.000/
3683	2339	1	-301.628	389.885	125.000	-301.628	389.885	-125.000/
3684	2340	1	-300.814	443.443	125.000	-300.814	443.443	-125.000/
3685	2341	1	-300.000	497.000	125.000	-300.000	497.000	-125.000/
3686	2342	1	-350.000	175.000	125.000	-350.000	175.000	-125.000/
3687	2343	1	-351.254	228.808	125.000	-351.254	228.808	-125.000/
3688	2344	1	-352.508	282.615	125.000	-352.508	282.615	-125.000/
3689	2345	1	-352.217	336.284	125.000	-352.217	336.284	-125.000/
3690	2346	1	-351.927	389.953	125.000	-351.927	389.953	-125.000/
3691	2347	1	-350.964	443.476	125.000	-350.964	443.476	-125.000/
3692	2348	1	-350.000	497.000	125.000	-350.000	497.000	-125.000/
3693	2349	1	-400.000	175.000	125.000	-400.000	175.000	-125.000/
3694	2350	1	-401.388	228.844	125.000	-401.388	228.844	-125.000/
3695	2351	1	-402.777	282.687	125.000	-402.777	282.687	-125.000/
3696	2352	1	-402.501	336.354	125.000	-402.501	336.354	-125.000/
3697	2353	1	-402.226	390.020	125.000	-402.226	390.020	-125.000/
3698	2354	1	-401.113	443.510	125.000	-401.113	443.510	-125.000/
3699	2355	1	-400.000	497.000	125.000	-400.000	497.000	-125.000/
3700	2356	1	-450.000	175.000	125.000	-450.000	175.000	-125.000/
3701	2357	1	-451.348	229.010	125.000	-451.348	229.010	-125.000/
3702	2358	1	-452.696	283.020	125.000	-452.696	283.020	-125.000/
3703	2359	1	-452.511	336.672	125.000	-452.511	336.672	-125.000/
3704	2360	1	-452.326	390.323	125.000	-452.326	390.323	-125.000/
3705	2361	1	-451.163	443.661	125.000	-451.163	443.661	-125.000/
3706	2362	1	-450.000	497.000	125.000	-450.000	497.000	-125.000/
3707	2363	1	-500.000	175.000	125.000	-500.000	175.000	-125.000/
3708	2364	1	-501.307	229.177	125.000	-501.307	229.177	-125.000/
3709	2365	1	-502.615	283.354	125.000	-502.615	283.354	-125.000/
3710	2366	1	-502.521	336.990	125.000	-502.521	336.990	-125.000/
3711	2367	1	-502.427	390.626	125.000	-502.427	390.626	-125.000/
3712	2368	1	-501.213	443.813	125.000	-501.213	443.813	-125.000/
3713	2369	1	-500.000	497.000	125.000	-500.000	497.000	-125.000/
3714	2370	1	-550.000	175.000	125.000	-550.000	175.000	-125.000/
3715	2371	1	-551.092	229.170	125.000	-551.092	229.170	-125.000/
3716	2372	1	-552.184	283.340	125.000	-552.184	283.340	-125.000/
3717	2373	1	-552.093	336.948	125.000	-552.093	336.948	-125.000/
3718	2374	1	-552.001	390.557	125.000	-552.001	390.557	-125.000/
3719	2375	1	-551.001	443.778	125.000	-551.001	443.778	-125.000/
3720	2376	1	-550.000	497.000	125.000	-550.000	497.000	-125.000/
3721	2377	1	-600.000	175.000	125.000	-600.000	175.000	-125.000/
3722	2378	1	-600.877	229.163	125.000	-600.877	229.163	-125.000/
3723	2379	1	-601.754	283.326	125.000	-601.754	283.326	-125.000/
3724	2380	1	-601.664	336.907	125.000	-601.664	336.907	-125.000/
3725	2381	1	-601.575	390.487	125.000	-601.575	390.487	-125.000/

