SIMULATION OF DISCRETE FRACTURE NETWORK USING FLEXIBLE VORONOI GRIDDING

A Dissertation

by

ZUHER SYIHAB

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2009

Major Subject: Petroleum Engineering

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Approved by:

Chair of Committee,	David S. Schechter
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ABSTRACT

Simulation of Discrete Fracture Network Using Flexible Voronoi Gridding.

(December 2009)

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Institut Teknologi Bandung, Indonesia

Chair of Advisory Committee: Dr. David S. Schechter

Fractured reservoirs are generally simulated using Warren and Root[26] dual-porosity (DP) approach. The main assumption of this approach is that the geometry of fractures are uniformly distributed and interconnected in reservoirs. This may be true for many cases of naturally fractured reservoirs. However, for a large scale and disconnected fractured reservoirs, DP is often not applicable. Due to the latter case, it is necessary to have more sophisticated simulation studies which allow the fracture to be geometry explicitly represented into the static model using Discrete Fracture Network (DFN) approach.

Most work on DFN grid model up to recently has been done with Delaunay tessellations. This research proposes an alternative technique to discretize the two-dimensional DFN using Voronoi diagrams, nevertheless applying the same DFN principles outlined in previous work.

Through complicated procedures to generate DFN model, grid system based on Voronoi polygons has been developed. The procedure will force Voronoi edges follow the exact geometry of fractures. Furthermore, implementing the Voronoi diagrams allows the use of fewer polygons than the traditional Local Grid Refinement (LGR). And most importantly, due to the nature of the Voronoi polygons or locally orthogonal grids, the transmissibility calculations can be simplified and are more accurate than corner point formulation for non-square grid blocks.

Finally, the main and most important goal of this study is to develop a black-oil Control Volume Finite Difference (CVFD) reservoir simulator that allows us to model

DFN more realistically. One of the features of the developed simulator is the capability to model individual fractures with non-uniform aperture distribution, such as log-normally distributed apertures as shown using X-Ray CT scanner measurements.

Prior to using the DFN simulator to model reservoirs with fractures and their apertures distribution, the simulator was validated against commercial simulators. The simulator provides results in close agreement with those of a reference finite-difference simulator in cases where direct comparisons are possible.

Several simulations of synthetic DFN were presented to demonstrate the robustness of the Voronoi diagrams to represent fracture networks and its aperture distributions. In summary, the simulation of the DFN using the proposed approaches is capable to model both fractured and unfractured systems. However, the DFN model with Voronoi grids requires more efforts on building the grid model compared to other methods. Numerically, simulations of fractured systems are very challenging.

DEDICATION

My graduate studies at Texas A&M University would not have been possible without the help from God and prayer of my parents and family members.

This dissertation is dedicated to:

My late mother, Budur Syihab,
My late father, Ali Syihab,
My brothers and sisters,

I want to give my very special dedication to my beautiful wife, *FNU Hanifah* for her sacrifices and patience while accompanying me in the most challenging times during this journey.

ACKNOWLEDGMENTS

I would like to express my highest gratitude to my research advisor, Dr. David Schechter for his ideas, encouragement, patience and financial support through research assistantship during this study. The sources of the assistantship were from DOE (2003-2006) and Crisman Institut (2007-2008).

My appreciation is also extended to members of the reading committee, Dr. Wattenbarger for his direction in some of the contents of this dissertation, Dr. Maggard for his introduction to simulation through his class and Dr. Efendiev for his comments in some areas of this research.

My special thanks to Erwin Putra and his family for their support in many ways. Putra has been my discussion partner, especially at the early stage of this research. The support from him and his family will never be forgotten.

I would like to thank my friends Darmo and his family, Jooned, Siswo, Fitrix, Rifky, Moses, Vaibhav, Kalwant, Roly Simangunsong, Moses, Pahala, Koko and many others for their friendship during my stay in Texas.

Finally, I would like to thank my family for their continuous support, encouragement and love. This dissertation is dedicated to my wife, Hanifa, parents, brothers and sisters. Without their support and prayers this work would not have been possible.

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CHAPTER I

INTRODUCTION

1.1 Research Background

Dual-porosity (DP) models to represent fractured reservoirs were pioneered in the early sixties by Warren and Root[1]. This method has been used extensively and is the most widely applied model to simulate flow through porous media in a fractured reservoir. This approach has some important limitations which are due to the mathematical and geometrical formulations. Dual-porosity formulation represents fractured reservoirs as an array of parallelepiped matrix blocks interspersed by a set of uniform orthogonal connected fractures (**Fig. 1.1**).

The flow in DP models is dominated by a large number and small-scale fractures. Transfer functions between matrix and fractures in DP are evaluated based on the idealized fracture geometry introduced by Warren and Root. Therefore, DP models are not well suited to model a realistic fracture network[2,3].

Reservoir simulation involves application of numerical methods to model a system of conservation laws to describe flow in a porous medium in the form of linear discretization. The results of a reservoir simulation model are clearly dependent upon the computational grid and the geometrical representation[4]. The most common gridding system used in the reservoir simulation is the regular Cartesian grid system. The grids are generally non-aligned with reservoir heterogeneities, such as faults, fractures and consequently are not able to provide an accurate representation of those valuable properties.

Studies on fracture networks and its properties have recently advanced in many aspects due to improvements in areas such as computational power, advances in reservoir

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description technology and laboratory experiments of fracture apertures distribution. All these aspects have created the opportunity for improved modeling and ultimately, better understanding of the behavior of flow in fractured systems. Thus the need for a more robust simulation tool is unarguably necessary.

In light of those limitations (the gridding technique to accurately represent fracture geometry and the capability to model fracture aperture distribution) and in contending with the advancements in fracture networks, discrete-fracture modeling (DFN), a tool which represents fractures individually along with flexible gridding techniques is required to model complex fractured porous medium.

Although some attempts in this area have been pursued, the utilization of Voronoi grid systems, particularly to represent fracture networks and its aperture distributions provided by laboratory experiments (X-Ray CT Scan) has not been yet investigated.

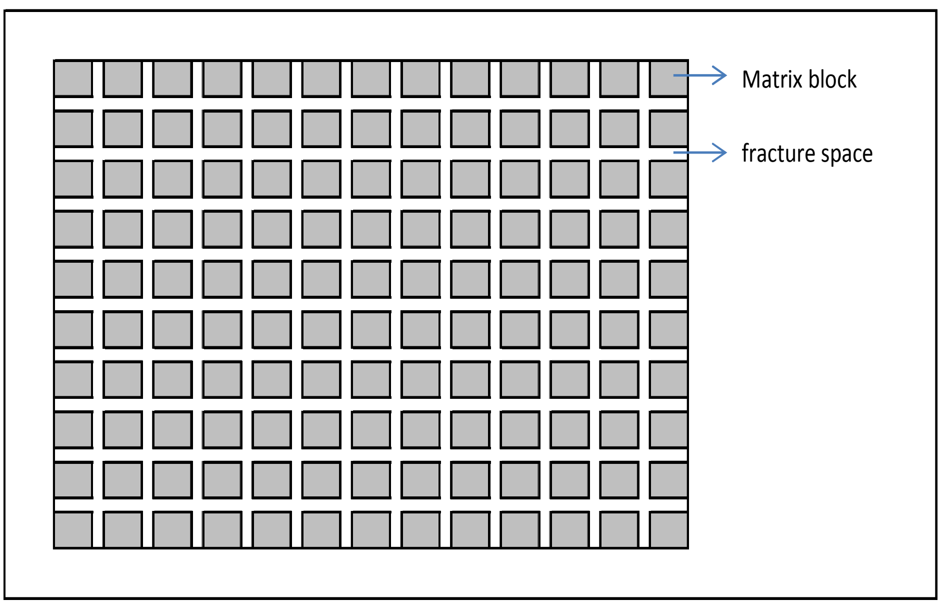


Fig. 1.1-Dual-porosity model[1]

1.2 Literature Review

In this section, important works related to the topics developed in this thesis are briefly discussed. It consists of historical background about reservoir simulation, gridding techniques, DFN modeling, and fracture aperture measurements using X-Ray CT Scanning. Some specific aspects that need a more thorough discussion are presented in chapters where the corresponding topics are studied.

1.2.1 History of Reservoir Simulation

The evolution of reservoir simulation can be traced back to the 1950's. It was initiated by Aronofsky and Jenkins's radial gas flow model[5]. Over the past fifty years, reservoir simulation has rapidly developed in physical and mathematical models, discretization methods, linear equations solvers, pre-processing, post-processing and reservoir visualization. The physical models were developed from the simplest model of 1D, one-phase into 3D, three-phase complex models, such as the black oil, pseudo-black oil, compositional, chemical, thermal, dual-porosity/dual-permeability models and most recently, discrete fracture models (DFN).

The discretization methods developed earlier used finite difference (FD) methods[4,6] with rectangular parallelepiped grids to more sophisticated methods with unstructured grids, such as mixed finite element methods[7] (MFEM), control volume finite element (CVFE) method and the Perpendicular Bisection (PEBI) method[8,9].

Solving a linear system of equations initially was implemented using direct solver, Gaussian elimination method. It has been further improved into Gaussian elimination method and sparse Gaussian elimination method[10]. The iterative methods have also developed, such as slice and line successive over relaxation methods (SSOR and LSOR). Stability and convergence problems in iterative methods[10] have been reduced or solved using the preconditioned conjugate-gradient-like method, orthogonal minimized residual error (ORTHOMIN) method[11], Conjugate Gradient[12], stabilized Bi-conjugate-gradient

(BICG-STAB) and general minimized residual error (GMRES) method[7]. These iterative methods combined with the linear equations preconditioner have become popular and well suited to solve complex engineering problems such as finite difference and finite element applications.

The pre-processing technique has improved from data card preparation to automatic grid generation based on geological structure and well completions. The post-processing has enhanced from static 2D visualization into dynamic 3D visualization. The software scale has also improved from small packages to large platforms, which allows the integration of various data, such as geological, geophysical, reservoir simulation, oil field management, risk analysis, sensitivity, and optimization.

Several factors need to be taken into account to carry out a reservoir simulation. These include the size and type of reservoir, software packages, data availability, objectives, computer hardware, computing cost and time limit. In the early development period of reservoir simulation, computer associated factors are the crucial factors to be considered due to the speed limit of CPU and size of memory.

However in recent time, the capacity of computer hardware has improved. Computer's processors are very fast, memory is inexpensive and therefore, the size of simulation models have increased from hundreds and thousands to millions in the number of grid blocks.

1.2.2 Gridding Techniques

Well completion techniques, such as non-conventional wells and the increasing requirements on the accuracy of history matching require a fine scale reservoir simulation model. The finite difference (FD) method is a mature and widely implemented technique for black oil, compositional, thermal, and chemical simulation. FD is strictly limited for structured grids[12], i.e., a rectangular grid in 2D and parallelepiped grid in 3D. The structured grids cannot efficiently represent the irregular geological complexity of a reservoir, such as faults, fractures, irregular boundaries, pitchouts and deviated wells. Therefore, various unstructured or flexible gridding techniques[8] have been developed to reduce the limitations. There are several gridding techniques found in the literature; this section will briefly review some of the most well-known and widely applied gridding techniques.

1.2.2.1 Globally Orthogonal Grid

The rectangular and parallelepiped grids known as Cartesian grids are used in the two and three dimensional spaces respectively. They are globally orthogonal and have regular structures. There are two kinds of Cartesian grids which are commonly adopted in the reservoir simulation; point-distributed and block-centered grid[5] (Fig. 1.2). The latter one is widely used, since it is easier to generate the grid system.

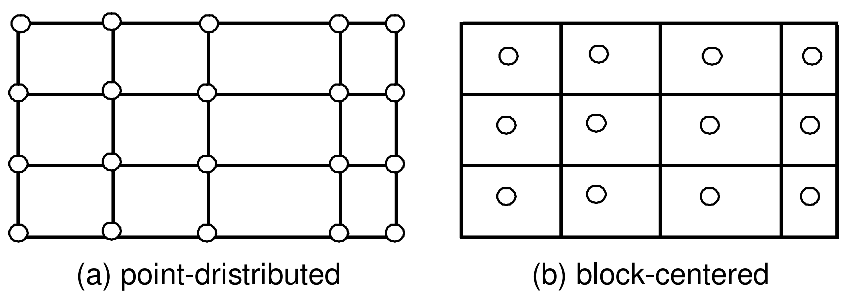


Fig 1.2-Globally orthogonal grid systems

1.2.2.2 Corner Point Grid

In order to accurately represent the complexity of geometrical features of reservoir structure, the vertices of grid blocks are first set and then the corresponding grid points are determined (**Fig. 1.3**). Although this kind of gridding is able to accurately represent the complicated geometrical features of reservoirs, the connection line between two neighboring nodes is not necessarily orthogonal to the interface between them. The flux in and out of such grids should be corrected or projected to the primary axes (W-E, S-N). Thus, the flux in or out of the gridblock boundaries cannot be accurately calculated[3].

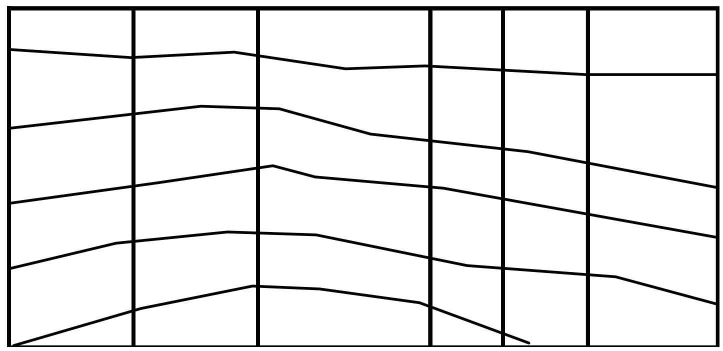


Fig. 1.3-Corner point grid

1.2.2.3 Locally Orthogonal Grid

The locally orthogonal grid is also known as the Voronoi grid. It has property that the connection line between two neighboring nodes is orthogonal to the interface between them (**Fig. 1.4**).

It was first applied by Heinrich in a reservoir simulation[7] model. Heinemann named this grid a PEBI grid[8], since a grid block consists of perpendicular bisectors of the triangle which have the common vertices (known as Delaunay triangle). He presented a k-orthogonal PEBI grid which has not been widely applied. Furthermore, Palagi also studied the PEBI grid generation method, applied the grid model into black-oil reservoir simulations[13], and demonstrated the use of PEBI grid to reduce grid orientation effect, modelling horizontal well and etc. Economides applied PEBI grid to model horizontal wells[14]. Research results have shown that PEBI is a flexible grid that better handles complicated reservoirs. Recently, Chong et al.[15] has shown that a kind of PEBI grid (hybrid grid) effectively reduces grid orientation effects. However, the structure of the matrix coefficients used to solve for the unknowns at nodes becomes quite complicated, and so it needs to use more efficient linear equation solution techniques.

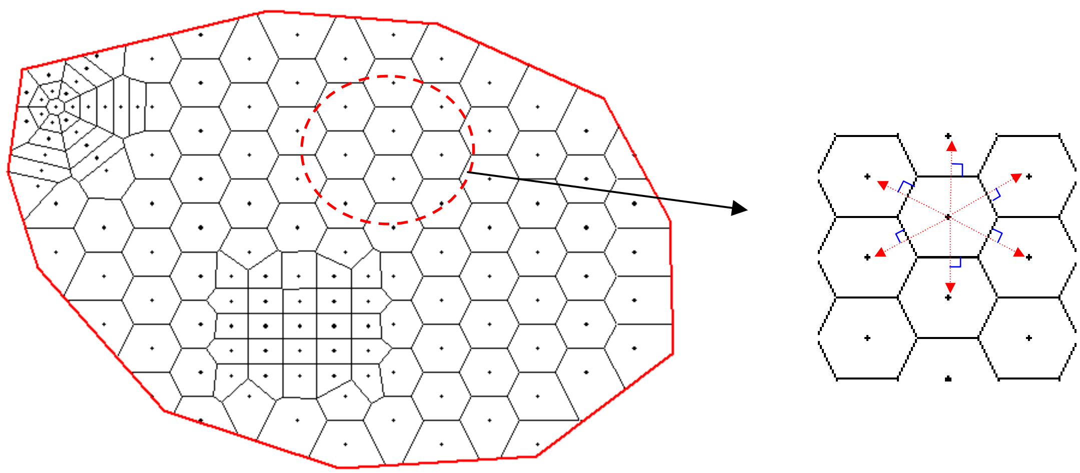


Fig. 1.4-Voronoi grid (locally orthogonal grid)

1.3 Introduction to Discrete Fracture Network Simulation

DFN was mainly used in attempts to directly model the fractures as an integrated media, not as an additional porous media in reservoirs as with Warrant and Root's dual-porosity concepts. The rock properties are the only factors to distinguish between fractures and matrix blocks. This model allows us to conduct simulations without coupling matrix and fracture media as was done in previous models. In addition, it makes it possible to directly model both matrix-fracture interactions and inter-fracture flow in porous media.

Studies on DFN can be traced back to the early 1980's. Researchers such as Noorishad et al.[16] applied the technique. They investigated the pressure distribution along fractures using upstream Finite Element Method (FEM). Further enhancements for general petroleum engineering applications were made by Karimi-Fard and Firoozabadi[2]. They used a Finite Element approach to avoid problems due to very small volumes of fractures compared to matrix blocks. Their DFN grid model used a Delaunay tessellation to align the block edges on the fractures. Meanwhile, Aziz et al.[3] aggressively worked on a general framework to apply finite difference discretization techniques to model the DFN more widely. He called the approach the Control Volume Finite Difference (CVFD). A few years earlier, Pruess[17] used a similar concept for geothermal applications and called the method Integration of Finite Difference (IFD).

1.4 Introduction to Fracture Aperture Measurement Using X-Ray CT Scanner

Computed tomography (CT) is a medical imaging method employing X-Ray tomography. Digital processing is used to generate a three-dimensional image of the inside of an object from a large series of two-dimensional X-ray images taken around a single axis of rotation[1].

In the field of petroleum engineering, one of the applications of X-ray CT scanner is to measure variation of fracture apertures. Since there is no direct calculation from the images of fracture aperture data extracted from the CT scanner, a calibration curve needs to be established. This method was introduced by Muralidharan[18]. Initially, a rock is artificially fractured and different sizes of feeler gauges placed inside the fractures. Based on the known sizes of fillers, a graph of CT number vs. aperture along the perpendicular to the fracture was calibrated (**Fig. 1.5**). Images were taken every 1 mm up to 60 mm.

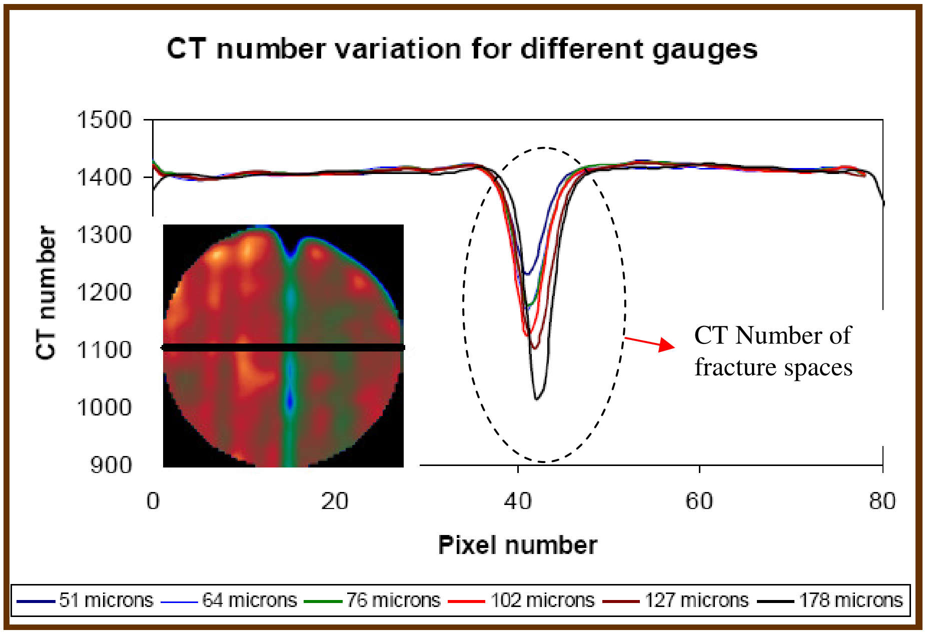


Fig. 1.5: CT Number from different feeler gauges (after Muralidharan et al.[18])

The calibration curve is basically the width used to keep the fracture open vs. the area under the curves (**Fig. 1.6**). Based on the calibration curve, one could determine the relation between fracture aperture and the integration of the CT signals along the fracture.