3726	2382	1	-600.788	443.744	125.000	-600.788	443.744	-125.000/
3727	2383	1	-600.000	497.000	125.000	-600.000	497.000	-125.000/
3728	2384	1	-650.000	175.000	125.000	-650.000	175.000	-125.000/
3729	2385	1	-650.744	228.808	125.000	-650.744	228.808	-125.000/
3730	2386	1	-651.488	282.615	125.000	-651.488	282.615	-125.000/
3731	2387	1	-651.313	336.234	125.000	-651.313	336.234	-125.000/
3732	2388	1	-651.138	389.854	125.000	-651.138	389.854	-125.000/
3733	2389	1	-650.569	443.427	125.000	-650.569	443.427	-125.000/
3734	2390	1	-650.000	497.000	125.000	-650.000	497.000	-125.000/
3735	2391	1	-700.000	175.000	125.000	-700.000	175.000	-125.000/
3736	2392	1	-700.611	228.452	125.000	-700.611	228.452	-125.000/
3737	2393	1	-701.222	281.905	125.000	-701.222	281.905	-125.000/
3738	2394	1	-700.961	335.562	125.000	-700.961	335.562	-125.000/
3739	2395	1	-700.701	389.220	125.000	-700.701	389.220	-125.000/
3740	2396	1	-700.350	443.110	125.000	-700.350	443.110	-125.000/
3741	2397	1	-700.000	497.000	125.000	-700.000	497.000	-125.000/
3742	2398	1	-750.000	175.000	125.000	-750.000	175.000	-125.000/
3743	2399	1	-750.265	228.175	125.000	-750.265	228.175	-125.000/
3744	2400	1	-750.531	281.350	125.000	-750.531	281.350	-125.000/
3745	2401	1	-750.454	335.181	125.000	-750.454	335.181	-125.000/
3746	2402	1	-750.377	389.012	125.000	-750.377	389.012	-125.000/
3747	2403	1	-750.189	443.006	125.000	-750.189	443.006	-125.000/
3748	2404	1	-750.000	497.000	125.000	-750.000	497.000	-125.000/
3749	2405	1	-800.000	175.000	125.000	-800.000	175.000	-125.000/
3750	2406	1	-799.920	227.898	125.000	-799.920	227.898	-125.000/
3751	2407	1	-799.840	280.795	125.000	-799.840	280.795	-125.000/
3752	2408	1	-799.947	334.799	125.000	-799.947	334.799	-125.000/
3753	2409	1	-800.053	388.804	125.000	-800.053	388.804	-125.000/
3754	2410	1	-800.027	442.902	125.000	-800.027	442.902	-125.000/
3755	2411	1	-800.000	497.000	125.000	-800.000	497.000	-125.000/
3756	2412	1	-850.000	175.000	125.000	-850.000	175.000	-125.000/
3757	2413	1	-849.924	227.989	125.000	-849.924	227.989	-125.000/
3758	2414	1	-849.848	280.978	125.000	-849.848	280.978	-125.000/
3759	2415	1	-849.855	334.740	125.000	-849.855	334.740	-125.000/
3760	2416	1	-849.863	388.501	125.000	-849.863	388.501	-125.000/
3761	2417	1	-849.931	442.751	125.000	-849.931	442.751	-125.000/
3762	2418	1	-850.000	497.000	125.000	-850.000	497.000	-125.000/
3763	2419	1	-900.000	175.000	125.000	-900.000	175.000	-125.000/
3764	2420	1	-899.928	228.080	125.000	-899.928	228.080	-125.000/
3765	2421	1	-899.856	281.160	125.000	-899.856	281.160	-125.000/
3766	2422	1	-899.764	334.680	125.000	-899.764	334.680	-125.000/
3767	2423	1	-899.673	388.199	125.000	-899.673	388.199	-125.000/
3768	2424	1	-899.836	442.599	125.000	-899.836	442.599	-125.000/
3769	2425	1	-900.000	497.000	125.000	-900.000	497.000	-125.000/
3770	2426	1	-950.000	175.000	125.000	-950.000	175.000	-125.000/
3771	2427	1	-949.942	227.952	125.000	-949.942	227.952	-125.000/
3772	2428	1	-949.883	280.904	125.000	-949.883	280.904	-125.000/
3773	2429	1	-949.886	334.664	125.000	-949.886	334.664	-125.000/
3774	2430	1	-949.889	388.424	125.000	-949.889	388.424	-125.000/
3775	2431	1	-949.945	442.712	125.000	-949.945	442.712	-125.000/
3776	2432	1	-950.000	497.000	125.000	-950.000	497.000	-125.000/
3777	2433	1	-1000.000	175.000	125.000	-1000.000	175.000	-125.000/
3778	2434	1	-999.955	227.824	125.000	-999.955	227.824	-125.000/
3779	2435	1	-999.910	280.648	125.000	-999.910	280.648	-125.000/
3780	2436	1	-1000.008	334.648	125.000	-1000.008	334.648	-125.000/
3781	2437	1	-1000.106	388.648	125.000	-1000.106	388.648	-125.000/
3782	2438	1	-1000.053	442.824	125.000	-1000.053	442.824	-125.000/
3783	2439	1	-1000.000	497.000	125.000	-1000.000	497.000	-125.000/
3784	2440	1	-1050.000	175.000	125.000	-1050.000	175.000	-125.000/
3785	2441	1	-1050.070	228.050	125.000	-1050.070	228.050	-125.000/
3786	2442	1	-1050.139	281.100	125.000	-1050.139	281.100	-125.000/
3787	2443	1	-1050.306	334.899	125.000	-1050.306	334.899	-125.000/
3788	2444	1	-1050.473	388.697	125.000	-1050.473	388.697	-125.000/
3789	2445	1	-1050.237	442.849	125.000	-1050.237	442.849	-125.000/
3790	2446	1	-1050.000	497.000	125.000	-1050.000	497.000	-125.000/
3791	2447	1	-1100.000	175.000	125.000	-1100.000	175.000	-125.000/

3792	2448	1	-1100.184	228.276	125.000	-1100.184	228.276	-125.000/
3793	2449	1	-1100.368	281.552	125.000	-1100.368	281.552	-125.000/
3794	2450	1	-1100.604	335.149	125.000	-1100.604	335.149	-125.000/
3795	2451	1	-1100.841	388.746	125.000	-1100.841	388.746	-125.000/
3796	2452	1	-1100.420	442.873	125.000	-1100.420	442.873	-125.000/
3797	2453	1	-1100.000	497.000	125.000	-1100.000	497.000	-125.000/
3798	2454	1	-1150.000	175.000	125.000	-1150.000	175.000	-125.000/
3799	2455	1	-1150.272	228.342	125.000	-1150.272	228.342	-125.000/
3800	2456	1	-1150.545	281.684	125.000	-1150.545	281.684	-125.000/
3801	2457	1	-1150.888	335.403	125.000	-1150.888	335.403	-125.000/
3802	2458	1	-1151.232	389.121	125.000	-1151.232	389.121	-125.000/
3803	2459	1	-1150.616	443.061	125.000	-1150.616	443.061	-125.000/
3804	2460	1	-1150.000	497.000	125.000	-1150.000	497.000	-125.000/
3805	2461	1	-1200.000	175.000	125.000	-1200.000	175.000	-125.000/
3806	2462	1	-1200.361	228.408	125.000	-1200.361	228.408	-125.000/
3807	2463	1	-1200.721	281.816	125.000	-1200.721	281.816	-125.000/
3808	2464	1	-1201.172	335.656	125.000	-1201.172	335.656	-125.000/
3809	2465	1	-1201.623	389.496	125.000	-1201.623	389.496	-125.000/
3810	2466	1	-1200.811	443.248	125.000	-1200.811	443.248	-125.000/
3811	2467	1	-1200.000	497.000	125.000	-1200.000	497.000	-125.000/
3812	2468	1	-1250.000	175.000	125.000	-1250.000	175.000	-125.000/
3813	2469	1	-1250.403	228.534	125.000	-1250.403	228.534	-125.000/
3814	2470	1	-1250.806	282.069	125.000	-1250.806	282.069	-125.000/
3815	2471	1	-1251.094	335.956	125.000	-1251.094	335.956	-125.000/
3816	2472	1	-1251.382	389.842	125.000	-1251.382	389.842	-125.000/
3817	2473	1	-1250.691	443.421	125.000	-1250.691	443.421	-125.000/
3818	2474	1	-1250.000	497.000	125.000	-1250.000	497.000	-125.000/
3819	2475	1	-1300.000	175.000	125.000	-1300.000	175.000	-125.000/
3820	2476	1	-1300.446	228.661	125.000	-1300.446	228.661	-125.000/
3821	2477	1	-1300.892	282.321	125.000	-1300.892	282.321	-125.000/
3822	2478	1	-1301.016	336.255	125.000	-1301.016	336.255	-125.000/
3823	2479	1	-1301.141	390.189	125.000	-1301.141	390.189	-125.000/
3824	2480	1	-1300.570	443.594	125.000	-1300.570	443.594	-125.000/
3825	2481	1	-1300.000	497.000	125.000	-1300.000	497.000	-125.000/
3826	2482	1	-1350.000	175.000	125.000	-1350.000	175.000	-125.000/
3827	2483	1	-1350.212	228.601	125.000	-1350.212	228.601	-125.000/
3828	2484	1	-1350.424	282.202	125.000	-1350.424	282.202	-125.000/
3829	2485	1	-1350.578	335.796	125.000	-1350.578	335.796	-125.000/
3830	2486	1	-1350.732	389.390	125.000	-1350.732	389.390	-125.000/
3831	2487	1	-1350.366	443.195	125.000	-1350.366	443.195	-125.000/
3832	2488	1	-1350.000	497.000	125.000	-1350.000	497.000	-125.000/
3833	2489	1	-1400.000	175.000	125.000	-1400.000	175.000	-125.000/
3834	2490	1	-1399.978	228.541	125.000	-1399.978	228.541	-125.000/
3835	2491	1	-1399.956	282.082	125.000	-1399.956	282.082	-125.000/
3836	2492	1	-1400.140	335.337	125.000	-1400.140	335.337	-125.000/
3837	2493	1	-1400.323	388.591	125.000	-1400.323	388.591	-125.000/
3838	2494	1	-1400.162	442.796	125.000	-1400.162	442.796	-125.000/
3839	2495	1	-1400.000	497.000	125.000	-1400.000	497.000	-125.000/
3840	2496	1	-1450.000	175.000	125.000	-1450.000	175.000	-125.000/
3841	2497	1	-1449.933	228.459	125.000	-1449.933	228.459	-125.000/
3842	2498	1	-1449.866	281.918	125.000	-1449.866	281.918	-125.000/
3843	2499	1	-1450.049	335.296	125.000	-1450.049	335.296	-125.000/
3844	2500	1	-1450.231	388.674	125.000	-1450.231	388.674	-125.000/
3845	2501	1	-1450.116	442.837	125.000	-1450.116	442.837	-125.000/
3846	2502	1	-1450.000	497.000	125.000	-1450.000	497.000	-125.000/
3847	2503	1	-1500.000	175.000	125.000	-1500.000	175.000	-125.000/
3848	2504	1	-1499.888	228.377	125.000	-1499.888	228.377	-125.000/
3849	2505	1	-1499.777	281.754	125.000	-1499.777	281.754	-125.000/
3850	2506	1	-1499.958	335.255	125.000	-1499.958	335.255	-125.000/
3851	2507	1	-1500.139	388.756	125.000	-1500.139	388.756	-125.000/
3852	2508	1	-1500.070	442.878	125.000	-1500.070	442.878	-125.000/
3853	2509	1	-1500.000	497.000	125.000	-1500.000	497.000	-125.000/
3854	2510	1	-1550.000	175.000	125.000	-1550.000	175.000	-125.000/
3855	2511	1	-1550.019	228.295	125.000	-1550.019	228.295	-125.000/
3856	2512	1	-1550.038	281.591	125.000	-1550.038	281.591	-125.000/
3857	2513	1	-1550.067	335.242	125.000	-1550.067	335.242	-125.000/

3858	2514	1	-1550.095	388.894	125.000	-1550.095	388.894	-125.000/
3859	2515	1	-1550.048	442.947	125.000	-1550.048	442.947	-125.000/
3860	2516	1	-1550.000	497.000	125.000	-1550.000	497.000	-125.000/
3861	2517	1	-1600.000	175.000	125.000	-1600.000	175.000	-125.000/
3862	2518	1	-1600.150	228.214	125.000	-1600.150	228.214	-125.000/
3863	2519	1	-1600.299	281.427	125.000	-1600.299	281.427	-125.000/
3864	2520	1	-1600.176	335.229	125.000	-1600.176	335.229	-125.000/
3865	2521	1	-1600.052	389.031	125.000	-1600.052	389.031	-125.000/
3866	2522	1	-1600.026	443.015	125.000	-1600.026	443.015	-125.000/
3867	2523	1	-1600.000	497.000	125.000	-1600.000	497.000	-125.000/
3868	2524	1	-1650.000	175.000	125.000	-1650.000	175.000	-125.000/
3869	2525	1	-1650.108	228.604	125.000	-1650.108	228.604	-125.000/
3870	2526	1	-1650.217	282.209	125.000	-1650.217	282.209	-125.000/
3871	2527	1	-1650.213	335.716	125.000	-1650.213	335.716	-125.000/
3872	2528	1	-1650.209	389.223	125.000	-1650.209	389.223	-125.000/
3873	2529	1	-1650.104	443.111	125.000	-1650.104	443.111	-125.000/
3874	2530	1	-1650.000	497.000	125.000	-1650.000	497.000	-125.000/
3875	2531	1	-1700.000	175.000	125.000	-1700.000	175.000	-125.000/
3876	2532	1	-1700.067	228.995	125.000	-1700.067	228.995	-125.000/
3877	2533	1	-1700.134	282.991	125.000	-1700.134	282.991	-125.000/
3878	2534	1	-1700.250	336.203	125.000	-1700.250	336.203	-125.000/
3879	2535	1	-1700.366	389.415	125.000	-1700.366	389.415	-125.000/
3880	2536	1	-1700.183	443.207	125.000	-1700.183	443.207	-125.000/
3881	2537	1	-1700.000	497.000	125.000	-1700.000	497.000	-125.000/
3882	2538	1	-1750.000	175.000	125.000	-1750.000	175.000	-125.000/
3883	2539	1	-1750.133	228.944	125.000	-1750.133	228.944	-125.000/
3884	2540	1	-1750.266	282.888	125.000	-1750.266	282.888	-125.000/
3885	2541	1	-1750.415	336.218	125.000	-1750.415	336.218	-125.000/
3886	2542	1	-1750.564	389.548	125.000	-1750.564	389.548	-125.000/
3887	2543	1	-1750.282	443.274	125.000	-1750.282	443.274	-125.000/
3888	2544	1	-1750.000	497.000	125.000	-1750.000	497.000	-125.000/
3889	2545	1	-1800.000	175.000	125.000	-1800.000	175.000	-125.000/
3890	2546	1	-1800.199	228.893	125.000	-1800.199	228.893	-125.000/
3891	2547	1	-1800.398	282.786	125.000	-1800.398	282.786	-125.000/
3892	2548	1	-1800.580	336.234	125.000	-1800.580	336.234	-125.000/
3893	2549	1	-1800.762	389.682	125.000	-1800.762	389.682	-125.000/
3894	2550	1	-1800.381	443.341	125.000	-1800.381	443.341	-125.000/
3895	2551	1	-1800.000	497.000	125.000	-1800.000	497.000	-125.000/
3896	2552	1	-1850.000	175.000	125.000	-1850.000	175.000	-125.000/
3897	2553	1	-1850.273	229.064	125.000	-1850.273	229.064	-125.000/
3898	2554	1	-1850.547	283.128	125.000	-1850.547	283.128	-125.000/
3899	2555	1	-1850.541	336.460	125.000	-1850.541	336.460	-125.000/
3900	2556	1	-1850.536	389.792	125.000	-1850.536	389.792	-125.000/
3901	2557	1	-1850.268	443.396	125.000	-1850.268	443.396	-125.000/
3902	2558	1	-1850.000	497.000	125.000	-1850.000	497.000	-125.000/
3903	2559	1	-1900.000	175.000	125.000	-1900.000	175.000	-125.000/
3904	2560	1	-1900.348	229.235	125.000	-1900.348	229.235	-125.000/
3905	2561	1	-1900.696	283.470	125.000	-1900.696	283.470	-125.000/
3906	2562	1	-1900.503	336.687	125.000	-1900.503	336.687	-125.000/
3907	2563	1	-1900.310	389.903	125.000	-1900.310	389.903	-125.000/
3908	2564	1	-1900.155	443.452	125.000	-1900.155	443.452	-125.000/
3909	2565	1	-1900.000	497.000	125.000	-1900.000	497.000	-125.000/
3910	2566	1	-1950.000	175.000	125.000	-1950.000	175.000	-125.000/
3911	2567	1	-1950.152	229.210	125.000	-1950.152	229.210	-125.000/
3912	2568	1	-1950.303	283.420	125.000	-1950.303	283.420	-125.000/
3913	2569	1	-1950.174	336.551	125.000	-1950.174	336.551	-125.000/
3914	2570	1	-1950.046	389.681	125.000	-1950.046	389.681	-125.000/
3915	2571	1	-1950.023	443.341	125.000	-1950.023	443.341	-125.000/
3916	2572	1	-1950.000	497.000	125.000	-1950.000	497.000	-125.000/
3917	2573	1	-2000.000	175.000	125.000	-2000.000	175.000	-125.000/
3918	2574	1	-1999.956	229.185	125.000	-1999.956	229.185	-125.000/
3919	2575	1	-1999.911	283.370	125.000	-1999.911	283.370	-125.000/
3920	2576	1	-1999.846	336.415	125.000	-1999.846	336.415	-125.000/
3921	2577	1	-1999.781	389.460	125.000	-1999.781	389.460	-125.000/
3922	2578	1	-1999.891	443.230	125.000	-1999.891	443.230	-125.000/
3923	2579	1	-2000.000	497.000	125.000	-2000.000	497.000	-125.000/