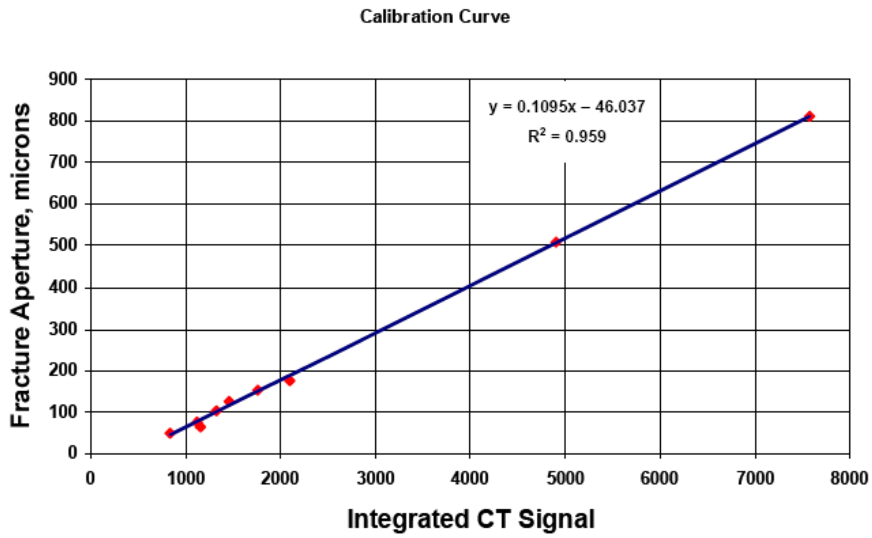


Fig. 1.6-Calibration curve to measure fracture apertures (after Muralidharan et al.[18])

With the extensive work done on the fracture aperture measurements, the ability to couple the information on fracture geometry derived with the X-Ray CT scanner and numerical flow simulation has not yet been honored in any reservoir simulation studies.

1.5 Research Objectives

The main objective of this research is to develop methodology to model vigorously fluid flow in complex reservoir geometry with or without fractures in the system. The term "vigorously" here means that the fractures are represented explicitly as an integrated porous media, not a separate or virtual media as in the dual-porosity model. In order to achieve this main goal, the following steps have to be conducted in this research:

1. Developing a general flexible mesh generation technique based on Voronoi diagram algorithm.

2. Developing a 3D, three-phase black-oil reservoir simulator that is capable of modeling fractured and unfractured systems using control volume finite difference approach.
3. Comparing and benchmarking the developed DFN simulator against various simulators (commercial and academic simulators) and analytical solutions.
4. Honoring experimental work by incorporating fracture aperture distribution as determined by X-Ray CT scanning.
5. Performing simulation of a system with complex intersecting fractures and fracture networks generated using fractal approach[19].

CHAPTER II

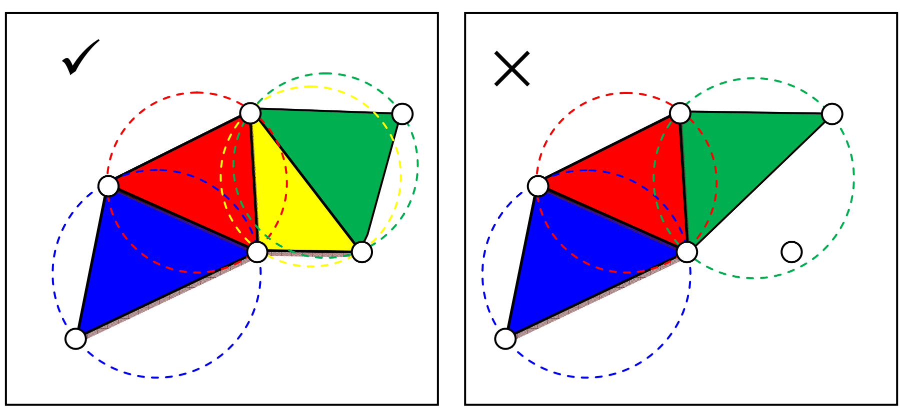
VORONOI DIAGRAM AND DISCRETE FRACTURE NETWORKS

2.1 Voronoi Diagram and Delaunay Triangulation

Simple Voronoi diagrams were initially employed as early as 1644 by Descartes. First comprehensive formulations of Voronoi diagrams were developed by Peter Dirichlet and Georgy Fedoseevich Voronoi. These diagrams consist of a polygon with all edges equidistant between the center point and neighboring points. Voronoi proposed the general case of the Voronoi diagram in 1908[20].

The Voronoi grid is considered to be the dual structure of the Delaunay triangles (DTs) formed by a given set of nodes in a plane. For a given set of nodes, Delaunay triangles are constructed by connecting the nodes in close proximity into triangles.

The *Delaunay triangulation* is a collection of edges satisfying an "empty circle" property[21]: a unique circle passing through three vertices of a triangle that does not contain any other points in the system. **Fig. 2.1** shows an example of the correct DTs with an "empty circle" property and incorrect triangles.



(a) Correct Delaunay triangle (b) Incorrect Delaunay triangle

Fig. 2.1-Delaunay triangulation and "empty circle" property

The Voronoi grid is formed by the perpendicular-bisectors of the edges of the DTs. Due to this property, the Voronoi grid is also called perpendicular-bisector (PEBI) grid[9].

2.1.1 Delaunay Tessellation Algorithm

Many Voronoi algorithms exist abundantly in the literature[22-24] which mostly include the Delaunay tessellation algorithms. In general, the initial step to generate Voronoi polygon is essentially to build a Delaunay tessellation. A simple procedure in this study has been implemented to build DTs. The procedure contains the following steps:

1. Store nodes/points in 2D Cartesian coordinate, (X_i, Y_i), (X_{i+1},Y_{i+1}),…(X_N,Y_N). N is total number of nodes in the system.
2. Select a node/point arbitrarily, (X_j, Y_j), where $j \in \{i.\ N\}$
3. Find the closest point to the point selected from step-2, (X_{j+1},Y_{j+1}).
4. Draw a line from (X_j, Y_j) to (X_{j+1},Y_{j+1}). This line will be the first DT's edge/vertex.
5. Search for a point (X_k,Y_k), where $k \neq j$, $k \neq j+1$ and $k \in \{i.\ N\}$ such that the triangle satisfy the "empty circle" property of DT.
6. Repeat step 4 and step 5 until no unique DT found in the system.

In order to determine whether the "empty-circle" property is satisfied, first we need to determine the center, (Xc, Yc) and the radius, r of a circle by given three points $P_1(x_1,y_1)$, P_2 $(x_1,y_1)$and $P_3(x3,y3)$ on a plane (**Fig. 2.2**).

Two lines are formed; the first line, L_1 passes P_1 and P_2. The second line, L_2 passes P_2 and P_2. The equations of those lines are:

$$L1 : y_{L1} = m_{L1}\,(x - x_2) + y_2 \quad (2.1)$$

$$L2 : y_{L2} = m_{L2}\,(x - x_2) + y_2 \quad (2.2)$$

where, m_{L1} and m_{L2} are the slopes of L_1 and L_2 respectively.

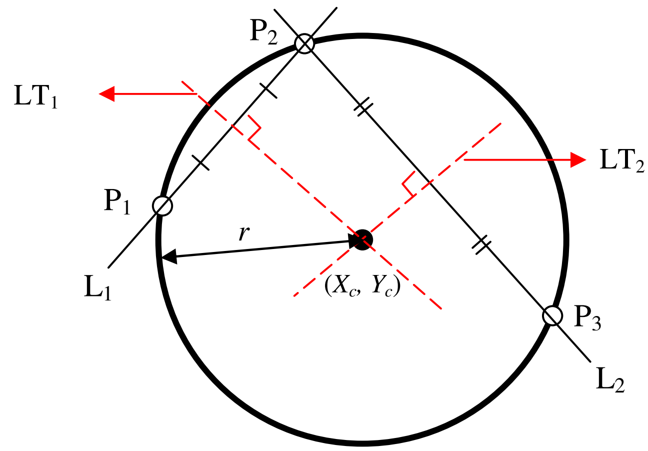


Fig. 2.2- A circle that passing through three points, P1, P2 and P3 on a plane

The centre of the circle basically is the intersection of the two lines perpendicular to and passing through the midpoints of the lines L_1 and L_2. These lines are named LT_1 and LT_2 and expressed by the following equations:

$$y_{LT1} = -\frac{1}{m_{L1}}\left(x - \frac{1}{2}(x_1 + x_2)\right) + \frac{1}{2}(y_1 + y_2) \quad \text{.......} (2.3)$$

$$y_{LT2} = -\frac{1}{m_{L2}}\left(x - \frac{1}{2}(x_2 + x_3)\right) + \frac{1}{2}(y_2 + y_3) \quad \text{.......} (2.4)$$

The center of the circle is obtained by solving *x* or substituting Eq. 2.3 into Eq. 2.4.

$$X_c = \frac{1}{2(m_{L2} - m_{L1})}\left[m_{L1}\, m_{L2}(y_1 - y_3) + m_{L2}(x_1 + x_2) - m_{L1}(x_2 + x_3)\right] \quad \text{.......} (2.5)$$

Y_c is obtained by substituting Eq. 2.5 into Eq. 2.3 or Eq. 2.4.

$$Y_c = -\frac{1}{m_{L1}}\left(X_c - \frac{1}{2}(x_1 + x_2)\right) + \frac{1}{2}(y_1 + y_2) \quad (2.6)$$

The radius of the circle is solved by the following equation:

$$r = \sqrt{(X_c - x_1)^2 + (Y_c - y_1)^2} \quad (2.7)$$

With the known attributes of a circle (radius and center), we can construct a complete equation of a circle:

$$(x - X_c)^2 + (y - Y_c)^2 = r^2 \quad (2.8)$$

Given an arbitrary point in a plane (x_{test}, y_{test}), the "empty circle" property is determined by the following conditions:

1. False, if $(x_{test} - X_c)^2 + (y_{test} - Y_c)^2 - r^2 \le 0$
2. True, if $(x_{test} - X_c)^2 + (y_{test} - Y_c)^2 - r^2 > 0$

2.1.2 Voronoi Algorithm

After performing the Delaunay tessellation algorithm, each vertex of DTs is bisected perpendicular by passing through their midpoints. The intersections of all perpendicular lines are connected to form a Voronoi polygon. The Voronoi polygon is created based on the shortest path of the connected intersections (**Fig. 2.3**). This procedure is repeated for all DTs in the system. This method, shortest-path Voronoi diagram generation[25], is the method applied in this study.

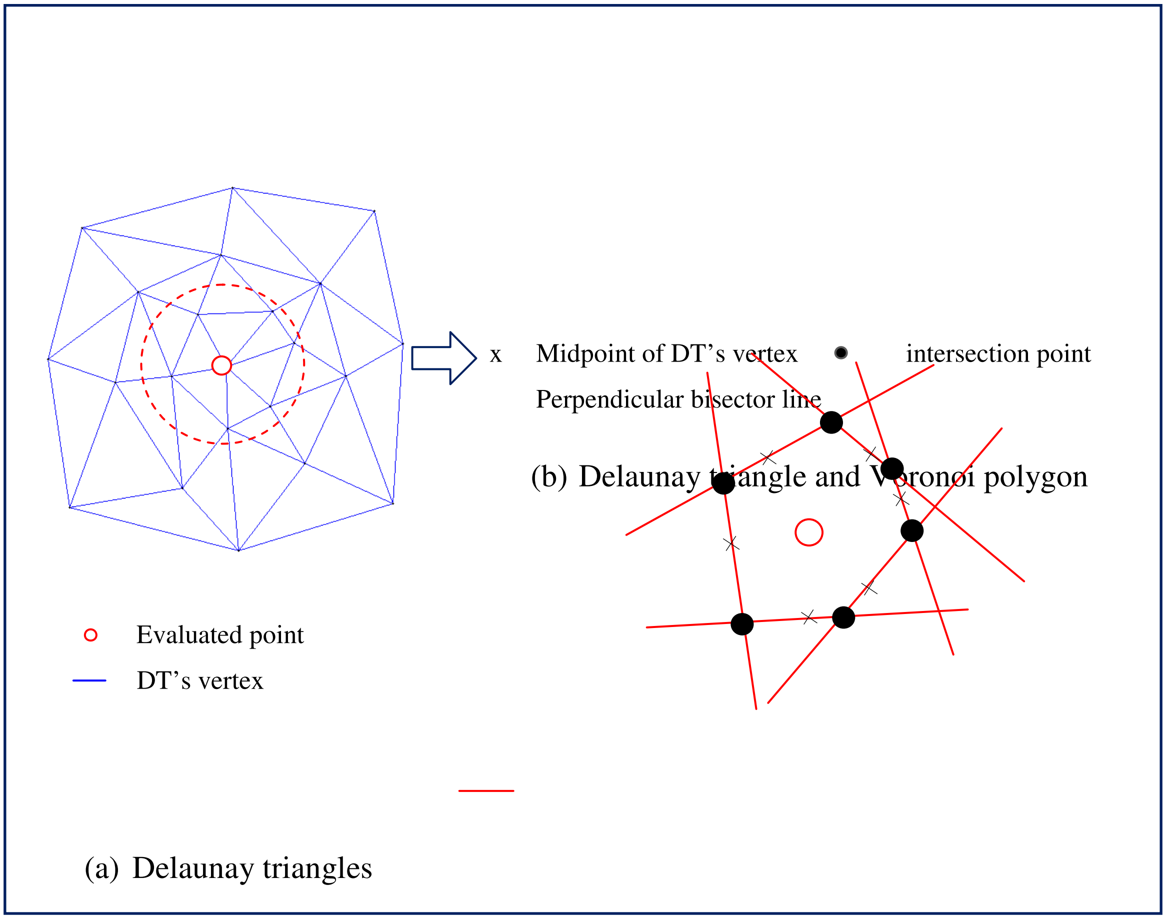


Fig. 2.3-Voronoi algorithm based on the shortest-path of connected intersection

Fig. 2.4 shows the correlations between DTs and Voronoi polygons. The dashed lines and solid lines are the DTs and Voronoi edges respectively.

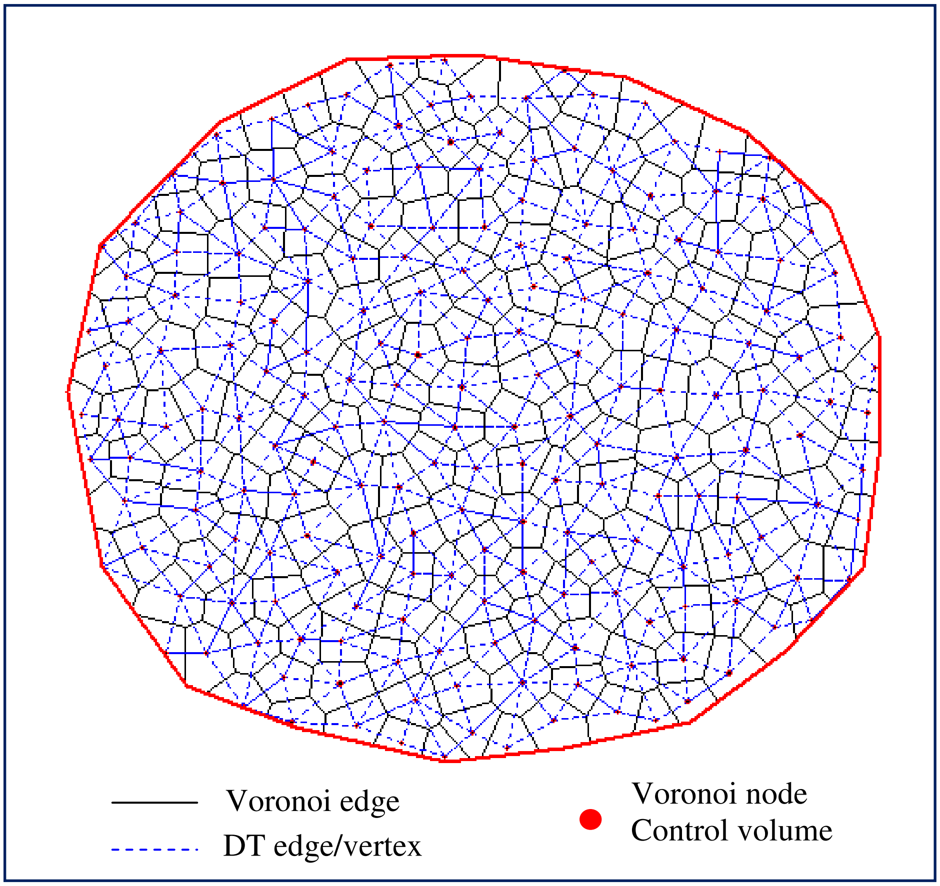


Fig. 2.4-Voronoi and Delaunay triangles

2.2 Discrete Fracture and Voronoi Diagram

Discrete fracture networks are formed by multiple fracture sets. Some of the fracture sets may intersect with the other fracture sets. In the case of facture sets that do not intersect other fracture sets, they can be treated as a single fracture set, or otherwise it is treated as multiple-intersecting fracture sets.

This section will introduce techniques employed to populate Voronoi nodes needed to grid fracture network for both single fracture and multiple intersecting fracture sets. The techniques contain simple procedures or operations such as determining intersection of two straight lines and intersections of a straight line with a circle.

2.2.1 Single Fracture

For a single fracture set, technique to populate nodes such that Voronoi edges are aligned with the fracture is very simple. The fracture is represented as a straight line. A pair of nodes is simply distributed parallel along the fracture and another pair of nodes is distributed perpendicular and equidistant (emphasized by the circles) with the fracture (**Fig. 2.5**).

The detailed step by step procedures to populate nodes for a single fracture set are as follows (shown in **Fig. 2.5**):

1. Determine number of segments or blocks, N for a single fracture represented by a straight line equation.

$$y = mx + c_f \quad \text{(2.9)}$$

2. Determine coordinates (X_i, Y_i) of each segment on the fracture.
3. Draw N virtual small circles (radius of r). The center of the circle is X_i, Y_i.
   The equation of each circle is:

$$(x-X_i)^2 + (y-Y_i)^2 = r^2 \quad \text{(2.10)}$$

4. Draw lines perpendicular to the fracture that passing through each center of the circle. Since these lines are passing through the center of each circle, each line equation becomes:

$$y = (-1/m)\,x + (Y_i+X_i/m) \quad \text{(2.11)}$$

5. The Voronoi nodes can be obtained by substituting the **Eq. 2.11** into **Eq. 2.10**.

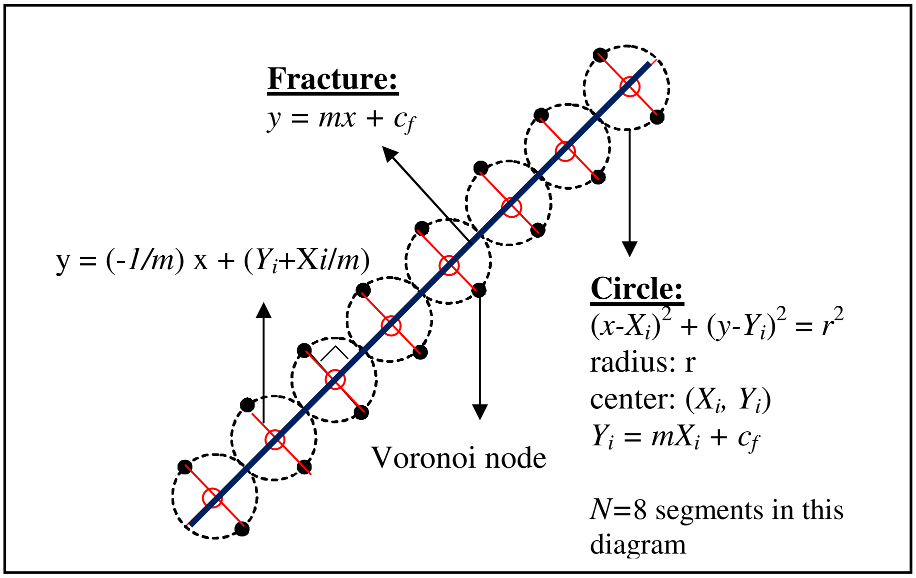


Fig. 2.5-Voronoi nodes for single fracture in the geometrical domain

2.2.2 Multiple Intersecting Fracture Sets

A more complex problem arises from discrete fracture networks formed by multiple-intersecting fracture sets. Each of line segments is treated as a single fracture. Away from intersecting points, nodes can be distributed similar to a single fracture set as discussed in the previous section. A different technique should be performed to grid the fractures near intersection points. The nodes should be populated on the virtual circle in which the pairs of nodes are equidistant to the associated fracture set.

Fig. 2.6 shows a technique to populate points around multiple-intersecting fractures. F(1,2) and F(2,1) are virtual lines which divide fracture sets into the same angles. Points 1 to 8 are the control volumes. Point 1 and point 2 are equidistant points to fracture Set 2. In the case of Fracture Set 2, the line is symmetrical with points 1 and 2 being a mirror image of each other. The rest of the points are equidistant to Fracture Set 1 or Fracture Set 2 as well. In order to maintain or avoid the distortion of Voronoi edges, the points which are sited on the region between two fractures (e.g. point 1 and 8, 2 and 3, 4 and 5, 6 and 7) have to be pairs of mirror images with respect to F(1,2) or F(2,1). **Fig. 2.7** shows an example of the geometrical domain of a discrete fracture model with two perpendicular intersecting fracture sets.