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3924 2580 1 -2050.000 175.000 125.000 -2050.000 175.000 -125.000/
3925 2581 1 -2049.978 228.926 125.000 -2049.978 228.926 -125.000/
3926 2582 1 -2049.956 282.852 125.000 -2049.956 282.852 -125.000/
3927 2583 1 -2049.923 336.207 125.000 -2049.923 336.207 -125.000/
3928 2584 1 -2049.891 389.563 125.000 -2049.891 389.563 -125.000/
3929 2585 1 -2049.945 443.282 125.000 -2049.945 443.282 -125.000/
3930 2586 1 -2050.000 497.000 125.000 -2050.000 497.000 -125.000/
3931 2587 1 -2100.000 175.000 125.000 -2100.000 175.000 -125.000/
3932 2588 1 -2100.000 228.667 125.000 -2100.000 228.667 -125.000/
3933 2589 1 -2100.000 282.333 125.000 -2100.000 282.333 -125.000/
3934 2590 1 -2100.000 336.000 125.000 -2100.000 336.000 -125.000/
3935 2591 1 -2100.000 389.667 125.000 -2100.000 389.667 -125.000/
3936 2592 1 -2100.000 443.333 125.000 -2100.000 443.333 -125.000/
3937 2593 1 -2100.000 497.000 125.000 -2100.000 497.000 -125.000/
3938 /
3939 NODAL RESTRAINTS AND PRESCRIBED D.O.F.
3940 -----
3941
3942 <<<<< FORMAT >>>>> (units = mm, degrees)(d(NODE)>0!!!) Node No. MUST be in ascending
order. Cannot repeat nodes.
3943 NODE DX-R DY-R DZ-R R1-R R2-R [#NODES d(NODE)] [#NODES d(NODE)] [#NODES
d(NODE)] /
3944 478 0 1 0 0 1/
3945 507 0 1 0 0 1/
3946 537 0 1 0 0 1/
3947 566 0 1 0 0 1/
3948 594 0 1 0 0 1/
3949 622 0 1 0 0 1/
3950 646 0 1 0 0 1/
3951 674 0 1 0 0 1/
3952 704 0 1 0 0 1/
3953 734 0 1 0 0 1/
3954 764 0 1 0 0 1/
3955 794 0 1 0 0 1/
3956 823 0 1 0 0 1/
3957 854 0 1 0 0 1/
3958 883 0 1 0 0 1/
3959 911 0 1 0 0 1/
3960 930 0 1 0 0 1/
3961 961 0 1 0 0 1/
3962 988 0 1 0 0 1/
3963 1012 0 1 0 0 1/
3964 1036 0 1 0 0 1/
3965 1054 0 1 0 0 1/
3966 1080 0 1 0 0 1/
3967 1107 0 1 0 0 1/
3968 1128 0 1 0 0 1/
3969 1155 0 1 0 0 1/
3970 1173 0 1 0 0 1/
3971 1203 0 1 0 0 1/
3972 1210 0 0 1 0 0/
3973 1216 0 0 1 0 0/
3974 1227 0 0 1 0 0/
3975 1229 0 1 0 0 1/
3976 1236 0 0 1 0 0/
3977 1239 0 0 1 0 0/
3978 1242 0 0 1 0 0/
3979 1248 0 0 1 0 0/
3980 1249 0 1 0 0 1/
3981 1254 0 0 1 0 0/
3982 1258 0 0 1 0 0/
3983 1259 0 0 1 0 0/
3984 1268 0 1 1 0 1/
3985 1289 0 1 0 0 1/
3986 1292 0 0 1 0 0/
3987 1313 0 1 0 0 1/

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3988      1320      0      0      1      0      0/
3989      1335      0      1      0      0      1/
3990      1348      0      0      1      0      0/
3991      1355      0      1      0      0      1/
3992      1377      0      0      1      0      0/
3993      1381      1      1      0      1      1/
3994      1398      0      0      1      0      0/
3995      1411      0      1      0      0      1/
3996      1421      0      0      1      0      0/
3997      1441      0      1      0      0      1/
3998      1445      0      0      1      0      0/
3999      1471      0      0      1      0      0/
4000      1474      0      1      0      0      1/
4001      1479      0      0      1      0      0/
4002      1484      0      0      1      0      0/
4003      1488      0      0      1      0      0/
4004      1493      0      0      1      0      0/
4005      1496      0      1      0      0      1/
4006      1498      0      0      1      0      0/
4007      1511      0      0      1      0      0/
4008      1518      0      0      1      0      0/
4009      1525      0      1      1      0      1/
4010      1543      0      1      0      0      1/
4011      1572      0      1      0      0      1/
4012      1591      0      1      0      0      1/
4013      1616      0      1      0      0      1/
4014      1642      0      1      0      0      1/
4015      1660      0      1      0      0      1/
4016      1687      0      1      0      0      1/
4017      1708      0      1      0      0      1/
4018      1726      0      1      0      0      1/
4019      1751      0      1      0      0      1/
4020      1775      0      1      0      0      1/
4021      1798      0      1      0      0      1/
4022      1816      0      1      0      0      1/
4023      1842      0      1      0      0      1/
4024      1870      0      1      0      0      1/
4025      1896      0      1      0      0      1/
4026      1924      0      1      0      0      1/
4027      1954      0      1      0      0      1/
4028      1984      0      1      0      0      1/
4029      2019      0      1      0      0      1/
4030      2054      0      1      0      0      1/
4031      2089      0      1      0      0      1/
4032      2124      0      1      0      0      1/
4033      2159      0      1      0      0      1/
4034      2194      0      1      0      0      1/
4035      2229      0      1      0      0      1/
4036      2262      0      1      0      0      1/
4037      2289      0      1      0      0      1/
4038      2308      0      1      0      0      1/
4039      2320      0      1      0      0      1/
4040      /
4041              AUTO GENERATE NODAL RESTRAINTS
4042              -----
4043
4044      <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc]          < RTYP = 2 or 3>
4045      RTYP   DX-R   DY-R   DZ-R   R1-R   R2-R   X1     Y1     Z1     [ NX     SX
NY     SY     NZ     SZ]   [X2     Y2     Z2]/
4046      /
4047              AUTO GENERATE RESULTS (DISP OR REACTIONS)
4048              -----
4049
4050      <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>

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4051  RTYP  D(0-5) R(0-5)   X1      Y1      Z1      [ NX      SX      NY      SY      NZ
SZ]    [X2      Y2      Z2]/
4052  /
4053                                     LINKED NODES
4054                                     -----
4055
4056  <<<<< FORMAT >>>>> [NX,NY,NZ=1, all else=0 by default] [X2 > X1 >= 0, or Y2 > Y1 >= 0,
etc] < RTYP = 2 or 3>
4057  RTYP  D(0-5)   X1      Y1      Z1      [ NX      SX      NY      SY      NZ      SZ]
[X2      Y2      Z2]/
4058  /
4059
4060  <NOTES:>
4061  Smearred Reinforcement:
4062      d - Distance from the top of the element to the centroid of the
4063      reinforcement layer.
4064
4065  Truss Elements:
4066      OS - Element offset measured from nodal location (typically middle layer).
4067      Negative OS is toward element bottom surface.
4068
4069  REF - Reinforcement Types (smearred & truss):
4070      1 - Ductile Steel Reinforcement (tension+compression)
4071      2 - Prestressing Steel (tension+compression)
4072      3 - Ductile Steel Reinforcement (tension only)
4073      4 - Ductile Steel Reinforcement (compression only)
4074
4075  Element incidences:
4076      <INC9> - Only required when nine noded element is used.
4077
4078  Element types (MUST input in this order - Shell, solid, then truss):
4079      1 - Shell elements
4080      2 - Solid elements
4081      3 - Truss elements
4082
4083  Coordinates: (Cannot use a mix of type 1 and 2 coordinates)
4084      TYPE - 1 - Top and Bottom coordinates of the node are provided.
4085      2 - Centre Line coordinates of the node are provided.
4086      3 - Coordinates of the node for the solid element are provided.
4087
4088  Restrained D.O.F.:
4089      0 - Unrestrained degree of freedom
4090      1 - Restrained degree of freedom
4091
4092  Auto generate restrained D.O.F.:
4093      TYPE - 1 - Point restraints
4094      2 - Line restraints
4095      3 - Area restraints
4096
4097  (1)  DO NOT INSERT OR DELETE ANY LINE.
4098      EXCEPTION:  INSERTION OF LINES IN THE SPACE PROVIDED FOR INPUT OF
4099      DATA.  IN THIS CASE, LEAVE LINE WITH SLASH AFTER LAST DATA LINE.
4100
4101  (2)  BLANK SPACES SHOULD BE USED TO SEPARATE DATA WITHIN A DATA LINE.
4102
4103  (3)  ELEMENT INCIDENCE NUMBER 9 (i.e. <INC9>) TO BE IGNORED WHEN 8 NODED
4104      SERENDIPITY ELEMENT USED.
4105
4106  (4)  DIMENSIONED FOR:  50 ELEMENTS, 200 NODES, 100 RESTRAINED NODES,
4107      16 CONCRETE LAYERS, 6 REINFORCEMENT LAYERS, 30 MATERIALS, 20 LAYER
4108      PATTERNS, MAXIMUM FRONTWIDTH OF 100.
4109

```

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -           D A T A     -
4          -           Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title          (30 char. max.) : SLAB
11         Load case title          (30 char. max.) : Self Weight
12         Load case file name      (8 char. max.) : LOAD1
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 0
18         No. of nodes with imposed displacements : 0
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 477
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         /
50
51         PRESCRIBED NODE DISPLACEMENTS
52         -----
53         <<<<< FORMAT >>>>>
54         NODE   DOF   DISPL   [#NODE d(NODE)] /
55         (1-5) (mm|deg)
56         /
57
58         CONCRETE PRESTRAINS
59         -----
60         <NOTE:> UNITS: me
61         <<<<< FORMAT >>>>>
62         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
63         /
64
65         GRAVITATIONAL LOADS
66         -----