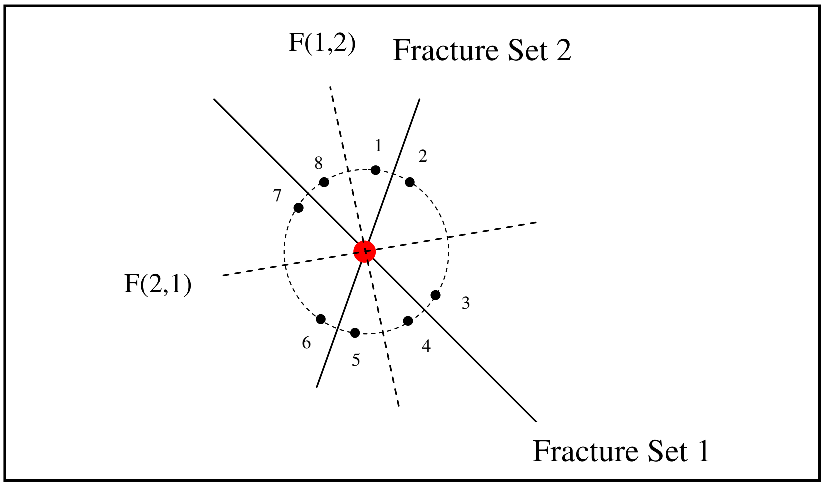


Fig. 2.6-Voronoi nodes for multiple fractures

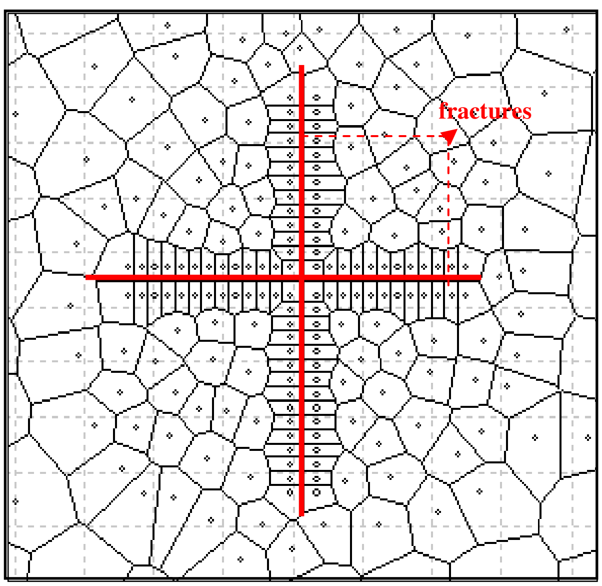


Fig. 2.7-Multiple fractures for hypothetical N/S – E/S fracture set in the geometrical domain

2.3 Treatment of Fracture Tips

Voronoi edges are formed by node population in plane. In the previous section, by populating nodes in the correct location, we were able to execute the Voronoi algorithm in order to build a single fracture and more complex fracture networks. However, the techniques previously discussed did not include the treatment of the fracture tips.

Without treating fracture tips, the fracture length generated by the Voronoi algorithm may not be accurate. The Voronoi edges may be extended and as consequence the volume of fracture will not be accurate. **Fig. 2.8** shows a single fracture set with and without fracture tips treatment.

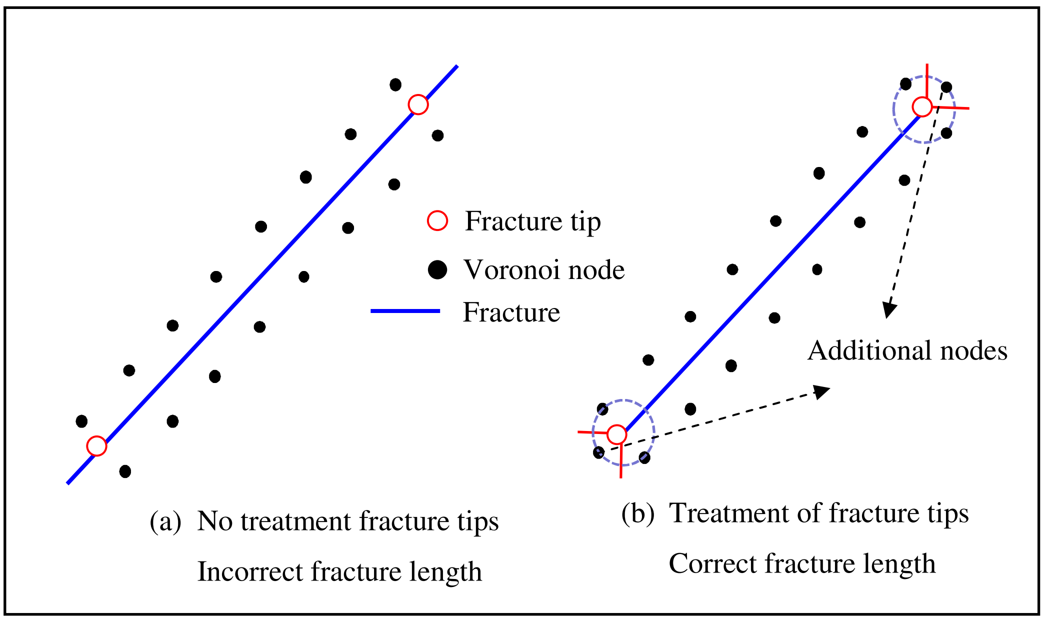


Fig. 2.8-Treatment of fracture tips

As depicted in the **Fig. 2.8,** an additional node for each fracture tip is required in order to terminate the Voronoi edges at the correct location. Each additional node is located on the extension of the fracture. The additional node should be passing through a virtual circle centered at the fracture tip.

2.4 Volume Correction on Discrete Fracture Network

The above description is merely a representation of the geometrical domain of a discrete fracture model. The computational domain treats and creates the fracture segments as additional or virtual control volumes. Each of the fracture grid blocks is given the required properties such as porosity, permeability, and etc. Moreover, the known distribution of fracture aperture (e.g. log-normally distributed[18]), thickness and fracture roughness can be easily incorporated into the computational domain. **Fig. 2.9** shows an example of the computational domain for two fracture sets. Additional nodes are added along the fracture lines. Since the computational domain is now honoring fracture characterization data, the numerical model can be applied as if the fractures are absent.

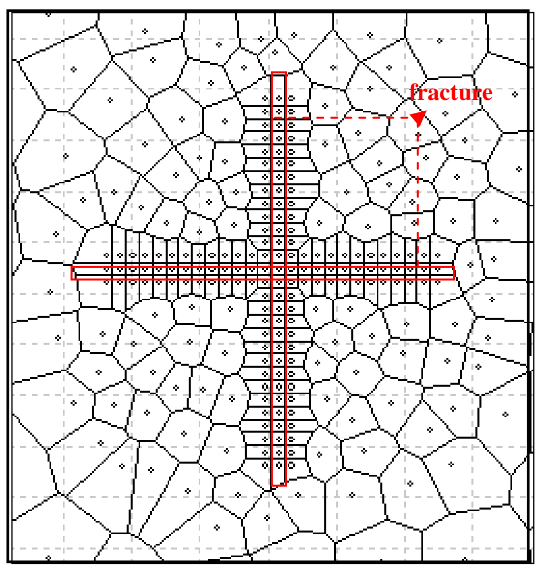


Fig. 2.9-Multiple fractures – computational domain

Furthermore, since the fractures in the geometrical domain are represented as lines, thus the bulk volumes of both fracture and the adjoining matrix blocks have to be corrected in the computational domain. The bulk volume of fracture segments can be computed based on given fracture apertures. Thus the bulk volume of the matrix adjoining with the fracture should be corrected due to the volume taken by the fractures.

Fig. 2.10 shows the volume correction comparison of the geometrical domain and the computational domain. Bulk volumes of the matrix blocks directly connected to fracture segments are decreased by half the bulk volume of the fracture segments.

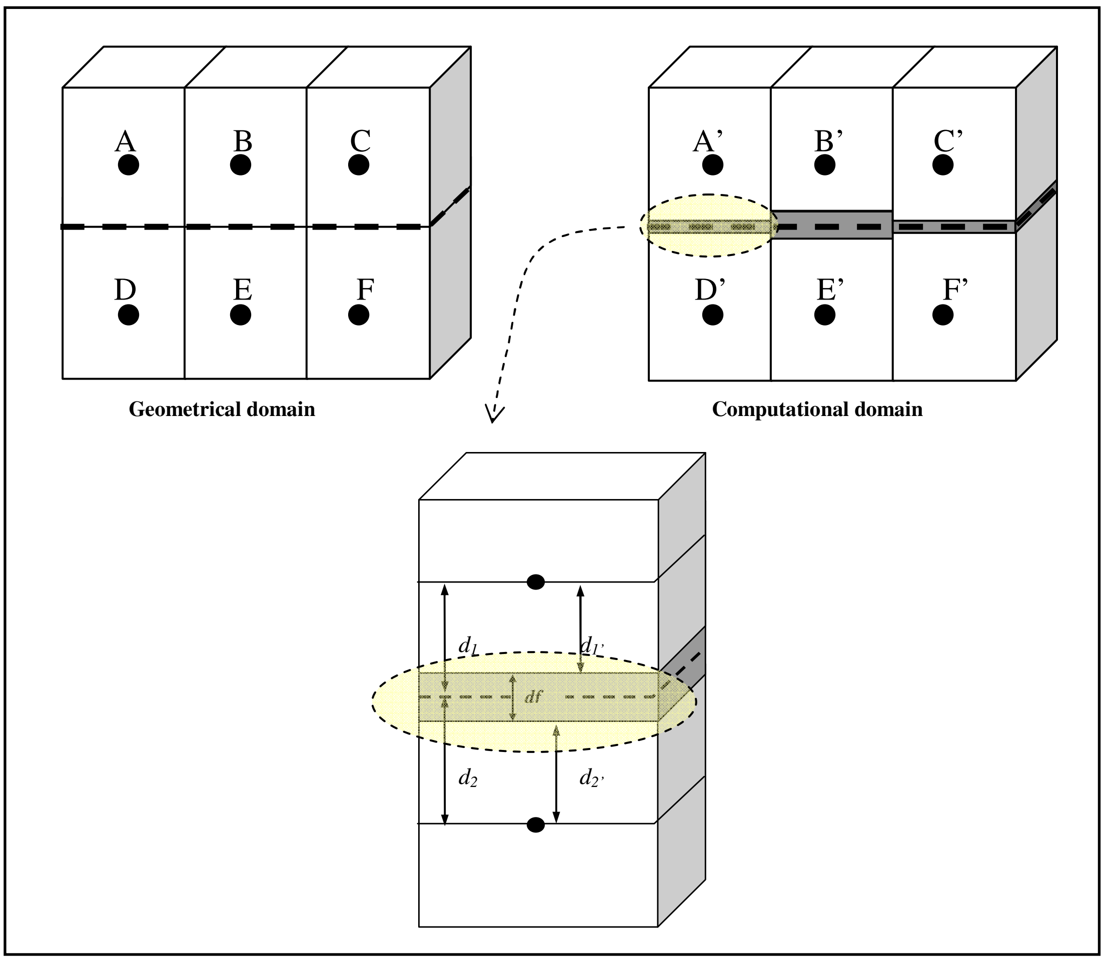


Fig. 2.10-Control Volume correction (computational domain)

d_1 and d_2 are the distances from the block A and D in the geometrical domain. After the volume correction, due to the aperture of the fracture (d_f), the distances become d_1' and d_2' in the computational domain.

The relationship between the original volume, V and the corrected volume, V' of a particular gridblock is expressed by the following equation:

$$V' = \left(1 - \frac{1}{2}\frac{d_f}{d}\right)V \quad \text{(2.12)}$$

Based on the above equation, it is important to have a refined grid blocks near fractures. Otherwise the volume correction is not necessarily performed in the computational domain, due to insignificant difference between V' and V.

2.5 Workflow of Grid Generation Technique

This workflow will describe the methodology on building a grid model using Voronoi algorithm. Besides the procedures to grid the matrix, the workflow will include the techniques to grid systems with fracture networks.

For this purpose, we assume that the fracture network and the fracture aperture distribution are provided prior to this work. The fracture network can be obtained by any approach, e.g. fractal geometry[19], outcrop[26] studies and others. The fracture aperture distribution can be obtained from X-Ray CT scan experiments[18,27].

To start building a grid model, we extract the fracture network as sets of X and Y coordinates. The fracture aperture distribution is applied for each fracture following the log-normal distribution or can be assigned manually. As previously noted, all the fracture sets are represented as line(s) in the geometrical domain.

A pair of nodes which later become the control volume should be populated as such to construct the Voronoi edges perfectly aligned onto the line of fractures. Therefore, one set of nodes should have a mirror effect on another set as seen in **Fig. 2.5**.

However, additional procedures are needed to grid a more complex fracture network (intersecting fractures). **Fig. 2.6** illustrates how we populate the nodes around the intersection.

Once we have populated the nodes (control volumes) for the fractures and their intersections, we can continue to add nodes to grid up the matrix. This can be done manually or use other options (random, rectangular, hexagonal, radial or hybrid).

Finally, we can execute the Voronoi algorithm with all the nodes of fractures and matrix blocks. Additional nodes to represent control volume of fracture blocks are added and the volumes of matrix blocks should be corrected (**Fig. 2.10**).

Fig. 2.11 illustrates the steps in building a grid model using the Voronoi algorithm as we just discussed.

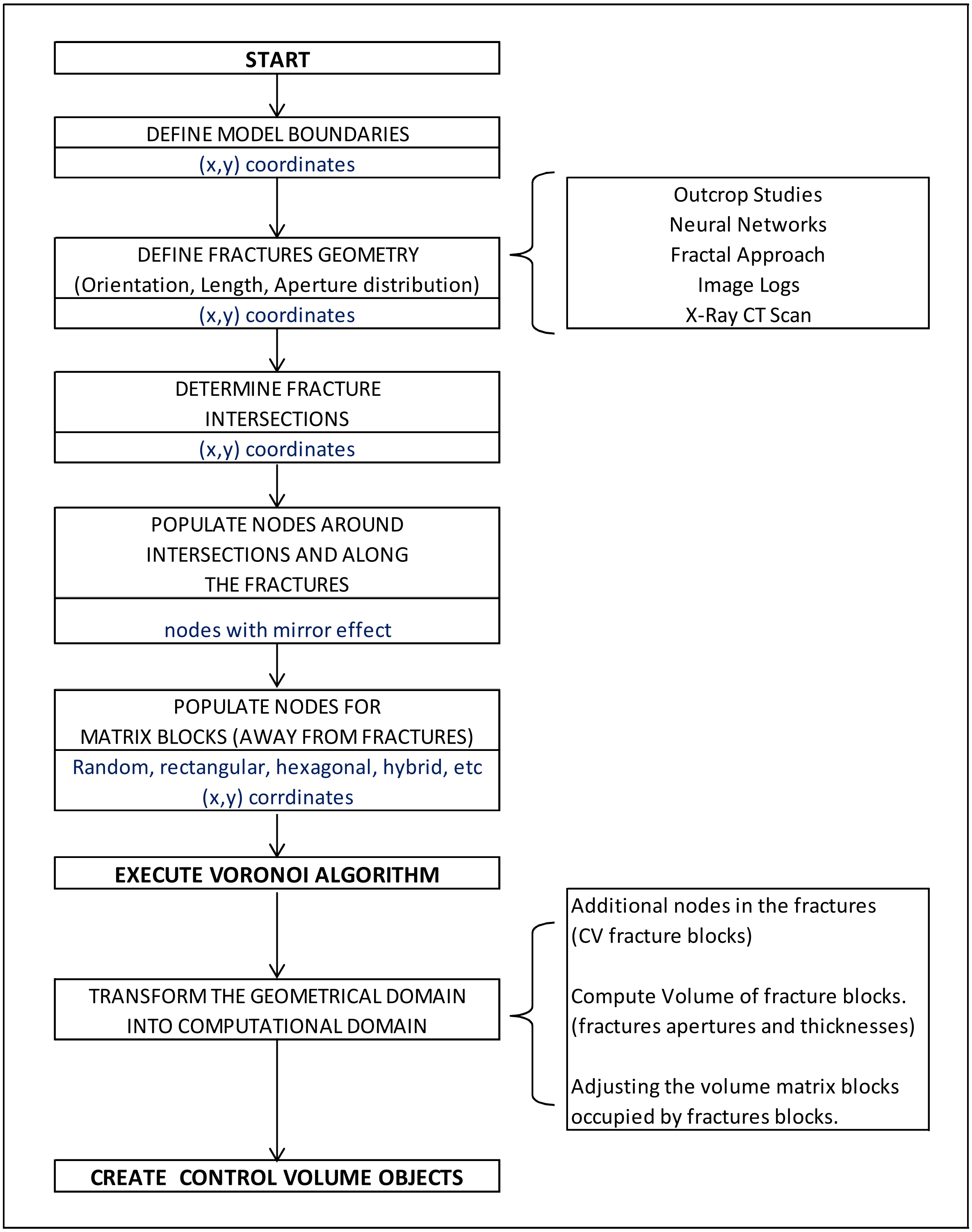


Fig. 2.11-Workflow of grid generation technique

CHAPTER III

DEVELOPMENT OF DISCRETE FRACTURE RESERVOIR SIMULATOR (DFN SIMULATOR)

3.1 Conservation of Mass Equations

The basic laws of reservoir simulation are the conservation of mass, energy and momentum. Mass balance in a grid block is achieved by equating the accumulation of mass in the block with the difference between the mass leaving and entering the block. Many derivations of the oil, water, and gas fluid flow equations exist abundantly in the literature[6,28-33]. Therefore, only a brief discussion will be presented here, especially related to discretization for Voronoi gridblock.

3.2 Governing Equations

To simplify the derivation of flow equations, we derived the flow equation and material equation on a block/grid/cell basis. This approach is called the discrete approach and is commonly used in the industry rather than discretizing partial differential equations.

3.2.1 Material Balance Equation

We begin with the material balance definition that the net flow rate in a cell is equal to the rate of accumulation of the cell. This statement is true if at this moment the production/injection term is ignored.

The accumulation term can be expressed as the following equation:

$$\text{Rate of accumulation} = \frac{1}{\Delta t}\left[\left(\frac{V_p S}{B}\right)_e^{(n+1)} - \left(\frac{V_p S}{B}\right)_e^{n}\right] \quad \text{.. (3.1)}$$

V_p = pore volume

S = phase saturation, *fraction*

B = formation volume factor

e = evaluated cell

Δt = time interval

The superscripts n and $n+1$ are corresponding to beginning and end of the time interval, Δt. the net flow rate into the evaluated cell, e is defined as:

$$\text{Net Flow Rate} = \sum_{i=1}^{N} q_{i \to e}, \; \mathrm{e} \neq \mathrm{i} \quad \text{.. (3.2)}$$

Subscript i is assigned for cells connected to the evaluated cell, e. $i \rightarrow e$ is the flux direction from i to e.

For an explicit finite difference scheme, the net flow rate of **Eq. 3.2** can be written as:

$$\sum_{i=1}^{N} q_{i \to e} = \sum_{i=1}^{N} T_{i \to e} \, M_{i \to e}^{n} \Delta\Phi_{i \to e}^{n+1} \quad \text{... (3.3)}$$

And in fully implicit form the above equation becomes:

$$\sum_{i=1}^{N} q_{i \to e} = \sum_{i=1}^{N} T_{i \to e} \, M_{i \to e}^{n+1} \Delta\Phi_{i \to e}^{n+1}$$

where,

T = Transmissibility term, *md-ft*

M = Mobility term, 1/*cp*

$\Delta\Phi$ = Potential difference, *psia*

N = Connection list (member of neighboring blocks)

The gradient or the potential difference $\Delta\Phi$ is calculated using the following formula:

$$\Delta\Phi_{i\rightarrow e} = \Delta p_{i\rightarrow e} + \gamma\Delta Z - \Delta p_c \quad (3.4)$$

where,

γ = Average specific gravity, *psi/ft*

ΔZ = Elevation difference, *ft*

Pc = Capillary pressure, *psia*

The mobility term, M is calculated with respect to standard conditions, thus the formation volume factor is included. Upstream relative permeability, $k_{r\ upstream}$ is used to calculate the fluid mobility.

$$M_{i\rightarrow e} = \frac{k_{r\,upstream}}{B_{i\rightarrow e}\,\mu_{i\rightarrow e}} \quad (3.5)$$

where,

$k_{rupstream}$ = Upstream relative permeability, *fraction*

$$k_{rupstream} = \begin{cases} k_{ri} & \text{if } \Phi_i > \Phi_e \\ \dfrac{k_{ri} + k_{re}}{2} & \text{if } \Phi_i = \Phi_e \\ k_{re} & \text{if } \Phi_i < \Phi_e \end{cases} \quad \text{.......... (3.6)}$$

The fluid formation volume factor and viscosity are the average values of the connected cells.

$$B_{i \to e} = \frac{B_i + B_e}{2} \quad \text{.......... (3.7)}$$

$$\mu_{i \to e} = \frac{\mu_i + \mu_e}{2} \quad \text{.......... (3.8)}$$

T is defined as transmissibility that describes the flow from one block to another block. **Fig. 3.1** illustrates the transmissibility of two blocks, block ① and block ②.