```

```

67 <<<< FORMAT >>>>
68 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
69     1      0.00000  0.00000  -1.00000  0.00000/
70     2      0.00000  0.00000  -1.00000  0.00000/
71     3      0.00000  0.00000  -1.00000  0.00000/
72     4      0.00000  0.00000  -1.00000  0.00000/
73     5      0.00000  0.00000  -1.00000  0.00000/
74     6      0.00000  0.00000  -1.00000  0.00000/
75     7      0.00000  0.00000  -1.00000  0.00000/
76     8      0.00000  0.00000  -1.00000  0.00000/
77     9      0.00000  0.00000  -1.00000  0.00000/
78    10      0.00000  0.00000  -1.00000  0.00000/
79    11      0.00000  0.00000  -1.00000  0.00000/
80    12      0.00000  0.00000  -1.00000  0.00000/
81    13      0.00000  0.00000  -1.00000  0.00000/
82    14      0.00000  0.00000  -1.00000  0.00000/
83    15      0.00000  0.00000  -1.00000  0.00000/
84    16      0.00000  0.00000  -1.00000  0.00000/
85    17      0.00000  0.00000  -1.00000  0.00000/
86    18      0.00000  0.00000  -1.00000  0.00000/
87    19      0.00000  0.00000  -1.00000  0.00000/
88    20      0.00000  0.00000  -1.00000  0.00000/
89    21      0.00000  0.00000  -1.00000  0.00000/
90    22      0.00000  0.00000  -1.00000  0.00000/
91    23      0.00000  0.00000  -1.00000  0.00000/
92    24      0.00000  0.00000  -1.00000  0.00000/
93    25      0.00000  0.00000  -1.00000  0.00000/
94    26      0.00000  0.00000  -1.00000  0.00000/
95    27      0.00000  0.00000  -1.00000  0.00000/
96    28      0.00000  0.00000  -1.00000  0.00000/
97    29      0.00000  0.00000  -1.00000  0.00000/
98    30      0.00000  0.00000  -1.00000  0.00000/
99    31      0.00000  0.00000  -1.00000  0.00000/
100   32      0.00000  0.00000  -1.00000  0.00000/
101   33      0.00000  0.00000  -1.00000  0.00000/
102   34      0.00000  0.00000  -1.00000  0.00000/
103   35      0.00000  0.00000  -1.00000  0.00000/
104   36      0.00000  0.00000  -1.00000  0.00000/
105   37      0.00000  0.00000  -1.00000  0.00000/
106   38      0.00000  0.00000  -1.00000  0.00000/
107   39      0.00000  0.00000  -1.00000  0.00000/
108   40      0.00000  0.00000  -1.00000  0.00000/
109   41      0.00000  0.00000  -1.00000  0.00000/
110   42      0.00000  0.00000  -1.00000  0.00000/
111   43      0.00000  0.00000  -1.00000  0.00000/
112   44      0.00000  0.00000  -1.00000  0.00000/
113   45      0.00000  0.00000  -1.00000  0.00000/
114   46      0.00000  0.00000  -1.00000  0.00000/
115   47      0.00000  0.00000  -1.00000  0.00000/
116   48      0.00000  0.00000  -1.00000  0.00000/
117   49      0.00000  0.00000  -1.00000  0.00000/
118   50      0.00000  0.00000  -1.00000  0.00000/
119   51      0.00000  0.00000  -1.00000  0.00000/
120   52      0.00000  0.00000  -1.00000  0.00000/
121   53      0.00000  0.00000  -1.00000  0.00000/
122   54      0.00000  0.00000  -1.00000  0.00000/
123   55      0.00000  0.00000  -1.00000  0.00000/
124   56      0.00000  0.00000  -1.00000  0.00000/
125   57      0.00000  0.00000  -1.00000  0.00000/
126   58      0.00000  0.00000  -1.00000  0.00000/
127   59      0.00000  0.00000  -1.00000  0.00000/
128   60      0.00000  0.00000  -1.00000  0.00000/
129   61      0.00000  0.00000  -1.00000  0.00000/
130   62      0.00000  0.00000  -1.00000  0.00000/
131   63      0.00000  0.00000  -1.00000  0.00000/
132   64      0.00000  0.00000  -1.00000  0.00000/

```

133	65	0.00000	0.00000	-1.00000	0.00000/
134	66	0.00000	0.00000	-1.00000	0.00000/
135	67	0.00000	0.00000	-1.00000	0.00000/
136	68	0.00000	0.00000	-1.00000	0.00000/
137	69	0.00000	0.00000	-1.00000	0.00000/
138	70	0.00000	0.00000	-1.00000	0.00000/
139	71	0.00000	0.00000	-1.00000	0.00000/
140	72	0.00000	0.00000	-1.00000	0.00000/
141	73	0.00000	0.00000	-1.00000	0.00000/
142	74	0.00000	0.00000	-1.00000	0.00000/
143	75	0.00000	0.00000	-1.00000	0.00000/
144	76	0.00000	0.00000	-1.00000	0.00000/
145	77	0.00000	0.00000	-1.00000	0.00000/
146	78	0.00000	0.00000	-1.00000	0.00000/
147	79	0.00000	0.00000	-1.00000	0.00000/
148	80	0.00000	0.00000	-1.00000	0.00000/
149	81	0.00000	0.00000	-1.00000	0.00000/
150	82	0.00000	0.00000	-1.00000	0.00000/
151	83	0.00000	0.00000	-1.00000	0.00000/
152	84	0.00000	0.00000	-1.00000	0.00000/
153	85	0.00000	0.00000	-1.00000	0.00000/
154	86	0.00000	0.00000	-1.00000	0.00000/
155	87	0.00000	0.00000	-1.00000	0.00000/
156	88	0.00000	0.00000	-1.00000	0.00000/
157	89	0.00000	0.00000	-1.00000	0.00000/
158	90	0.00000	0.00000	-1.00000	0.00000/
159	91	0.00000	0.00000	-1.00000	0.00000/
160	92	0.00000	0.00000	-1.00000	0.00000/
161	93	0.00000	0.00000	-1.00000	0.00000/
162	94	0.00000	0.00000	-1.00000	0.00000/
163	95	0.00000	0.00000	-1.00000	0.00000/
164	96	0.00000	0.00000	-1.00000	0.00000/
165	97	0.00000	0.00000	-1.00000	0.00000/
166	98	0.00000	0.00000	-1.00000	0.00000/
167	99	0.00000	0.00000	-1.00000	0.00000/
168	100	0.00000	0.00000	-1.00000	0.00000/
169	101	0.00000	0.00000	-1.00000	0.00000/
170	102	0.00000	0.00000	-1.00000	0.00000/
171	103	0.00000	0.00000	-1.00000	0.00000/
172	104	0.00000	0.00000	-1.00000	0.00000/
173	105	0.00000	0.00000	-1.00000	0.00000/
174	106	0.00000	0.00000	-1.00000	0.00000/
175	107	0.00000	0.00000	-1.00000	0.00000/
176	108	0.00000	0.00000	-1.00000	0.00000/
177	109	0.00000	0.00000	-1.00000	0.00000/
178	110	0.00000	0.00000	-1.00000	0.00000/
179	111	0.00000	0.00000	-1.00000	0.00000/
180	112	0.00000	0.00000	-1.00000	0.00000/
181	113	0.00000	0.00000	-1.00000	0.00000/
182	114	0.00000	0.00000	-1.00000	0.00000/
183	115	0.00000	0.00000	-1.00000	0.00000/
184	116	0.00000	0.00000	-1.00000	0.00000/
185	117	0.00000	0.00000	-1.00000	0.00000/
186	118	0.00000	0.00000	-1.00000	0.00000/
187	119	0.00000	0.00000	-1.00000	0.00000/
188	120	0.00000	0.00000	-1.00000	0.00000/
189	121	0.00000	0.00000	-1.00000	0.00000/
190	122	0.00000	0.00000	-1.00000	0.00000/
191	123	0.00000	0.00000	-1.00000	0.00000/
192	124	0.00000	0.00000	-1.00000	0.00000/
193	125	0.00000	0.00000	-1.00000	0.00000/
194	126	0.00000	0.00000	-1.00000	0.00000/
195	127	0.00000	0.00000	-1.00000	0.00000/
196	128	0.00000	0.00000	-1.00000	0.00000/
197	129	0.00000	0.00000	-1.00000	0.00000/
198	130	0.00000	0.00000	-1.00000	0.00000/