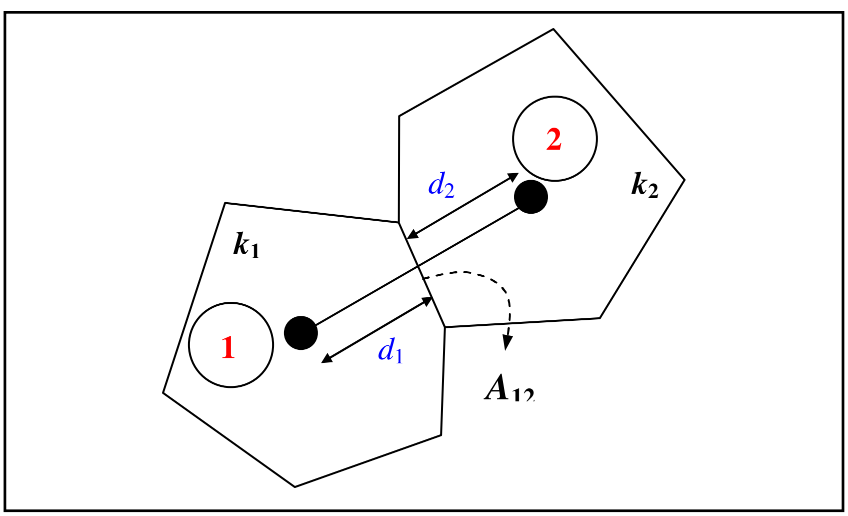


Fig. 3.1-Transmissibility description of two blocks; block ① and block ②

The transmissibility of two connected blocks is calculated using geometric average.

$$T_{12} = \frac{\alpha_1 \ \alpha_2}{\alpha_1 + \alpha_2} \quad \text{(3.9)}$$

where,

$$\alpha_1 = \frac{k_1 \ A_{1-2}}{d_1} \text{ and } \alpha_2 = \frac{k_2 \ A_{2-1}}{d_2} \quad \text{(3.10)}$$

where,

$A_{1\text{-}2}$ = Area of interface to the flow from $cell_1$ to $cell_2$

$A_{2\text{-}1}$ = Area of interface to the flow from $cell_2$ to $cell_1$

d = Distance from control volume to area of interface

The material balance equation of an evaluated cell, *e*, can be obtained by simple algebraic operation from the above equations.

$$\Delta a_{i\to e}^{m} \Delta\Phi_{i\to e}^{n+1} = \frac{1}{\Delta t}\left[\left(\frac{V_p S}{B}\right)_e^{(n+1)} - \left(\frac{V_p S}{B}\right)_e^{n}\right] \quad \text{(3.11)}$$

where,

$$\Delta a_{i\to e}^{m} \Delta\Phi_{i\to e}^{n+1} = \sum_{i=1}^{N} T_{i\to e} \ M_{i\to e}^{n} \Delta\Phi_{i\to e}^{n+1} \quad \text{(3.12)}$$

The material balance equation for the entire gridbocks is:

$$\sum_{i=1}^{N} T_{i\to e} \ M_{i\to e}^{n} \Delta\Phi_{i\to e}^{n+1} = \frac{1}{\Delta t}\left[\left(\frac{V_p S}{B}\right)_e^{(n+1)} - \left(\frac{V_p S}{B}\right)_e^{n}\right], \quad e \in \{1, Ncells\} \quad \text{(3.13)}$$

where, *NCells* is number of blocks in the system.

The left-hand side of **Eq. 3.13** is evaluated at the beginning of specified time interval (*Δt*). The entire pressure and saturation dependent variables on the left-hand side are evaluated at the end and beginning of time interval, *Δt* respectively. The pressure dependent variables are fluid and rock properties, and the saturation dependent variables are relative permeability and capillary pressure. Thus, **Eq. 3.13** is just applied for the IMPES method.

Since the implicit method evaluates pressure and saturation dependent variables at the end of the time interval, **Eq. 3.13** now becomes:

$$\sum_{i=1}^{N} T_{i\to e}\ M_{i\to e}^{n+1} \Delta\Phi_{i\to e}^{n+1} = \frac{1}{\Delta t}\left[\left(\frac{V_p S}{B}\right)_e^{(n+1)} - \left(\frac{V_p S}{B}\right)_e^{n}\right], \quad e \in \{1, Ncells\} \text{ .... } (3.14)$$

3.2.2 Fracture Discretization

As mentioned in the previous chapter, the DFN is represented explicitly as lines in the geometrical domain. The fracture volume, in the computational domain is given by the fracture aperture distribution. **Fig. 3.2** shows the difference in fracture representation between the geometrical and computational domains.

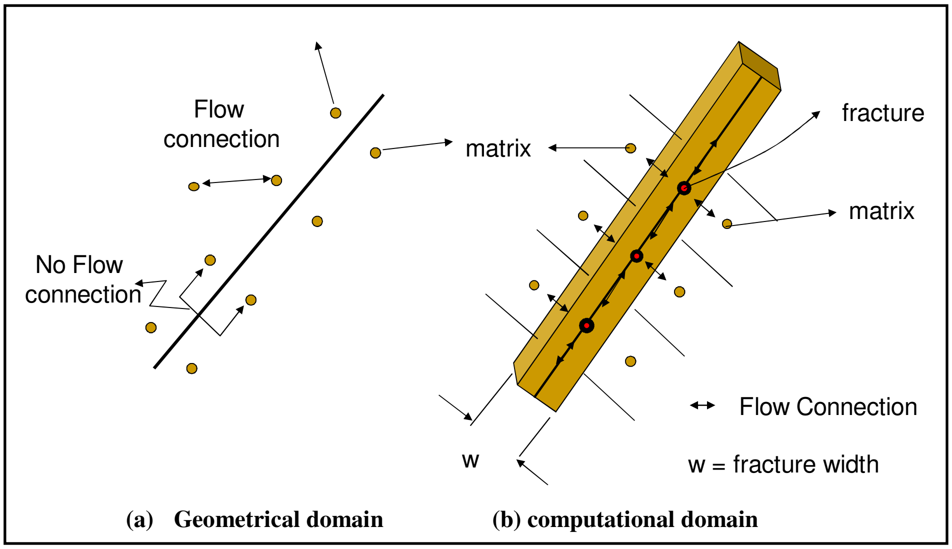


Fig. 3.2–Matrix-fracture and fracture-fracture connections in the computational and geometrical domains

As discussed in the previous chapter, the fracture aperture is not described as a smooth parallel plate in the DFN model. The fracture surfaces are naturally not uniform and the aperture follows a log-normal distribution[18,27].

Probability density function, *PDF* of log-normal distribution is expressed by the following equation[34]:

$$PDF = \frac{1}{x\sigma\sqrt{2\pi}} e^{-\frac{(\ln(x)-\mu)^2}{2\sigma^2}} \quad \text{.......} (3.15)$$

And the cumulative distribution function, *CDF* is:

$$CDF = \int_0^x \frac{1}{x\sigma\sqrt{2\pi}} e^{-\frac{(\ln(x)-\mu)^2}{2\sigma^2}} dx = \frac{1}{2} + \frac{1}{2} erf\left[\frac{\ln(x)-\mu}{\sigma\sqrt{2}}\right] \quad \text{.......} (3.16).$$

where,

μ = mean of fracture aperture.

σ = standard deviation.

x = fracture aperture.

With a given mean, standard deviation of fracture aperture, the fracture aperture, x along the line can be calculated using the inverse of **Eq. 3.16**. **Fig. 3.2** and **Fig. 3.4** are the example graphs of probability and cumulative density functions respectively.

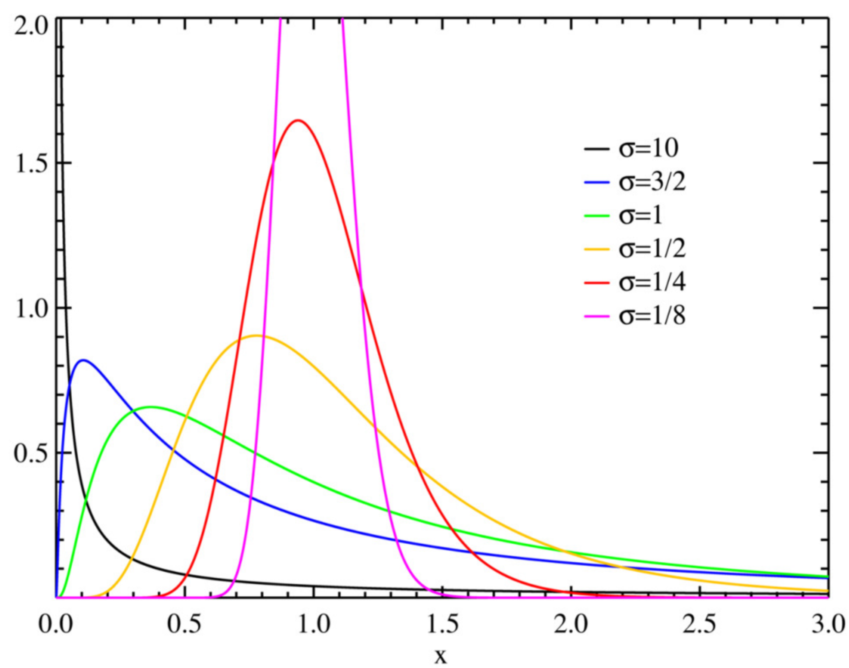


Fig. 3.3–Probability density function of a log-normal distribution[34]

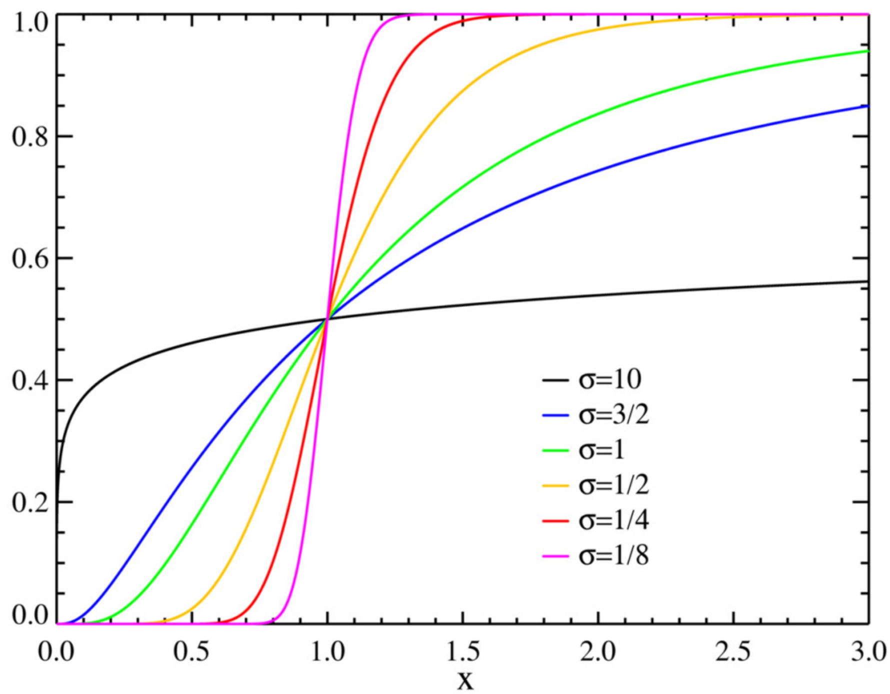


Fig. 3.4–Cumulative distribution function of a log-normal distribution[34]

In order to discretize the fracture, it is important to fragment the fracture into several segments prior to building the grid model. The number of fracture segments depends on the heterogeneity of the apertures or the fracture openings. This could be determined based on standard deviation of the log-normal distribution. A smaller standard deviation means less variation of fracture apertures and requires less number of fracture segments.

For the sake of simplicity, an adequate number of fracture segments in this research are predetermined by user prior to building the grid model. The number of gridblocks per-fracture is proportional to the fracture length. The longer the fracture the more number of gridblocks per-fracture is required. Despite the value of standard deviation of log-normal distribution, the typical number of gridblock per-fracture used in this study is 20 gridblocks per-fracture.

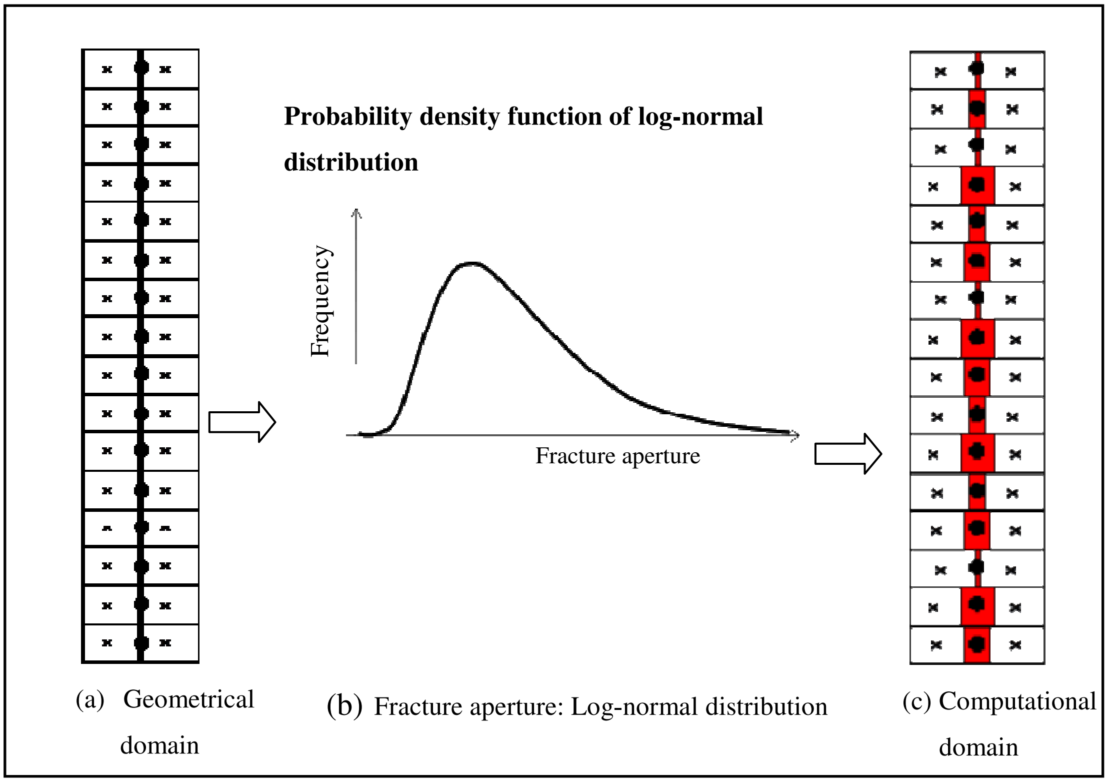


Fig. 3.5–Fracture aperture distribution

With a given fracture apertures, permeability of the fracture segments are calculated using the cubic-law formulation[35]. Based on the cubic law, the permeability can be presented as a function of fracture width or fracture aperture **(Eq. 3.17)**. It is worth being noted that the cubic-law formulation is using several assumptions such as the fracture surface is smooth and laminar flow occurs inside the fracture.

The permeability of the fracture is calculated by:

$$k_f = \frac{w^2}{12} \qquad (3.17)$$

where,

w = fracture width

k_f= fracture permeability

Some researches introduced fracture roughness into the cubic-law relationship to account for the fact that smooth fracture surfaces are not likely found in nature. They believe that there should be a factor in the cubic-law which inhibits the flow through the fractures[36,37]. However, in this case we assume the cubic law applies to individual point on the fracture face, as determined by CT scanning of fracture aperture or other methods.

If the fracture blocks are magnified as depicted in the dashed circle of **Fig. 3.5**, the flow connection will look like **Fig. 3.6**.

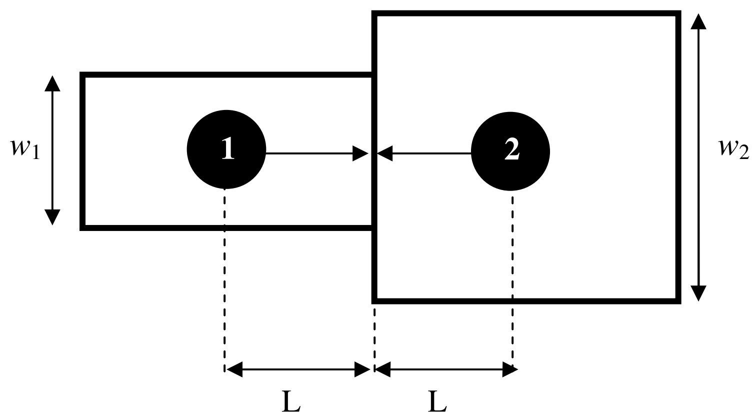


Fig. 3.6–Flow connection between two segments in the fracture where w_1 and w_2 represent two fracture grid cells with different aperture

3.2.3 Well Modeling

The pressure in the wellblock is not the same as the bottomhole flowing pressure at the well, p_{wf}. The reason is that the gridblock where the wells located are significantly larger than the wellbore radius. The pressure difference between the block pressure and bottomhole pressure, p_{wf} is proportional to the coefficient, the *productivity* or *injectivity index*. The geometric factor is commonly named the *well index*.

3.2.3.1 Peaceman's Well Model

Peaceman[38] found that the pressure calculated for a well block is the same as the flowing pressure at an equivalent radius, r_o, where he defined r_o as "the radius at which the steady-state flowing pressure for the actual well is equal to the numerically calculated pressure for the well block". The relationship between r_o and bottomhole pressure is expressed in the following equation.

$$p_{wf} - p(r) = \frac{q\mu}{2\pi} \ln \left(\frac{r_w}{r_o}\right) \qquad (3.18)$$

where,

p_{wf}	=	bottomhole well flowing pressure
$p(r)$	=	pressure at grid block containing the well
q	=	production rate of well
r_w	=	wellbore radius
r_o	=	radius at which steady-state flowing pressure for the actual well is

equal to the numerically calculated pressure for the well block.

Using uniform, square Cartesian grid blocks ($\Delta x = \Delta y$), Peaceman showed that if $\Delta x = \Delta y$ and $k_x = k_y$ then:

$$r_o = 0.28\ \Delta x \qquad (3.19)$$

In another paper, Peaceman[39] derived an expression for r_o for an isotropic reservoir with non-square grid blocks:

$$r_o = 0.14(\Delta x^2+\Delta y^2)^{1/2} \qquad (3.20)$$

Furthermore, he derived for an anisotropic reservoir:

$$r_o = \frac{0.28\left[\sqrt{k_y/k_x}\,(\Delta x)^2 + \sqrt{k_x/k_y}\,(\Delta y)^2\right]^{1/2}}{(k_y/k_x)^{1/4} + (k_x/k_y)^{1/4}} \quad ,\ldots\ldots(3.21)$$

3.2.3.2 Well Model for Voronoi Grid

In using Voronoi grid model, we need a different well model from Peaceman's well model originally formulated for radial and Cartesian square grid blocks. Aziz and Palagi[13] presented an analytical well model based on Peaceman's work which can be applied to grids of any geometry. This model assumes that the pressure in all grid blocks that are neighbors of the wellblock can be evaluated by the radial flow equation around the well. Also, flow is assumed to be radial around the well block despite of the location of the well. Their well model (**Fig. 3.7**) is shown in **Eq. 3.22**.

$$r_o = \exp\left(\frac{\sum_j \left(\frac{b}{d}\right)_{ij} \ln(d_{ij}) - \theta_{ij}}{\sum_j \left(\frac{b}{d}\right)_{ij}}\right) ,\ldots\ldots(3.22)$$

where,

j	=	grid block that is neighbor of well block i
b_{ij}	=	length of side of polygon
d_{ij}	=	distance between the centers of grid block i and j
θ_{ij}	=	angle open to flow ($\theta = 2\pi$ for an internal well, i.e. well located in the center of the block)

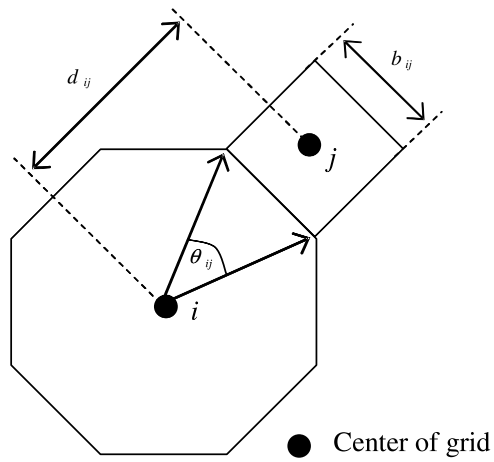


Fig. 3.7–Well model for a polygon (after Palagi et al.[13])

Palagi derived a special case for **Eq. 3.22** when the polygon of interest has equal sides, where:

$$(b/d)_{ij} = \tan(\pi/N), \quad (3.23)$$

Substituting **Eq. 3.23** into **Eq. 3.22** (with $\theta = 2\pi$) and solving for r_o gives:

$$r_o = d_{ij} \exp\left(\frac{-2\pi}{N\tan(\pi/N)}\right), \quad (3.24)$$

where, N is number of sides of the polygonal grid block containing the well.

Once we have the effective radius of the well, the well productivity index and the bottom-hole pressure can be calculated using the following formulas:

$$WI = \frac{2\,\pi\,k\,h}{\ln(\frac{r_o}{r_w}) + S}, \qquad (3.25)$$

$$P_{wf} = p(r) - \frac{q}{\lambda\,WI}, \qquad (3.26)$$

λ is the fluid mobility ($\lambda = k_r/\mu$).

3.2.3.4 Well Constraints

Producers are operated by the following constraints:

1. Constant flow rate of any one phase

   If the rate of any one phase is specified, then the rate of the other phase(s) can be calculated as follows:

$$P_{wf}^{\;n+1} = p(r)^{n+1} + \frac{q_\alpha}{WI\;\lambda_\alpha^{\;n+1}} \qquad (3.27)$$

   where,

   α = fluid phase (oil, gas and water)

2. Constant bottom hole pressure

   If the well bottomhole pressure is specified, then the rate of any phase can be obtained as follows:

$$q_\alpha^{n+1} = WI\;\lambda_\alpha^{n+1}(p(r)^{n+1} - p_{wf}) \qquad (3.28)$$

Injectors are usually operated at two constraints – either constant injection rate or constant injection pressure.

3. Constant Injection Rate

   If the injection rate of any one phase is specified, then the flowing bottomhole pressure is computed as follows:

$$P_{wf} = p(r)^{n+1} + \frac{q_\alpha}{W\lambda_\alpha^{\;n+1}} \quad \text{...(3.29)}$$

4. Constant Injection Pressure

   If the injection pressure is specified, then the rate of the injected phase can be obtained as follows:

$$q_\alpha = J\lambda_\alpha (P_{wf} - P_i) \quad \text{..(3.30)}$$

3.3 Solution Technique

Eq. 3.14 is the equation that we are going to solve in order to obtain the pressure and saturation distribution throughout the model. Residual functions will be used to construct a series of linear equations. The residual function is basically the difference of the net flow rate and the rate of accumulation (**Eq. 3.31**)

The residual equation implemented in the DFN Simulator is expressed by the following equations[33]:

$$r_{o,g,w}^{n+1} = \sum_{i=1}^{N} T_{i\to e} \; M_{i\to e}^{n+1} \Delta\Phi_{i\to e}^{n+1} - \frac{1}{\Delta t}\left[\left(\frac{V_p S}{B}\right)_e^{(n+1)} - \left(\frac{V_p S}{B}\right)_e^{n}\right] + q_{sc}, \quad e \in \{1, Ncells\} \quad \text{... (3.31)}$$

For black oil model, the equation should be expanded into all forms of residual functions of oil, gas as water phase.

Oil Phase:

$$r_o^{n+1} = \sum_{i=1}^{N} T_{i \to e} \; M_{o\,i \to e}^{\;n+1} \Delta\Phi_{o\,i \to e}^{\;n+1} - \frac{1}{\Delta t}\left[\left(\frac{V_p S_o}{B_o}\right)_e^{(n+1)} - \left(\frac{V_p S_o}{B_o}\right)_e^{n}\right] + q_{osc}, \quad e \in \{1, Ncells\} \;. (3.32)$$

Gas Phase:

$$r_g^{n+1} = \sum_{i=1}^{N} T_{i \to e} \; M_{g\,i \to e}^{\;n+1} \Delta\Phi_{g\,i \to e}^{\;n+1} - \frac{1}{\Delta t}\left[\left(\frac{V_p S_g}{B_g}\right)^{n+1} + R_{so}^{\;n+1}\left(\frac{V_p S_o}{B_o}\right)^{n+1} + R_{sw}^{\;n+1}\left(\frac{V_p S_w}{B_w}\right)^{n+1} - \ldots\right]$$

$$\left[\ldots\left(\frac{V_p S_G}{B_G}\right)_e^{n} - R_{so}^{\;n}\left(\frac{V_p S_o}{B_o}\right)^{n} - R_{sw}^{\;n}\left(\frac{V_p S_w}{B_w}\right)^{n}\right] + q_{g\,sc}, \quad e \in \{1, Ncells\}, \ldots\ldots\ldots(3.33)$$

Water Phase:

$$r_w^{n+1} = \sum_{i=1}^{N} T_{i \to e} \; M_{wi \to e}^{\;n+1} \Delta\Phi_{w\,i \to e}^{\;n+1} - \frac{1}{\Delta t}\left[\left(\frac{V_p S_w}{B_w}\right)_e^{(n+1)} - \left(\frac{V_p S_w}{B_w}\right)_e^{n}\right] + q_{wsc}, \; e \in \{1, Ncells\} \;.. (3.34)$$

Eq. 3. 31, **Eq. 3.32** and **Eq. 3.33** contain gravity terms. Now, we will add the capillary terms:

$$P_{cow} = P_o - P_w \qquad \therefore P_w = P_o - P_{cow}, \ldots\ldots\ldots\ldots\ldots(3.35)$$

$$P_{cog} = P_g - P_o \qquad \therefore P_g = P_{cog} + P_o, \ldots\ldots\ldots\ldots\ldots(3.36)$$

Thus, the potential terms of $\Delta\Phi_g$ and $\Delta\Phi_w$ in the **Eq. 3.33** and **Eq. 3.34** can be expressed with one unknown variable of oil pressure, P_o. The P_{cow} and P_{cog} are the rock properties provided in the form of tables as function of fluid saturations.

Another equation that we need is the saturation equation:

$$S_o^{n+1} + S_w^{n+1} + S_g^{n+1} = 1 \qquad \therefore \quad S_o^{n+1} = 1 - S_g^{n+1} - S_w^{n+1}, \qquad (3.37)$$

Finally, we can solve the three unknown variables (P_o, S_g and S_w) with the three Equations (Eq. 3.32, 3.33 and 3.34). Another remaining unknown, S_o can be computed by simply using **Eq. 3.37**.

3.3.1 Linear Equations

We will simplify the flow equations in term of residual functions and all the unknown variables. We can rewrite the residual functions for all phases as follows,

$$r_o = f(p, s_w, s_g) \qquad (3.38)$$

$$r_g = f(P, s_w, s_g) \qquad (3.39)$$

$$r_w = f(P, s_w, s_g) \qquad (3.40)$$

In more common terms, we may also express those equations as:

$$r_o = OIP^{n+1} - (OIP^n + Q_o) \qquad (3.41)$$

$$r_g = GIP^{n+1} - (GIP^n + Q_g) \qquad (3.42)$$

$$r_w = WIP^{n+1} - (WIP^n + Q_w) \qquad (3.43)$$

where,

OIP, *GIP* and *WIP* are oil, gas and water in place at standard conditions.

Q_o, Q_g and Q_w are oil, gas and water produced or injected from wells into the reservoir during the period from n to $n+1$ (Δt) at standard conditions.

Since our objective functions are to satisfy $r_o = 0$, $r_g = 0$ and $r_w = 0$, we can consider our problem similar to a root-finding problem. We can use any iterative method to solve all the equations. Newton-Raphson and Quasi-Newton iterative methods are used due to their general application in petroleum industry and simple implementation. **Fig. 3.8** and **Fig. 3.9** illustrate the iteration procedures of those two methods.

In order to solve the equations iteratively, we should compute the Jacobian matrix, J of those equations.

$$J = \begin{bmatrix} \frac{\partial r_o}{\partial p} & \frac{\partial r_o}{\partial s_w} & \frac{\partial r_o}{\partial s_g} \\ \frac{\partial r_g}{\partial p} & \frac{\partial r_g}{\partial s_w} & \frac{\partial r_g}{\partial s_g} \\ \frac{\partial r_w}{\partial p} & \frac{\partial r_w}{\partial s_w} & \frac{\partial r_w}{\partial s_g} \end{bmatrix} \quad \text{..........} (3.44)$$

The overall Newton-Raphson and Quasi-Newton iteration schemes form a linear equation of:

$$J^k \, [\Delta m]^{k+1} = -[r]^k \quad \text{..........} (3.45)$$

The superscript of k indicates the iteration k^{th} and $\Delta m = \begin{bmatrix} dp \\ ds_w \\ ds_g \end{bmatrix}$.

p^{k+1}, s_w^{k+1} and s_g^{k+1} are updated using the following equation.

$$\begin{bmatrix} p \\ s_w \\ s_g \end{bmatrix}^{k+1} = \begin{bmatrix} p \\ s_w \\ s_g \end{bmatrix}^{k} - \begin{bmatrix} dp \\ ds_w \\ ds_g \end{bmatrix}^{k+1} \quad \text{..........} (3.36)$$

The iteration is continued until our objective functions satisfied, or the residual functions of oil, gas and water (Eq. 3.41, 3.42 and 3.43) are closed to specific tolerance.
In addition to Quasi-Newton method, it doesn't need to update the Jacobian matrix for each iteration. It uses the first Jacobian for the entire iterations ($J^{k+1} = J^k = J^0$).

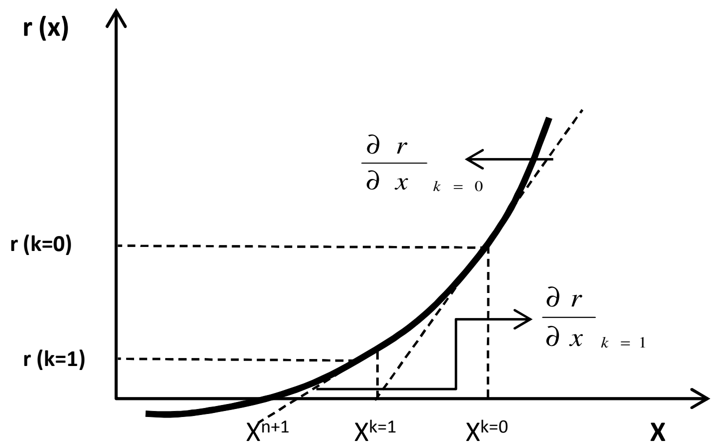


Fig. 3.8-Newton iteration method

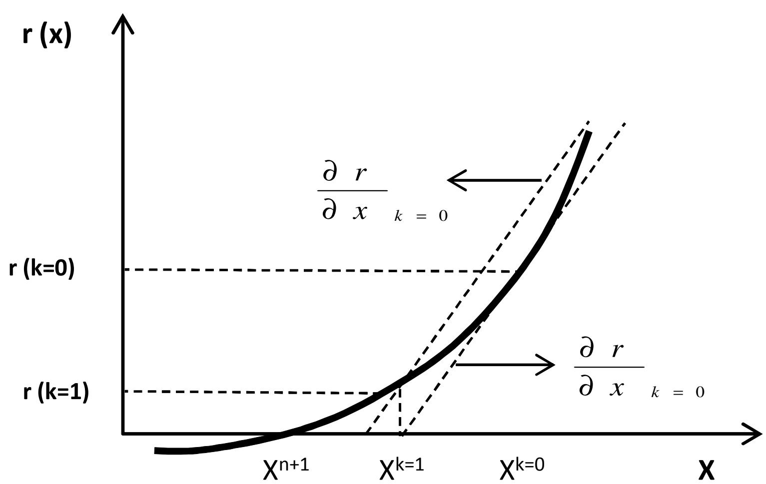


Fig. 3.9-Quasi Newton iteration method

3.3.2 Matrix Solvers

The final equation (**Eq. 3.45**) can be expressed in more compact form using matrix notation as $A\boldsymbol{x} = \boldsymbol{B}$, where A is the co-efficient of the Jacobian matrix, and $\boldsymbol{x}$ and $\boldsymbol{B}$ are column of vectors.

There are various methods available for solving such a system of linear equations, but generally these methods fall into two groups, direct methods and iterative methods. In DFN simulator developed, the solvers that we implemented were provided by SparseLib++ which was developed by Bertolazzi[40].

SparseLib++ contains many libraries of matrix and vector operations, such as matrix multiplication, transpose, and inversion. SparseLib++ is structurally implemented using C++. Thus, it is quite simple to couple the codes from SparseLib++ with any C++ code, such as the DFN simulator.

SparseLib++ is equipped with various iterative solver and pre-conditioners. The solvers are GMRES, Conjugate Gradient, Bi-Conjugate Gradient, Stabilized Bi-Conjugate Gradient, QMR, CHEBY and Richardson Iterations. The pre-conditioners are ILU, Diagonal, and ICP pre-conditioners.

The technical discussion of the matrix solver and the pre-conditioners in details is beyond the scope of this study. Most importantly, despite the matrix solver used, all methods should yield similar results and should be accurate as long as the specified tolerance can be satisfied.

3.4 Data Structure

DFN simulator has been developed using an object oriented programming language, Visual Basic 6.0 and Microsoft Visual C++. Visual Basic was used to implement the pre and post-processor while C++ was the processor of the simulator.

In order to simplify the implementation, several important objects were created. Most of the objects are recognizable by users as common terms in the reservoir simulators, e.g. fluid properties, rock properties, numerical controls, etc.

In general, the DFN Simulator uses common data structures as found in many commercial simulators. The main differences between commercial and DFN simulator are the static model structure. In models with Cartesian grid systems, the grid blocks are usually defined using the terms DX, DY and DZ for 2D and 3D models. The standard indexing system of i, j and k are no longer applicable in Voronoi grid system, due to the variation of block shapes.

The following data structures of the DFN simulator are reported in the form of tables. The explanation of keywords used in the DFN simulation is described in the second column of the tables.

3.4.1 Data Structure - Static Model

The static model consists of the dimensions of the model and the control volume (block) objects which include the rock properties assigned for each object:

1. Model dimensions

   NXNY : number of control volumes/layer

   NZ : number of layers

   START_CV [NCELLS]: initial block of control volume connections and their properties

   {Control Volume Connection and their Properties}

   END_CV : end of control volume connections and their properties

2. Control volume object (**Table 3.1**)

   This section is arranged in column format. Each column is separated by space(s) or tab characters. There are more than 10 columns (sub sections) associated for each control volume property. Additional columns depend on the number of neighboring blocks.

Table 3.1 Control volume (CV) Object

Column	Properties
1	Number of connections
2	Connection lists
3	The depth of control volume
4	Surface area (X-Y cross section)
5	Porosity
6	Lateral permeability
7	Vertical permeability
8	Pore volume multiplier
9	Net pay
10	PVT type or ID
11	Rock type or ID
12	The distance from CV centroid to the interface of connected cell-(i)
.	The distance from CV centroid to the interface of connected cell-(i+1)
.	
.	
n	The distance from CV centroid to interface of connected cell-(n)

More details regarding the control volume object is reported in the Appendix B**.**

3.4.2 Data Structure - Fluid Properties

NPVT : number of PVT table

The DFN simulator uses three-phase fluid properties as shown in the following table (**Table 3.2**).

Table 3.2 Fluid properties object

Column	Properties
1	Pressure (psia)
2	Oil formation volume factor, B_o (RB/STB)
3	Oil viscosity, μ_o (cp)
4	Gas solution in oil phase, R_{so} (SCF/STB)
5	Gas formation volume factor, B_g (RB/SCF)
6	Gas viscosity, μ_g (cp)
7	Water formation volume factor, B_w (RB/STB)
8	Water viscosity, μ_w (cp)
9	Gas solution in water phase, R_{sw} (SCF/STB)

3.4.3 Data Structure – Relative Permeabilities

Since the DFN simulator uses three-phase relative permeability, it requires two relative permeability tables, oil-water (Table 3.3) and gas-water (Table 3.4) relative permeability.

Table 3.3 Oil-water relative permeability curve

Column	Properties
1	Water saturation, Sw (fraction)
2	Oil relative permeability, k_{row} (fraction)
3	Water relative permeability, $\mathrm{k_{rw}}$ (fraction)
4	Oil-water capillary pressure, Pc_{ow} (psia)

Table 3.4 Gas-water relative permeability curve

Column	Properties
1	Liquid saturation, S_L (fraction)
2	Liquid relative permeability, k_{rwg} (fraction)
3	Gas relative permeability, k_{rg} (fraction)
4	Gas-liquid capillary pressure, pc_{wg} (psia)

3.4.4 Data Structure –Properties at Reference Condition

Table 3.5 shows fluid and rock properties at specified reference condition.

Table 3.5 Data at the reference condition

PB	Bubble point pressure, *psia*
PREF	Reference pressure, *psia*
ZREF	Reference depth, *ft*
CROCK	Rock compressibility, *1/psia*
DENOIL	Oil density, *lb/cu-ft*
DENWAT	Water density, *lb/cu-ft*
DENGAS	Gas density, *lb/cu-ft*

3.4.5 Data Structure – Numerical Controls

Numerical controls of the DFN simulator are depicted in Table 3.6.

Table 3.6-Numerical Control

RESIDERR	Residual Error
RESIDSOLVER	Solver Tolerance
ITMAX	Maximum Solver Iterations
ITSOLVER	Max. Newton Iterations
DELTIME	Time Step, days
MAXDP	Max. ΔP, psia
DTMAX	Maximum time step, days
DTMIN	Minimum time step, days
TMAX	TMAX, days
MASSW	MAX ΔS_w, fraction
MAXSG	MAX ΔS_g, fraction
MAXSO	Max. ΔS_o, fraction
DPPERT	Δp to calculate dr/dp, psia
DSWPERT	ΔS_W to calculate dr/ds_w, fraction
DSGPERT	Δs_g to calculate dr/dp, fraction

3.5 DFN Black Oil Simulator Work Flow

The following figures (Fig. 3.10 and Fig. 3.11) describe the detailed workflows of the developed reservoir simulator.