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529      461      0.00000      0.00000      -1.00000      0.00000/
530      462      0.00000      0.00000      -1.00000      0.00000/
531      463      0.00000      0.00000      -1.00000      0.00000/
532      464      0.00000      0.00000      -1.00000      0.00000/
533      465      0.00000      0.00000      -1.00000      0.00000/
534      466      0.00000      0.00000      -1.00000      0.00000/
535      467      0.00000      0.00000      -1.00000      0.00000/
536      468      0.00000      0.00000      -1.00000      0.00000/
537      469      0.00000      0.00000      -1.00000      0.00000/
538      470      0.00000      0.00000      -1.00000      0.00000/
539      471      0.00000      0.00000      -1.00000      0.00000/
540      472      0.00000      0.00000      -1.00000      0.00000/
541      473      0.00000      0.00000      -1.00000      0.00000/
542      474      0.00000      0.00000      -1.00000      0.00000/
543      475      0.00000      0.00000      -1.00000      0.00000/
544      476      0.00000      0.00000      -1.00000      0.00000/
545      477      0.00000      0.00000      -1.00000      0.00000/

```

546 /

547

548 ADDITIONAL LUMPED MASSES

549

550 <NOTE:> UNITS: kg, m/s, m/s2

551 <<<<< FORMAT >>>>>

552 NODE DOF-X DOF-Y DOF-Z MASS Vo-X Vo-Y Vo-Z Acc-X Acc-Y Acc-Z [ #NODE  
d(NODE) ] /

553 /

554

555 IMPULSE, BLAST AND IMPACT FORCES

556

557 <NOTE:> UNITS: Sec, kN

558 <<<<< FORMAT >>>>>

559 NODE DOF T1 F1 T2 F2 T3 F3 T4 F4 [ #NODE d(NODE) ] /

560 /

561

562 GROUND ACCELERATION

563

564 <NOTE:> UNITS: Sec, G

565 <<<<< FORMAT >>>>>

566 TIME ACC-X ACC-Y ACC-Z /

567 /

568

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0    -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title          (30 char. max.) : SLAB
11         Load case title          (30 char. max.) : Disp
12         Load case file name      (8 char. max.) : LOAD2
13
14         No. of elements with a u.d.l.          : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads   : 4
18         No. of nodes with imposed displacements : 0
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads        : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads        : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         387           0.00000      0.00000      -31.6250      0.00000      0.00000/
50         825           0.00000      0.00000      -31.6250      0.00000      0.00000/
51         1655          0.00000      0.00000      -31.6250      0.00000      0.00000/
52         2207          0.00000      0.00000      -31.6250      0.00000      0.00000/
53         /
54
55         PRESCRIBED NODE DISPLACEMENTS
56         -----
57         <<<<< FORMAT >>>>>
58         NODE   DOF   DISPL   [#NODE d(NODE)] /
59         (1-5) (mm|deg)
60         /
61
62         CONCRETE PRESTRAINS
63         -----
64         <NOTE:> UNITS: me
65         <<<<< FORMAT >>>>>
66         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /

```

```

67 /
68
69             GRAVITATIONAL LOADS
70             -----
71 <<<<< FORMAT >>>>>
72 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
73 /
74
75             ADDITIONAL LUMPED MASSES
76             -----
77 <NOTE:> UNITS:  kg, m/s, m/s2
78 <<<<< FORMAT >>>>>
79 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
80 d(NODE) ] /
81 /
82
83             IMPULSE, BLAST AND IMPACT FORCES
84             -----
85 <NOTE:> UNITS:  Sec, kN
86 <<<<< FORMAT >>>>>
87 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
88 /
89
90             GROUND ACCELERATION
91             -----
92 <NOTE:> UNITS:  Sec, G
93 <<<<< FORMAT >>>>>
94 TIME  ACC-X  ACC-Y  ACC-Z /
95 /