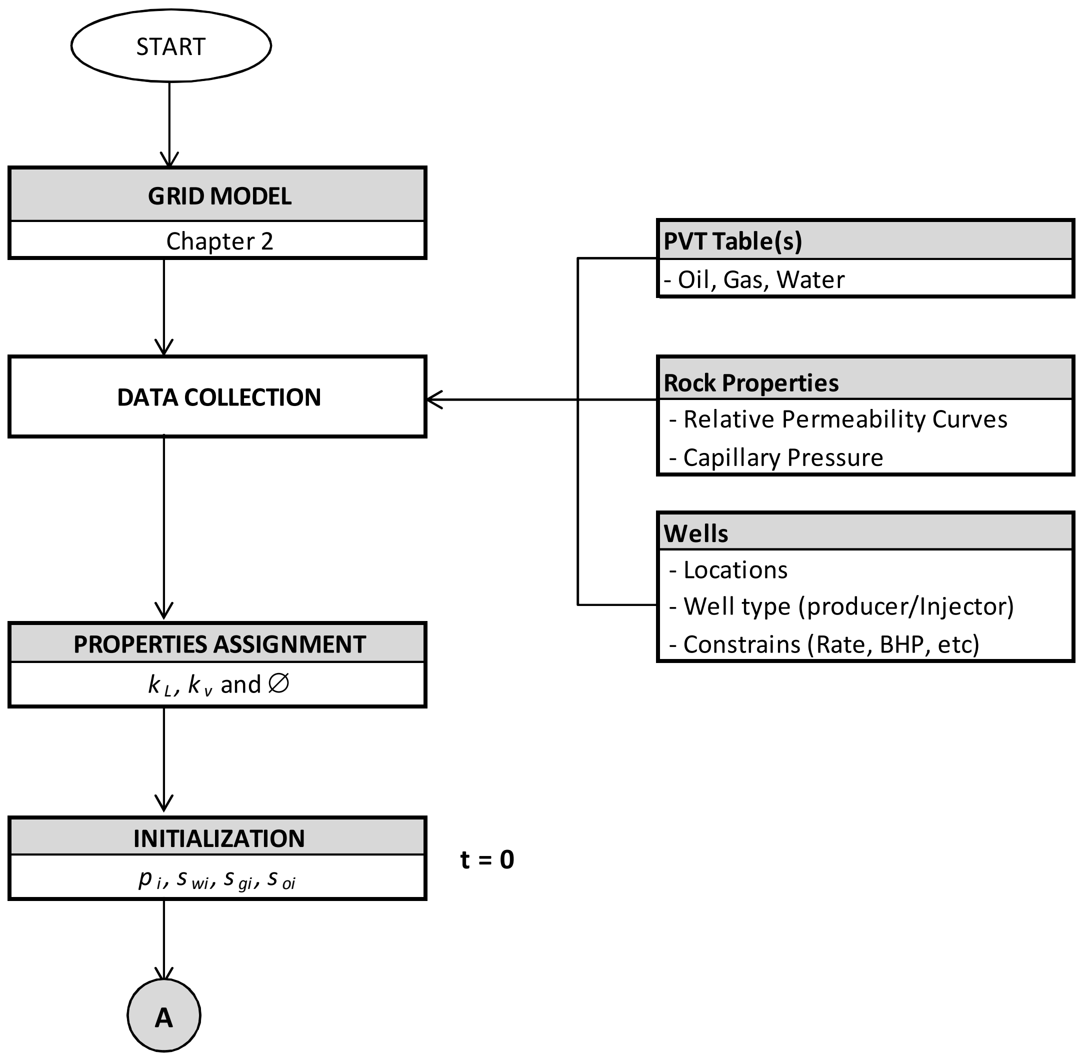


Fig. 3.10-Initialialization workflow

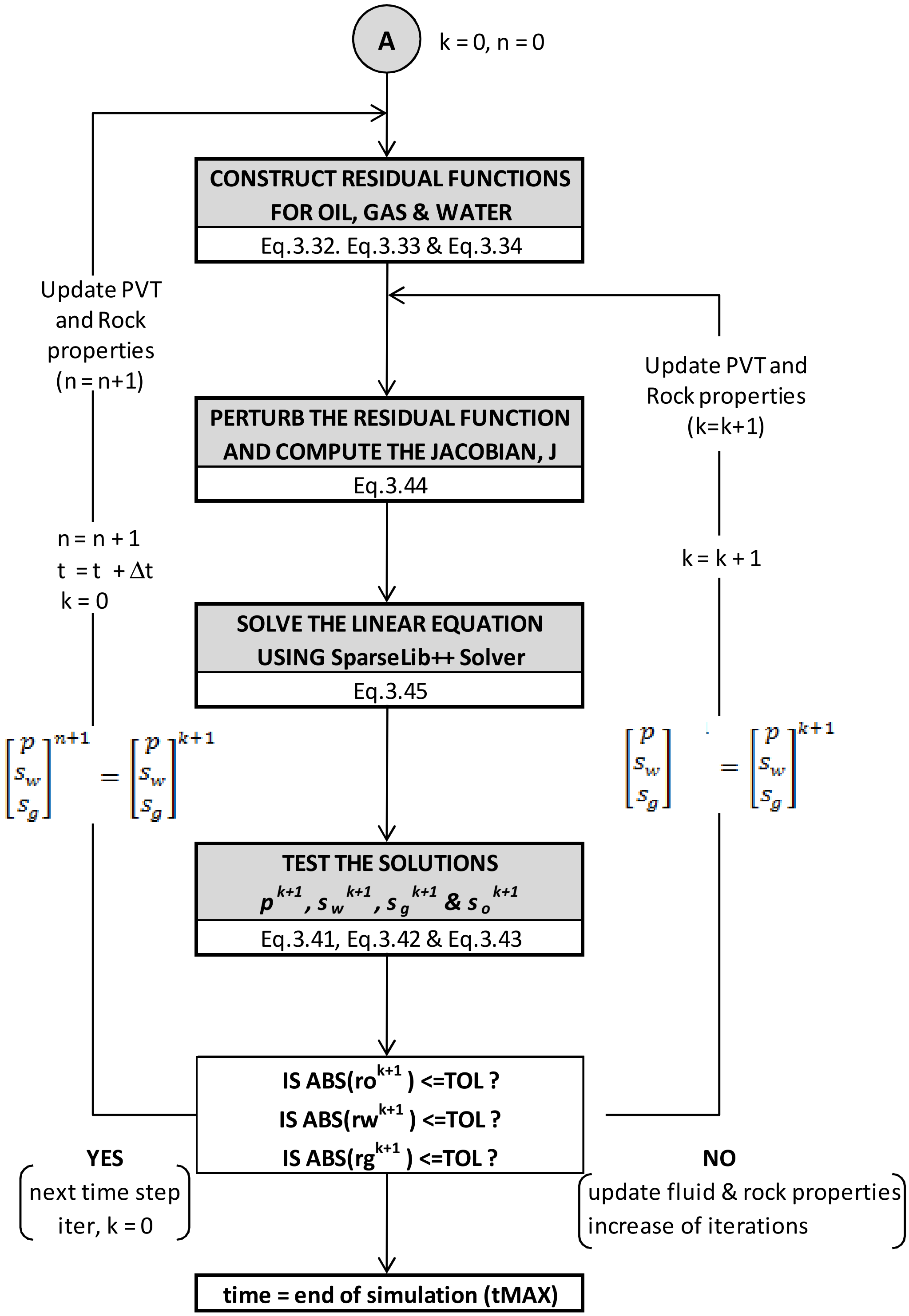


Fig. 3.11-Iteration workflow

CHAPTER IV

VALIDATION OF DFN SIMULATOR

Prior to using the developed DFN simulator to model complex geometry of reservoirs, we extensively validated the simulator against available commercial and academic simulators. Most importantly, we also compared the DFN simulator results against analytical solutions.

This section provides validation procedures of the DFN simulator against single-phase, analytical solutions for well testing and other black-oil academic and commercial reservoir simulators. Several test problems were built to validate the DFN simulator against existing commercial and academic simulators.

The welltest solutions were obtained from welltest software, KAPPA®. We used the Computer Modeling Group simulator, IMEX as a commercial black-oil simulator and RZ, which developed by Robert A Wattenbarger[33] as an academic simulator.

Various models were built, from 2D single-phase, to 3D 3-phase unstructured grid models. Block pressures, GOR, saturations and bottomhole pressures were the parameters that were compared in all the validation cases.

In addition to comparison of the results of the DFN and other simulators, one model was built to validate the shape factor formula in the Warrent and Root[1] dual-porosity approach. Finally, we validated our simulator with six other simulators that participated in the first SPE comparative solution project[41].

The following are the list of the validation cases:

1. Case I: single-phase DFN and analytical well testing solutions.
2. Case II: DFN to validate "*shape factor*" in dual-porosity approach.
3. Case III: DFN and commercial and academic simulators with rectangular grid model.

4. Case IV: DFN unstructured and structured grid models
5. DFN and first SPE comparative solution project.

4.1 Single-Phase DFN Simulation and Well Testing Solution

A welltest solution was used to validate the DFN simulator against analytical solutions. The analytical solutions can be obtained from any welltest or Pressure Transient Analysis (PTA) software. As mentioned earlier, the analytical solution for the following example was obtained from KAPPA® software.

In order to validate the DFN Simulator against the analytical solution, the DFN model was built to follow the basic assumptions applied in the analytical solution:

(1) Single phase flow.

(2) Homogeneous reservoir.

4.1.1 Model Description – Case I

A producer well is located in the center of a square model of 5000 ft x 5000 ft. Constant pressure was applied to all sides of the boundaries (**Fig. 4.1** and **Table 4.1**). The well was operated with the following drawdown and buildup sequences:

1. Drawdown or constant rate of 1000 bbl/day for 12 hours.
2. Build up or shut in the well for 12 hours.
3. Drawdown or constant rate of 1000 bbl/D for 24 hour.
4. Build up or shut in the well for 8 days.

Single phase oil flow behavior could be achieved by modifying the Stone's three-phase relative permeability curves in the black oil simulation model such that only oil dominates the flow (**Fig-4.2 and Table 4.2**). Constant porosity and permeability values were applied through the entire model to preserve the homogeneous assumption in the analytical solutions.

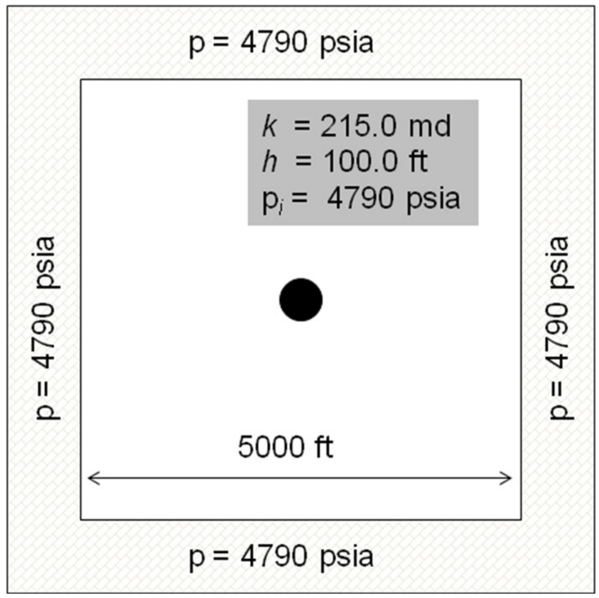


Fig. 4.1–Model description (homogeneous single-porosity model)

Table 4.1 Reservoir and wellbore model

Reservoir and wellbore	
Permeability	215 md
Thickness	100 ft
Porosity	20%
Model dimensions	5000 ft x 5000 ft
Closed-constant pressure boundaries	4790 psia
Initial pressure	4790 psia
Wellbore radius	0.25 ft
Formation volume factor	1.2 RB/STB

Table 4.2 Single-phase relative permeability

s_w	k_{rw}	k_{row}
0.000	0.00	1.00
0.999	0.00	1.00
1.000	1.00	0.00

s_L	k_{rg}	k_{rog}
0.000	0.00	1.00
0.999	0.00	1.00
1.000	1.00	0.00

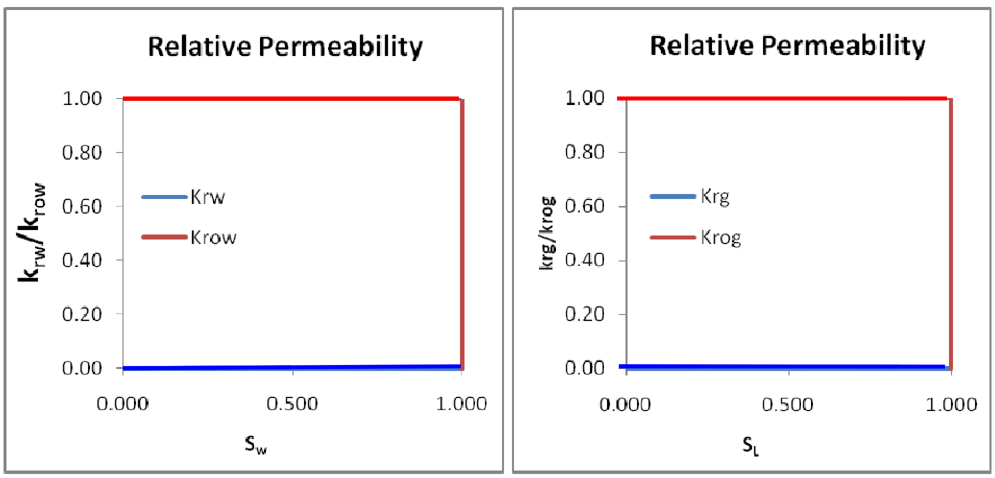


Fig4.2-Relative permeability curves for single-phase oil flow

DFN Simulator was used to run the model and the result was compared to the analytical model provided by the welltest software. Small time step, Δt of 0.01 day was set in order to construct good pressures and derivatives vs. time plots.

There were two flow periods, the second drawdown and the last buildup period that was evaluated to validate results of the DFN simulation. We interpreted the results and expected to get exactly the same properties that were used in the DFN simulation model.

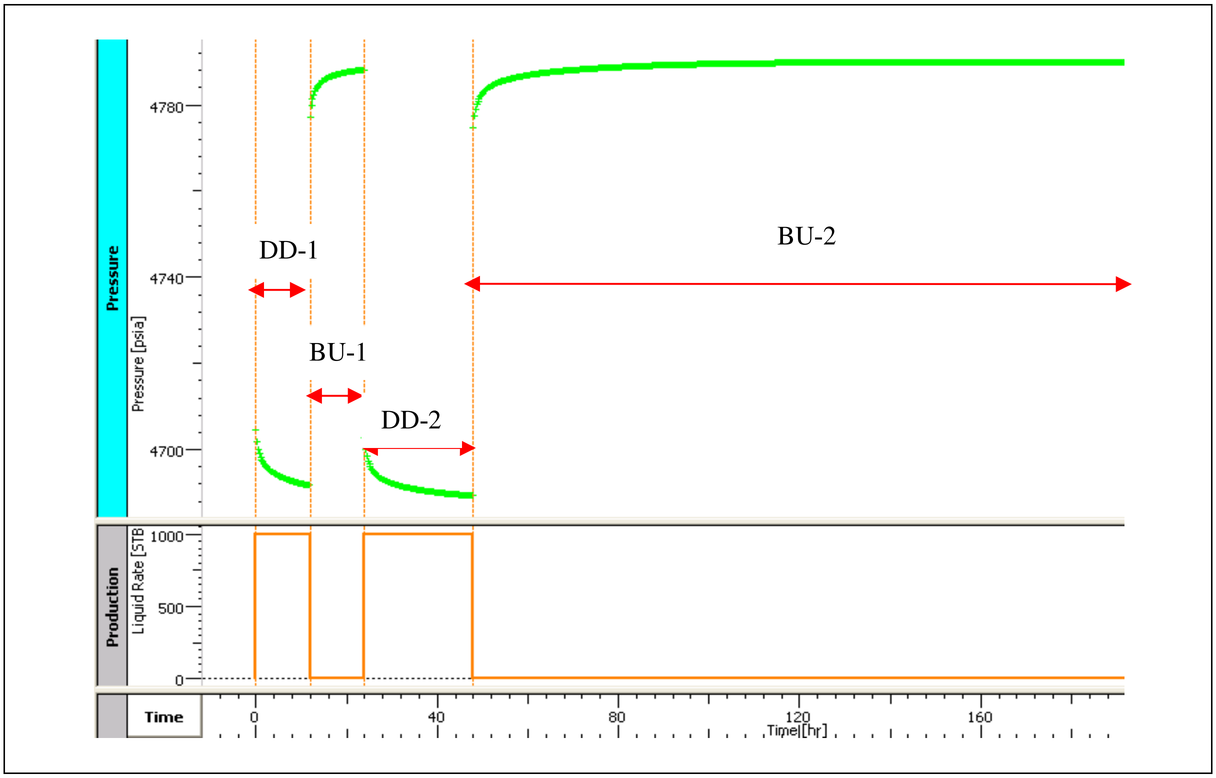


Fig. 4.3–Welltest design (rate and pressure profiles)

Fig. 4.3 shows the complete welltest period (10 days). It contains drawdown and build up periods. The figures shows rate and pressure profiles generated from DFN simulator results.

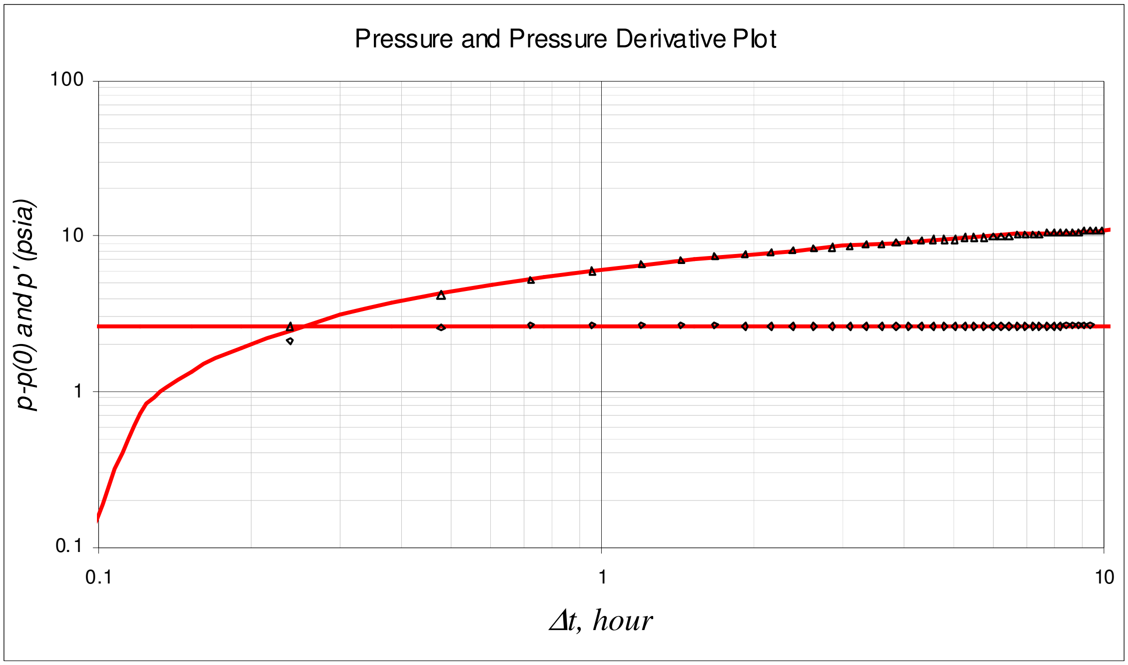


Fig. 4.4–Pressure and the derivative plot for second drawdown period (DD-2)

Fig. 4.4 shows the pressure and its derivative plots of the real data and the interpretation result. The interpretation results were forced using the given DFN model properties. The initial pressures, permeabilities and skin factors were identical between the DFN simulation and analytical solution.

Since we did not incorporate wellbore storage into the DFN model, we assumed the value the wellbore storage was negligible (C_{wb} = 0 bbl/psi). However in order to get reasonable matches on pressure and its derivate, the wellbore storage from the well test interpretation was also very small (C_{wb} = 1.12 E-6 bbl/psi).

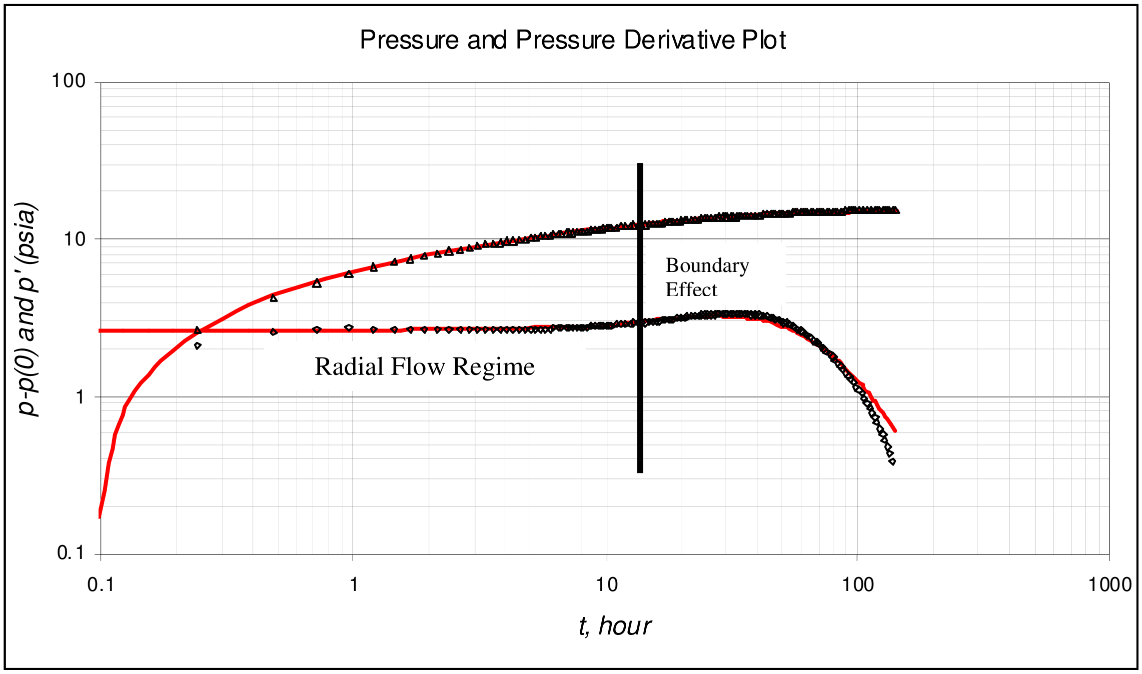


Fig. 4.5–Pressure and the derivative plot for second buildup period (BU-2)

In order to see the boundary effect, we used the second buildup period which was performed for a much longer period compared to the earlier drawdown and buildup periods. The second buildup period was performed for 8 days. The effect of the constant pressure boundary condition was clearly shown in the pressure derivative plot (**Fig.4.5**).

As expected, the DFN simulation was in excellent agreement with the welltest interpretation results. As it was shown in the DD-2 interpretation, the wellbore storage effect could be considered negligible for the BU-2 period as well (C_{wb} = 1.65 E-6 bbl/psi).

In addition to the interpretation results provided from DD-2 and BU-2 periods, we could construct the pressure profile for the entire test periods as shown in **Fig. 4.6**. The difference between DFN simulator result and analytical solution is not noticeable.