```

```

1          - - - - -
2          -   L O A D   C A S E   -
3          -         D A T A     -
4          -       Version 1.0   -
5          - - - - -
6
7          LOAD CASE PARAMETERS
8          -----
9
10         Structure title      (30 char. max.) : SLAB
11         Load case title      (30 char. max.) : CONCENTRATED LOAD
12         Load case file name   (8 char. max.) : LOAD5
13
14         No. of elements with a u.d.l.      : 0
15         No. of elements with hydrostatic loads : 0
16         No. of elements with temperature loads : 0
17         No. of nodes with concentrated loads : 2
18         No. of nodes with imposed displacements : 0
19         No. of elements with concrete prestrains : 0
20         No. of elements with body loads : 0
21         No. of nodes with lumped mass assignment : 0
22         No. of nodes with impulse loads : 0
23         No. of ground acceleration data values : 0
24
25         UNIFORMLY DISTRIBUTED LOADS
26         -----
27         <<<<< FORMAT >>>>>
28         ELMT   LOAD MAG.(kPa)   [#ELMT d(ELMT)] x2 /
29         /
30
31         HYDROSTATIC LOADS
32         -----
33         <<<<< FORMAT >>>>>
34         ELMT   LOAD MAG.(MPa)   Z(mm)   [#ELMT d(ELMT)] x2 /
35         /
36
37         TEMPERATURE LOADS
38         -----
39         <<<<< FORMAT >>>>> (units = C) L o o k !!! ----->
40         ELMT   FINAL BOT.   INIT. BOT   FINAL TOP   INIT. TOP   ELAPSED [#ELMT d(ELMT)] x2 /
41         TEMP.     TEMP.     TEMP.     TEMP.     TIME (hr.)
42         /
43
44         CONCENTRATED LOADS
45         -----
46         <<<<< FORMAT >>>>> L o o k !!! ----->
47         NODE   FX   FY   FZ   MXZ   MYZ   [#NODE d(NODE) d(FX) d(FY) d(FZ) d(MXZ) d(MYZ)] x2 /
48         (kN) (kN) (kN) (kNm) (kNm)
49         12     0.000   0.000   1.000   0.000   0.000/
50         2590   0.000   0.000   -1.000  0.000   0.000/
51         /
52
53         PRESCRIBED NODE DISPLACEMENTS
54         -----
55         <<<<< FORMAT >>>>>
56         NODE   DOF   DISPL   [#NODE d(NODE)] /
57         (1-5) (mm|deg)
58         /
59
60         CONCRETE PRESTRAINS
61         -----
62         <NOTE:> UNITS: me
63         <<<<< FORMAT >>>>>
64         ELMT   STRAIN   [ #ELMT d(ELMT) d(STRAIN) ] x2 /
65         /
66

```

```

67             GRAVITATIONAL LOADS
68             -----
69 <<<<< FORMAT >>>>>
70 ELMT  GX  GY  GZ  GAMMA  [#ELMT  d(ELMT)] x2 /
71 /
72
73             ADDITIONAL LUMPED MASSES
74             -----
75 <NOTE:> UNITS:  kg, m/s, m/s2
76 <<<<< FORMAT >>>>>
77 NODE  DOF-X  DOF-Y  DOF-Z  MASS  Vo-X  Vo-Y  Vo-Z  Acc-X  Acc-Y  Acc-Z  [ #NODE
78 d(NODE) ] /
79 /
80             IMPULSE, BLAST AND IMPACT FORCES
81             -----
82 <NOTE:> UNITS:  Sec, kN
83 <<<<< FORMAT >>>>>
84 NODE  DOF  T1  F1  T2  F2  T3  F3  T4  F4  [ #NODE d(NODE) ] /
85 /
86
87             GROUND ACCELERATION
88             -----
89 <NOTE:> UNITS:  Sec, G
90 <<<<< FORMAT >>>>>
91 TIME  ACC-X  ACC-Y  ACC-Z /
92 /
93

```

```

1
2      - - - - -
3      -   V e c T o r 4   -
4      -   A u x i l i a r y   D a t a   -
5      - - - - -
6
7  Stiffness Matrix Solver          (1-2) : 2
8  Number of Parallel Threads      : 2
9
10 Shear Analysis Mode              (1-3) : 2
11
12 Concrete Aggregate Type          (1-2) : 1
13 Concrete Conductivity            : 2.19
14 Concrete Fracture Energy         (kN/m) : 0.00
15 Prestressing Friction Coefficient (/r) : 0.30
16 Prestressing Wobble Coefficient (/m) : 0.00250
17
18 Thermal Time Stepping Factor      : 0.6666667
19
20 Time Integration Method          (1-3) : 3
21
22 1st Mode to Assign Damping        : 1
23 2nd Mode to Assign Damping        : 2
24 Damping Ratio Assignment #1       : 0.00
25 Damping Ratio Assignment #2       : 2.00
26 Ground Acceleration in x-direction : 0.0
27 Ground Acceleration in y-direction : 0.0
28 Ground Acceleration in z-direction : 0.0
29 Mass Factor due to Self-Weight     : 1.0
30
31 Tension Softening Pt 1: Strain     (me) : 0.20
32 Tension Softening Pt 1: Stress     (MPa) : 3.00
33 Tension Softening Pt 2: Strain     (me) : 0.50
34 Tension Softening Pt 2: Stress     (MPa) : 2.00
35 Tension Softening Pt 3: Strain     (me) : 1.00
36 Tension Softening Pt 3: Stress     (MPa) : 1.00
37 Tension Softening Pt 4: Strain     (me) : 2.00
38 Tension Softening Pt 4: Stress     (MPa) : 0.10
39
40 Matrix Type                       : 1
41 Fibre Type                         : 1
42 Volumetric Fraction of Fibres      (%) : 0.0
43 Fibre Length                       (mm) : 50.0
44 Fibre Diameter                     (mm) : 0.60
45 Tensile Strength of Fibre          (MPa) : 1050.0
46 Mean fibre-Matrix Bond Stress      (MPa) : 0.00
47 SLS Equivalent Strength (Euro)     (MPa) : 1.00
48 ULS Equivalent Strength (Euro)     (MPa) : 0.50
49
50
51 NOTES:
52 Concrete Aggregate Type:
53     1. Carbonate
54     2. Silicious
55
56 Concrete Fracture Energy:
57     Input 0 for program generated default value.
58
59
60 Time Stepping Factor for Heat Flow Analysis:
61     0.500 : Crank-Nicolson Scheme (Accurate)
62     0.667 : Galerkin Scheme (Stable)
63
64 Shear Analysis Mode:
65     0. Out-of-Plane Shear Strains Neglected
66     1. Multi-Layer Analysis - Uniform Shear Strain

```

```
67           2. Multi-Layer Analysis - Parabolic Shear Strain
68
69
70 Dynamic Analysis Parameters
71 -----
72
73 Dynamic Analysis Mode:
74     1. Impact
75     2. Ground Acceleration
76     3. Impulse
77
78 Newmark Beta Factor:
79     0.25: Constant Acceleration
80     1/6: Linear Acceleration
81
82 Modal Factors   : Vibration modes to be considered for Rayleigh Damping
83
84 Damping Factors : Corresponding damping ratios for the above vibration modes
85
86 Ground Acceleration directions:
87     1: Acceleration applied in that direction
88     0: Acceleration not applied in that direction
89
90
91 Steel Fibre Reinforced Concrete
92 -----
93
94 Matrix type:
95     1. Concrete
96     2. Mortar
97
98 Fiber type:
99     1. Hooked
100    2. Straight
101
```