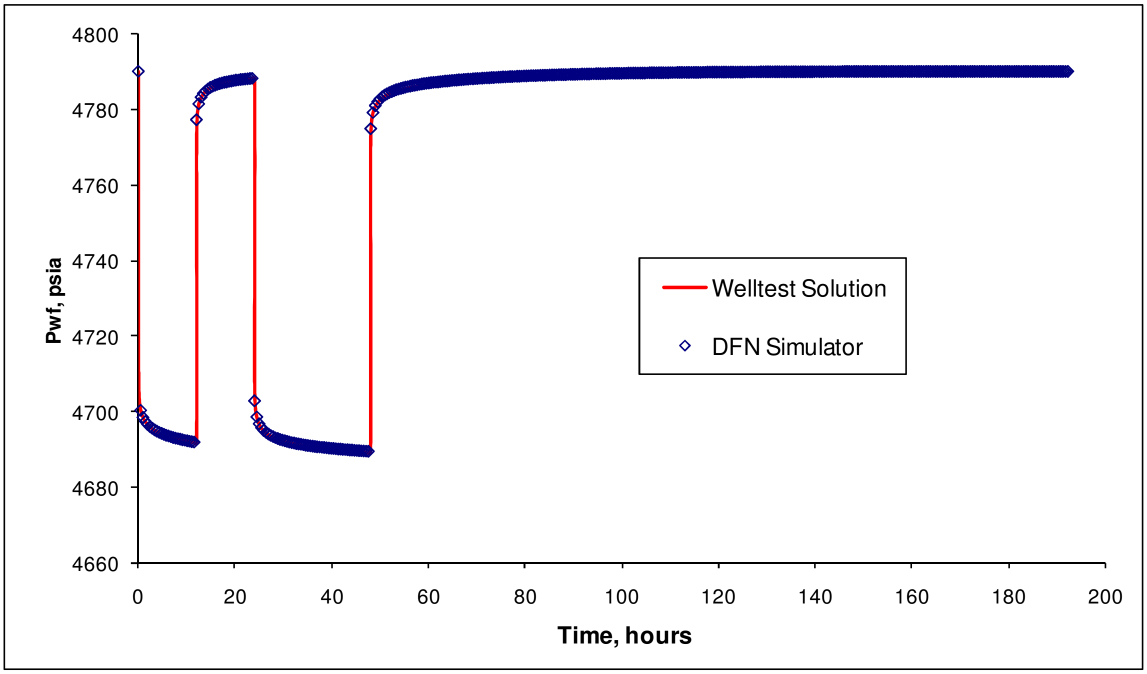


Fig. 4.6-Welltest and DFN Simulator (All test periods)

4.2 DFN Simulator and Dual-Porosity Model

This particular test case demonstrates the use of the DFN simulator to investigate the "shape factor" (σ), the value to quantify the matrix-fracture drainage in the dual-porosity model.

Matrix-fracture drainage in the dual-porosity model was idealized by Warren and Root[1] and expressed using the following equation.

$$q^* = \frac{q}{V_b} = \sigma \frac{k_m}{\mu}\left(p_m - p_f\right) \quad \text{.......................................(4.1)}$$

where,

q^* = drainage rate per bulk volume.

V_b = bulk volume.

k_m = matrix permeability.

μ = fluid viscosity.

p_m = pressure of matrix block.

p_f = pressure of fracture.

σ = dual-porosity shape factor.

Eq.4.1 is applied for pseudo-steady state flow which means that the drainage rate, q^* from matrix to fracture is constant.

4.2.1 Model Description – Case II

Fig. 4.7 represents one quarter of a full 2D model to represent a single matrix block in dual-porosity model. The distances between fractures are the same along *x* and *y* directions. High permeability and low permeability are applied for fractures and matrix blocks respectively. Parameters for Case II are shown in **Table 4.3**.

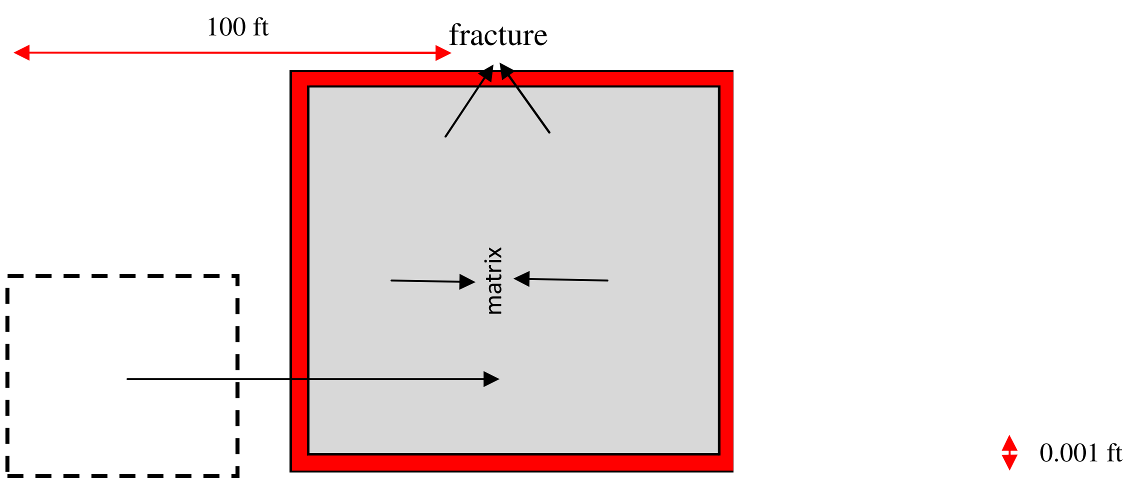


Fig. 4.7-"Shape factor" dual-porosity model

Table 4.3-Model description (Case II)

Fracture width, w	0.001 ft
Fracture spacing, L_x=L_y	100 ft
Fracture permeability, k_f	10,000 md
Matrix Permeability, k_m	0.0001 md
Formation Volume Factor, B_o	1.0 RB/STB
Viscosity, μ_o	0.7 cp
Bulk Volume, V_b	100x100x20 = 200,000 cu-ft

Small and constant drainage rate (q = 0.001 cu-ft/day) from matrix and fracture are applied along the fractures. The simulation was run for several days. At the early time, transient flow occurred followed by stabilized flow regime (pseudo-steady state flow).

The following steps were used to investigate dual-porosity shape factor under constant drainage condition:

1. Record the value of $\Delta p/q$ after the occurrence of pseudo-steady state flow.

   From **Fig. 4.8**, the $\Delta p/q$ = 0.31442 psi/cu-ft/D

2. Calculate $\Delta p/q^*$.

   If $q^* = q/V_b$, the value of $\Delta p/q^*$ *is 0.31442 x* V_b = *0.31442 x 2.0E+5* = 62,884

3. In order to represent a full model (a single matrix block model), the $\Delta p/q^*$ from a quarter model should be divided by 4. Therefore, the $\Delta p/q^*$ = 62,884 / 4 = 15,721.

4. Calculate the shape factor by using **Eq. 4.1.**

   $\boldsymbol{\sigma}$ = 0.00282

5. With σ = 0.00282 and fracture spacing of 100 ft, we can express the shape factor with the following formula:

$$\sigma = \frac{28.2}{L^2} \quad \text{.......... (4.2)}$$

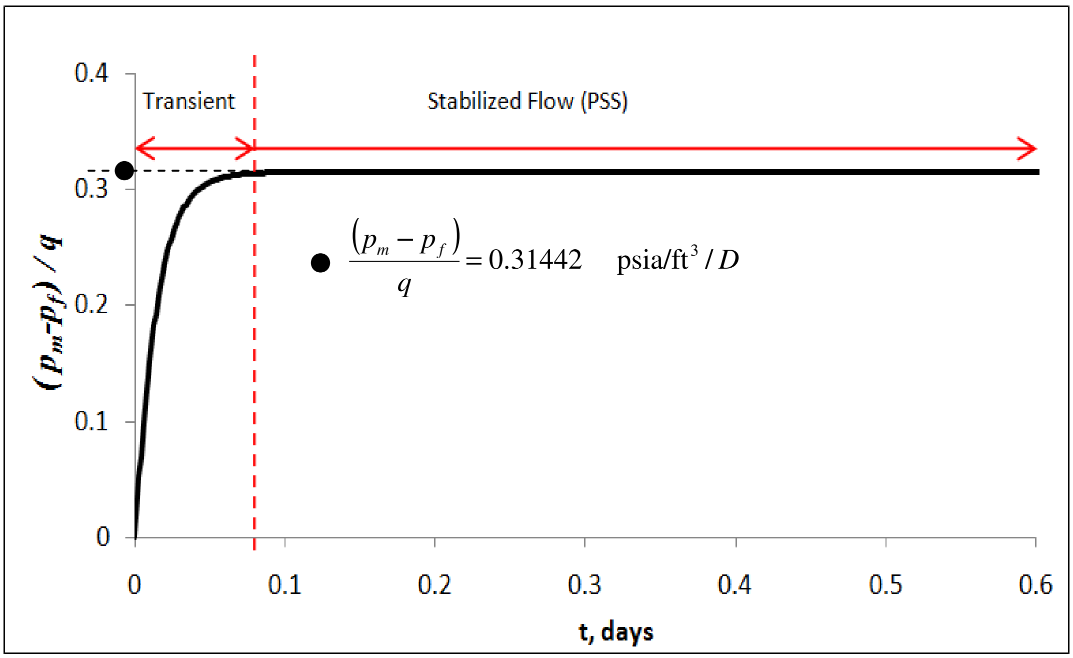
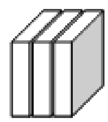
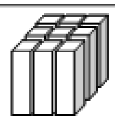
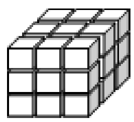
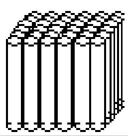
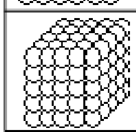


Fig. 4.8-Plot of $\frac{(p_m - p_f)}{q}$ vs. time (transient & pseudo-steady states)

The shape factors as function of fracture spacing from other researchers with a constant drainage rate are depicted in the **Table 4.4**.

For the same geometry, this expression is consistent with several authors. Mora et al.[42] and Coats[43] obtained 28.43 and 28.5 respectively.

Table 4.4-Shape factors from different authors (after Mora et al.[42])

			Constant Fracture Pressure		Constant Rate (pss)		
Geometry	W & R[1]	Kazemi[44]	Zimmerman /Lim & Aziz[45,46]	Mora[42]	Coats[43]	Mora[42]	This study
	*12*	*4**	$\pi^2 = 9.87$	$\pi^2 = 9.87$	12	12	
	*32**	*8**	$2\pi^2 = 19.74$	$2\pi^2 = 19.74$	*28.5*	28.43	28.2
	*60**	*12**	$3\pi^2 = 29.61$	$3\pi^2 = 29.61$	*49.6*	49.48	
			$18.17\left(- L^2 \frac{23.11}{D^2}\right)$	$18.17\left(- L^2 \frac{23.11}{D^2}\right)$		$25.13\left(= L^2 \cdot \frac{32}{D^2}\right)$	
			$25.67\left(= L^2 \frac{4\pi^2}{D^2}\right)$	$25.67\left(- L^2 \frac{4\pi^2}{D^2}\right)$		$38.98\left(= L^2 \cdot \frac{60}{D^2}\right)$	

4.3 DFN Simulator and Commercial Reservoir Simulators

This section will describe the validation procedures and present the results of the DFN simulator against commercial simulator. As previously mentioned, the commercial simulator used for this validation was the black oil simulator, IMEX as part of package from Computer Modeling Group (CMG). A 3-D, three-phase black oil model was simulated using both IMEX and DFN simulator.

4.3.1 Model Description – Case III

A simple example case was created based on a regular Cartesian 3-D reservoir model grid of 5x5x3 (**Fig. 4.9**). The dimension of each block is 1,200 ft x 1,200 ft x 100 ft. The three-phase model contains one producer located in the one corner of the model. The producer is perforated on the corner top layer and operated with constant oil rate (1000 stb/d) under the constraint of minimum bottom-hole pressure (1000 psia). The reservoir is homogeneous. Lateral permeabilities of 215 md and vertical permeability of 21.5 md were applied to each layer. The detailed data of the model is provided in the **Table 4.3, Table 4.4 and Table 4.5**.

Table 4.3- Three-phase fluid properties

p (psi)	*Rs* (SCF/STB)	*Bo* (RB/STB)	*Bg* (RB/SCF)	*Viso* (cp)	*Visg* (cp)	*Co* (1/psi)
14.7	1.0	1.062	0.9358	1.040	0.0080	1.581E-05
264.7	90.5	1.150	0.0679	0.975	0.0096	1.575E-05
514.7	180.0	1.207	0.0352	0.910	0.0112	1.569E-05
1014.7	371.0	1.295	0.0180	0.830	0.0140	1.556E-05
2014.7	636.0	1.435	0.0091	0.695	0.0189	1.533E-05
2514.7	775.0	1.500	0.0073	0.641	0.0208	1.521E-05
3014.7	930.0	1.565	0.0061	0.594	0.0228	1.509E-05
4014.7	1270.0	1.695	0.0046	0.510	0.0268	1.487E-05
5014.7	1618.0	1.827	0.0036	0.449	0.0329	1.465E-05
9014.7	2984.0	2.357	0.0022	0.203	0.0470	1.384E-05

Table 4.4 provides additional data at the reference pressure:

Table 4.4 Fluid properties at reference pressure

B_w =1.03 *RB/STB*
c_w =3x10^{-6} *psia*$^{-1}$
ρ_w = 63.24 *lb/cu-ft*
μ_w = 0.31 *cp*
ρ_o = 46.24 *lb/cu-ft*
ρ_g = 0.0647 *lb/cu-ft*
p_{ref} = 4790.0 *psia* p_b = *4017.7 psia*

Table 4.5 Three-phase relative permeability data

Water-Oil Saturation

SWT	KRW	KRNW
0.0000	0.0000	1.0000
0.3996	0.0000	1.0000
0.5994	0.0000	1.0000
0.9990	0.0000	1.0000
0.9992	0.2000	0.8000
0.9998	0.8000	0.2000
1.0000	1.0000	0.0000

Gas-Oil Saturation

SLT	KRG	KRNG
0.0000	1.0000	0.0000
0.1500	1.0000	0.0000
0.3000	0.9970	0.0000
0.4000	0.9800	0.0050
0.5000	0.7000	0.0250
0.5500	0.3500	0.0750
0.6000	0.2000	0.1250
0.7000	0.0900	0.1900
0.7500	0.0210	0.4100
0.8000	0.0100	0.6000
0.8800	0.0010	0.7200
0.9500	0.0001	0.8700
0.9800	0.0000	0.9400
0.9990	0.0000	0.9800
1.0000	0.0000	1.0000

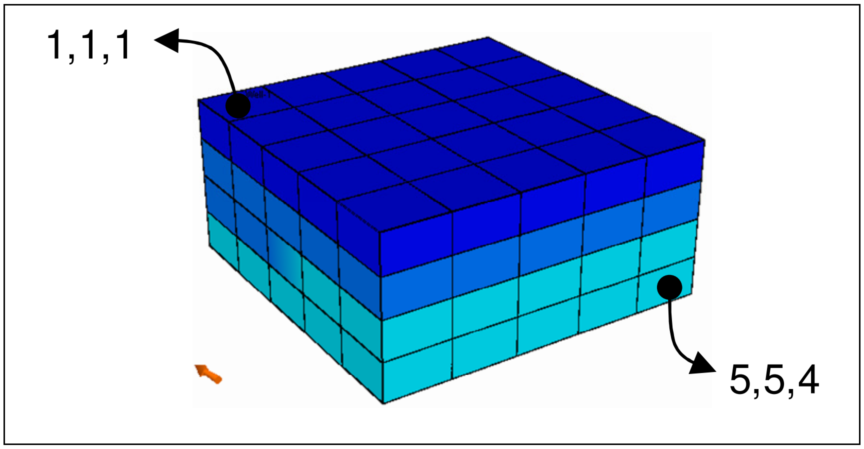


Fig. 4.9–Grid model of Case III (5 x 5 x 3)

The simulation was run for a short period (100 days). Both simulations were run using a fully-implicit scheme. The maximum residual errors in each time step were kept at $1x10^{-6}$. We compared the pressure and oil saturation from both simulators.

We selected two different locations in the model to compare the pressures. One was at the well block (block 1,1,1) and another one was at the furthest distance from the well (block 5,5,4). The oil saturation at the well block was also observed.

The results of the two simulators were as expected. The pressures at the well block and at block 5,5,4 from DFN simulator were in good agreement with CMG results (**Fig 4.10**). The match was also followed by the oil saturation at the well block (**Fig. 4.11**).

The relative error in pressure between the two simulators was less than 0.01%. This error primarily occurred during the early time period (the first 5 days). This could be reduced by setting smaller time step sizes at the early time. However, since the validation results were extremely good, we decided not rerun the model.

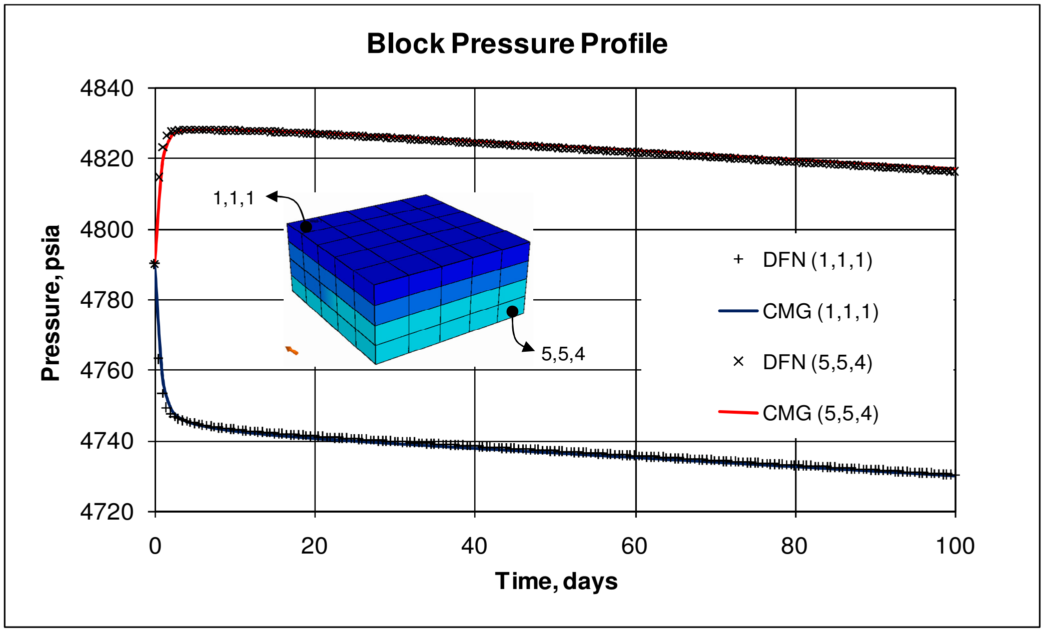


Fig. 4.10–Pressure profiles at the well block and furthest location from the well

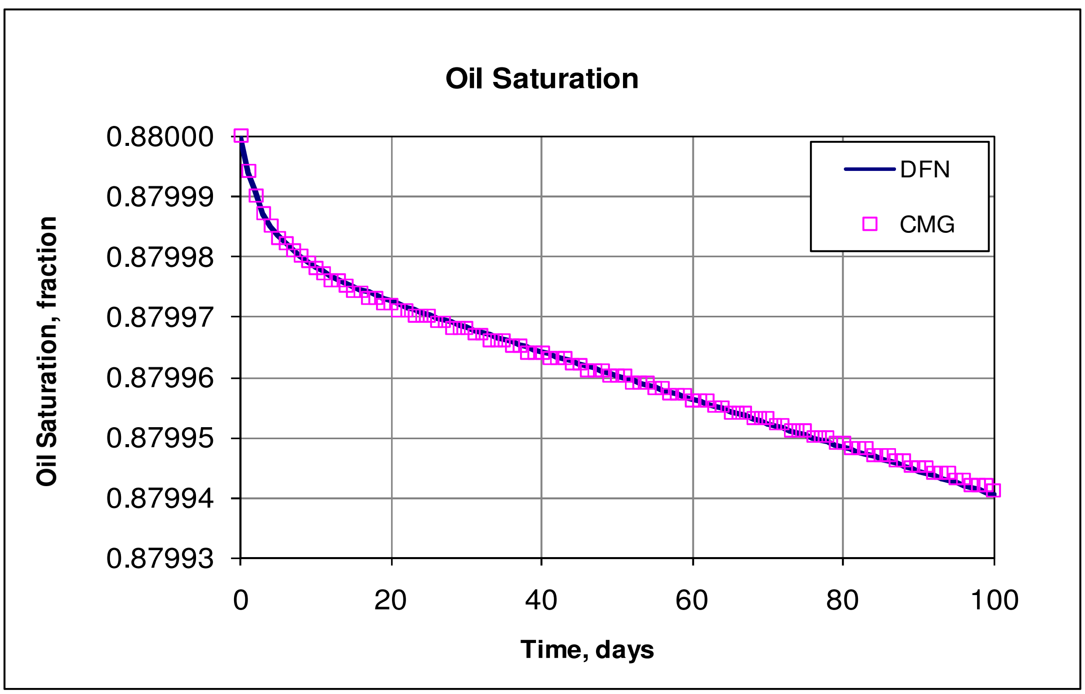


Fig. 4.11–Oil saturation at the well block

4.4 DFN Simulator Validation against RZ and Commercial Reservoir Simulators – Voronoi and Regular Grid Systems

The following section will present several example cases to validate the regular Cartesian grid and Voronoi grid system of the DFN simulator against IMEX and academic simulator (RZ).

In previous chapters, we have discussed how Voronoi algorithm can be used to generate various grid shapes. Thus, the purpose of this validation is to show the flexibility of Voronoi grid system in the DFN simulator compared with the academic and commercial simulators. In order to achieve this goal, a 2D black oil and unfractured model with no fractures should be created using all three simulators (IMEX, RZ and DFN simulator).

4.4.1 Model Description – Case IV

There were six different models tested in this exercise. They are:

1. CMG or IMEX with Cartesian regular grid system (CMG) – **Fig. 4.12a**
2. RZ with Cartesian regular grid (RZ-Regular) – **Fig. 4.12a**
3. DFN with Cartesian regular grid (REGULAR) – **Fig. 4.12a**
4. DFN with combination of regular and hexagonal grid (HEXA) – **Fig. 4.12b**
5. DFN with combination of regular and triangle grid (TRIANGLE) – **Fig. 4.12c**
6. DFN with irregular Voronoi grid (IRREGULAR) –**Fig. 4.12d**

The only difference between Case III and Case IV is the number of layers. The layer thickness is 100 ft. The fluid and rock properties were kept identical with the previous validation case. The numerical controls, e.g. time step, maximum saturations change, maximum pressures change and residual errors were also kept the same. All the runs utilized a fully-implicit finite difference scheme.

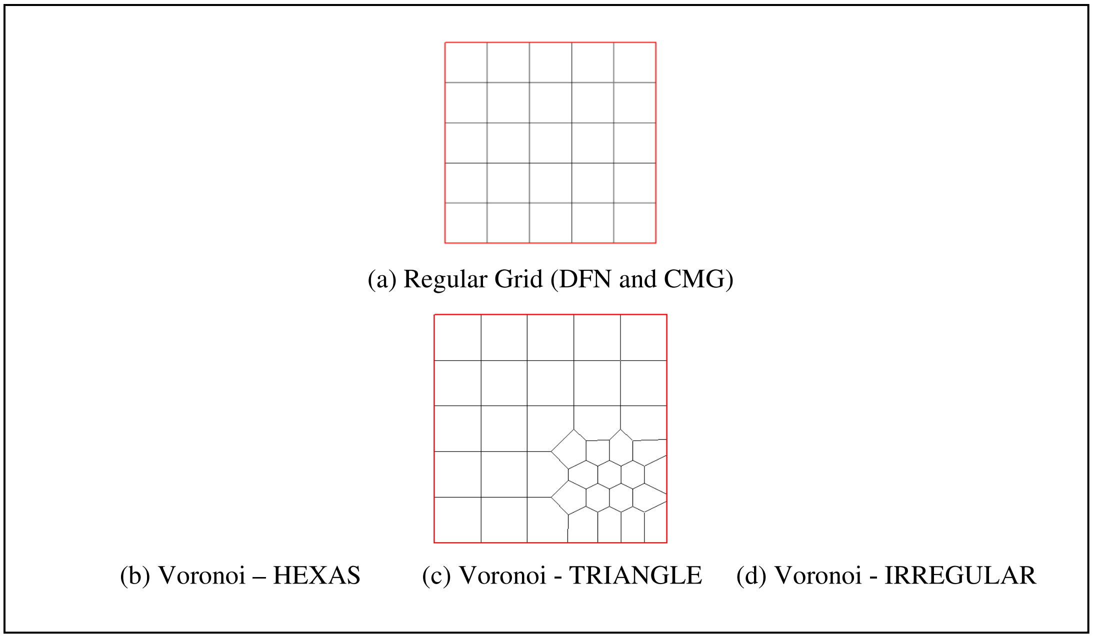


Fig. 4.12–CMG, RZ and DFN grid models (CASE 4)

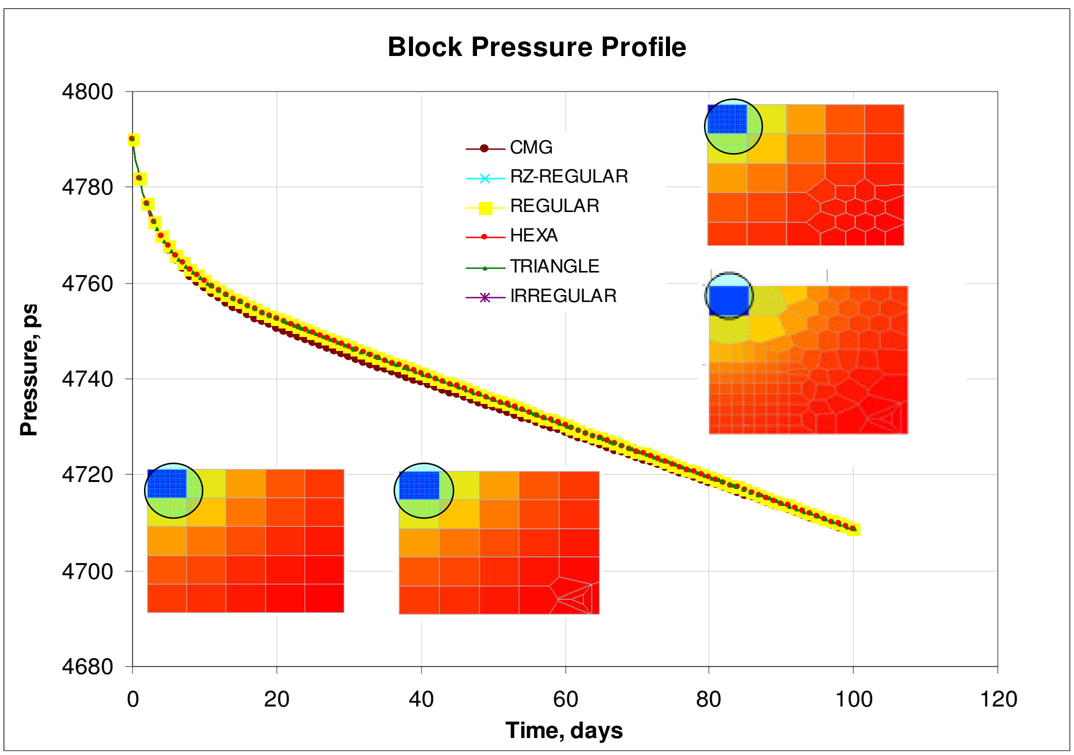


Fig. 4.13 – Block pressure profile of CMG, RZ and DFN with various grid systems

Fig. 4.13 shows the pressure profile of all six models using different simulators and various grid designs. It is clear that the DFN simulator with the Voronoi grid were in good agreement with the commercial and academic simulator for all grid designs.

4.5 DFN Simulator and First SPE Comparative Study

Similarly with other simulators, we also compared the results our DFN simulator with other simulators (commercial and in-house simulators) presented in the first SPE comparative study[41].

The first SPE comparative study was published in 1981. The model was a black-oil, 3-layer gas injection/oil production problem. The grid size was 10 x 10 x 3. The initialization and recurrent data were reported in detail in the original paper, and these data were used to setup the case for DFN Simulator. The grid dimension and well completions are depicted in **Fig. 4.14** and **Fig. 4.15** respectively.

The original study tested two different cases; the first case had constant saturation pressure (4014.7 psia), and the second case had a variable bubble-point pressure due to the variation of gas saturation. Only Case 1 results will be compared with DFN Simulator.

Fig. 4.16 and **Fig. 4.17** present the comparison of the well response in plots of oil rate vs. time and Gas-Oil Ratio vs. time for Case 1. The problem does not pose any major numerical difficulties and all the results are close. The results of the DFN simulator are well within the group for both IMPES and fully implicit methods of solution that were used by other simulators at the time. **Fig.4.18** and **Fig. 4.19** present the comparision of block pressure at the producer well and pressure across the diagonal from the producer to the injector respectively.

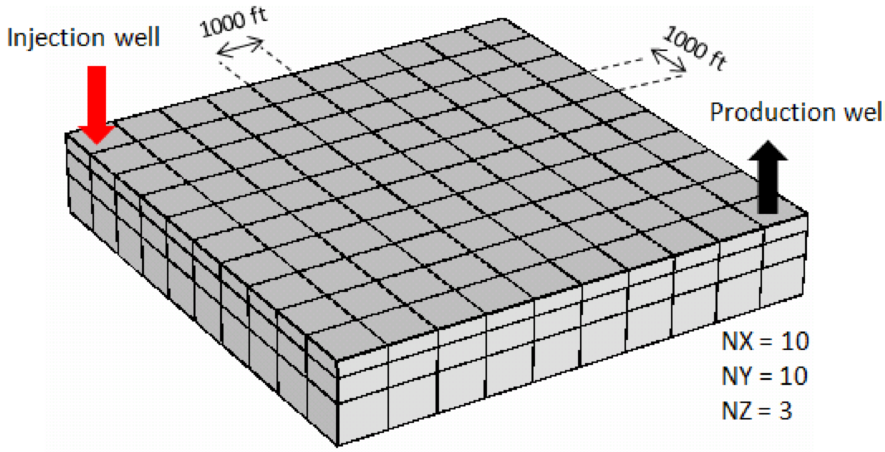


Fig. 4.14-2D grid model of first SPE comparative study (after Odeh et al.[41])

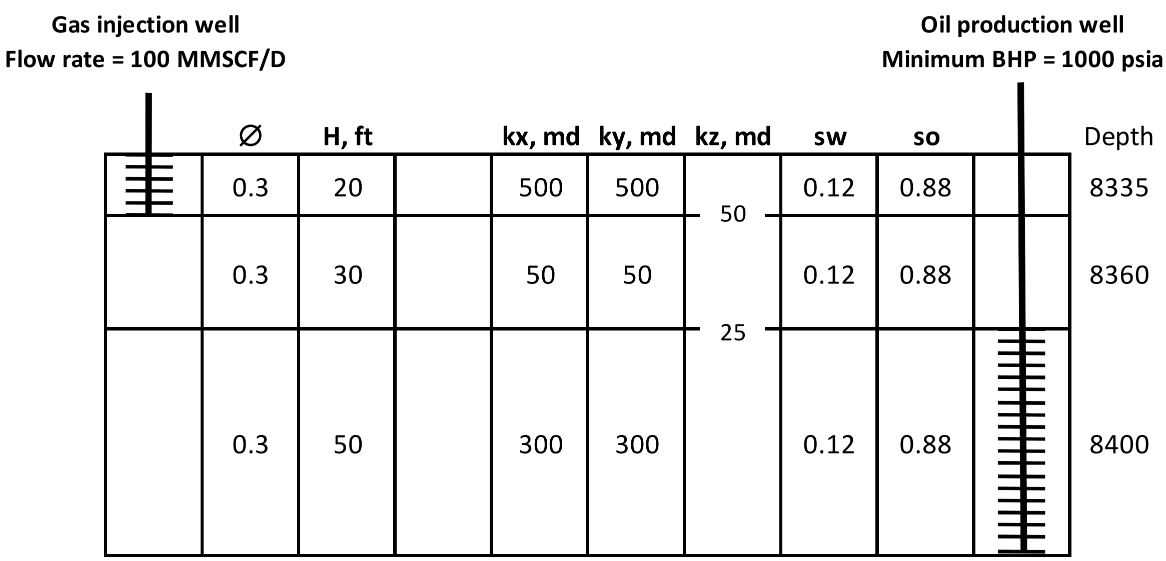


Fig. 4.15-Well completion data and layer properties (after Odeh et al.[41])

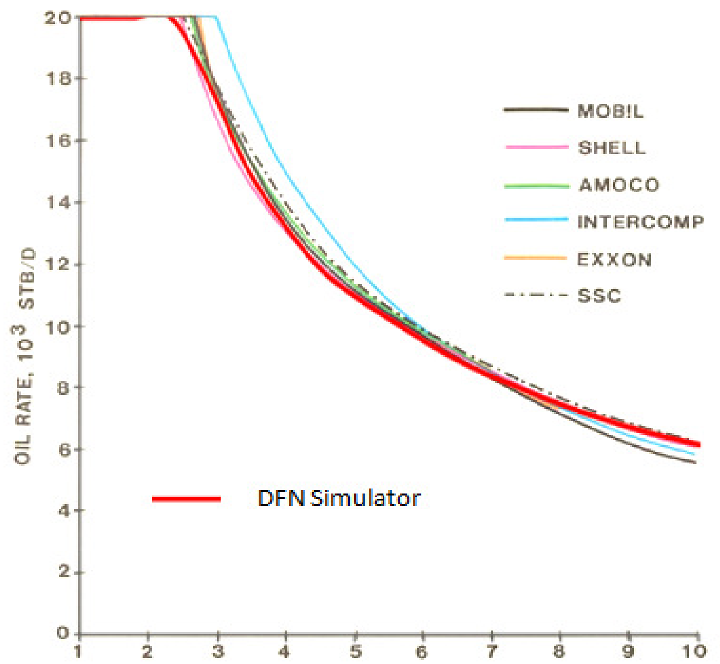


Fig. 4.16-Oil rate (after Odeh et al.[41])

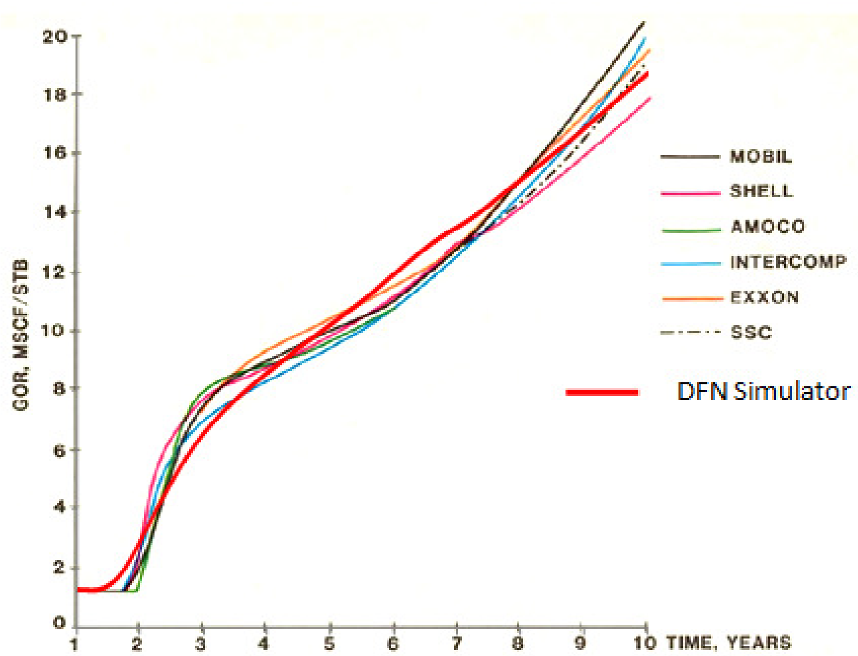


Fig. 4.17-Gas-oil ratio (after Odeh et al.[41])

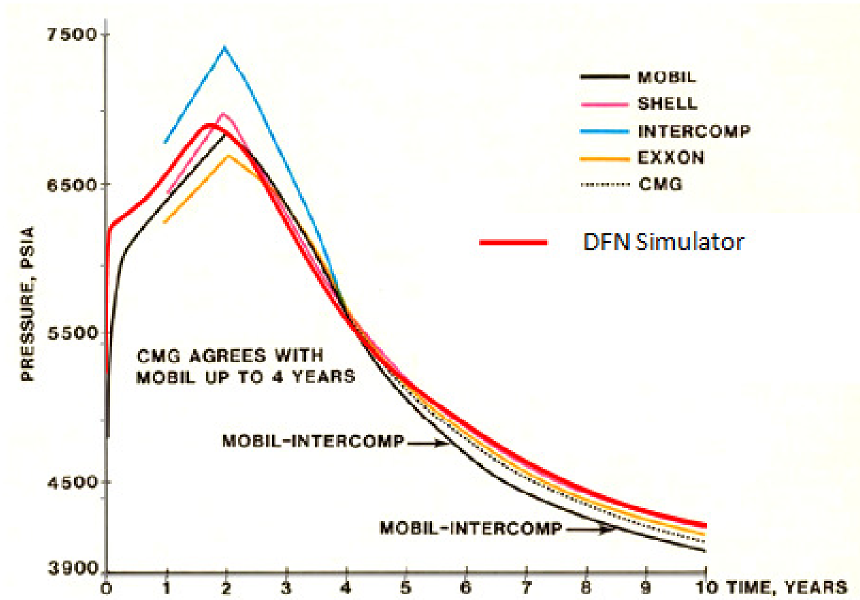


Fig. 4.18- Producer wellblock pressures (after Odeh et al.[41])

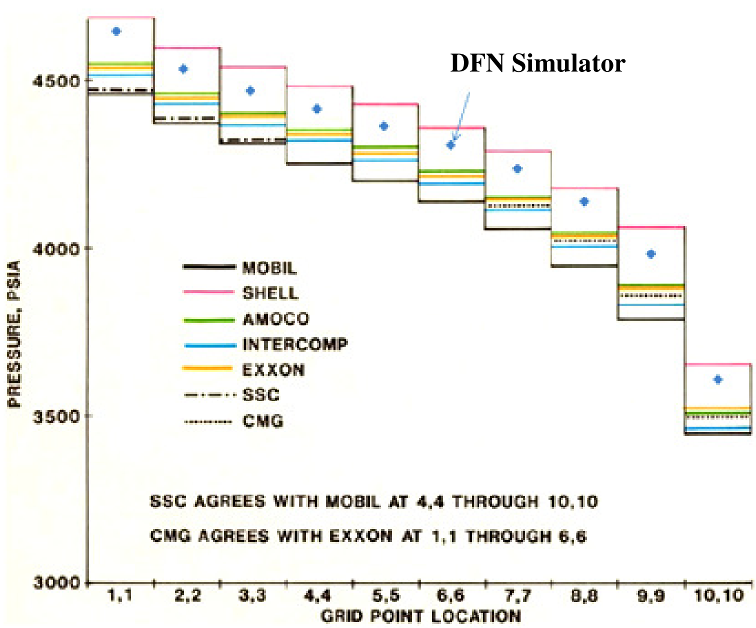


Fig. 4.19 – Block pressure at time = 8 years (after Odeh et al.[41])

CHAPTER V

SIMULATION OF DISCRETE FRACTURE NETWORKS USING VORONOI GRID SYSTEM

The previous chapter discussed the validation procedures of the DFN simulator that we have developed. The validation results have confirmed that the DFN simulator is comparable with other reservoir simulators and excellent agreement with welltest analytical solutions.

In this chapter, we mainly use the simulator to demonstrate various capabilities to model complex reservoir geometries, especially for fractured systems. Several simulations such as models of regular fracture spacing, multiple-fracture (isolated and connected fractures) geometries were performed to demonstrate the capabilities of the developed simulator.

The first model of regular fracture spacing was chosen to show the effects of aperture distribution on reservoir performance. Some other exercises are solely intended to show the unique features of the simulator. The unique features here are the gridding techniques, capability to incorporate fracture apertures distribution into reservoir model and etc.

Besides the capability to model complex geometry of fractures, an additional neat feature of our DFN simulator to run multiple-model simulations simultaneously is also reported in this section.

The simulation datasets of the entire exercises reported in this chapter are attached in the APPENDIX C.

5.1. DFN Simulation of 2D Regular Fracture Spacing

The following test cases were intended to show the effects of fractures and their aperture distribution on reservoir performance. Two models were built. One case was reservoir with uniform fracture apertures (CASE 5.A1) and the other one with log-normally distributed apertures (CASE 5.A2).

The matrix and fracture porosities are 0.25 and 0.5 respectively. The permeabilities of fractures were calculated using cubic law formulation based on the apertures of the fractures. Fracture permeability for CASE 5.A1 is 9,055 md (fracture width = 0.1 ft) and fractures permeabilities for CASE 5.A2 were in the range of 25 md to 300,000 md with mean of 9,055 md. The fluids and other rock properties were identical with the first SPE comparative study.

Fig. 5.1 shows the squared grid model (33 x 33 x 1) applied for both cases. We used variable grid sizes, with finer grids near the fractures. The largest grid blocks are 500 ft x 500ft and the smallest blocks are 0.1 ft x 0.1 ft. The model dimension is 5,380.4 ft x 5,380.4 ft. It is a single-layer model with thickness of 100 ft.

A producer well is located in the bottom left corner and the injector well is located at the top right corner of the model. The producer well was operated with a constant oil rate of 15,000 STB/D and minimum bottomhole pressure of 1,000 psia was set as constrain. Gas was injected constantly at 50 MMSCF/D until end of simulation (10 years).

Table 5.1 is the summary of the model descriptions and **Fig. 5.1** shows the grid model of these two cases.

Table 5.1-Model descriptions (CASE A1 and CASE A2)

Descriptions	CASE 5.A1	CASE 5.A2
Grid dimension	33x33x1	33x33x1
Fracture spacing	1,220 ft	1,220 ft
Model width/ Length	5,380.4 ft	5,380.4 ft
Model thickness	100 ft	100 ft
Matrix permeability	50 md	50 md
Fracture permeability	Constant 9,055 md	Log-normally distributed 24 md – 300 D (mean = 9,055 md)
Matrix porosity	0.25	0.25
Fracture porosity	0.5	0.5
Fluid properties	SPE-1	SPE-1
Initial conditions	SPE-1	SPE-1
Other rock properties	SPE-1	SPE-1
Producing rate	Oil, 15,000 STB/D	Oil, 15,000 STB/D
Minimum produce BHrP	1,000 psia	1,000 psia
Injection rate	Gas, 50 MMSCF/D	Gas, 50 MMSCF/D

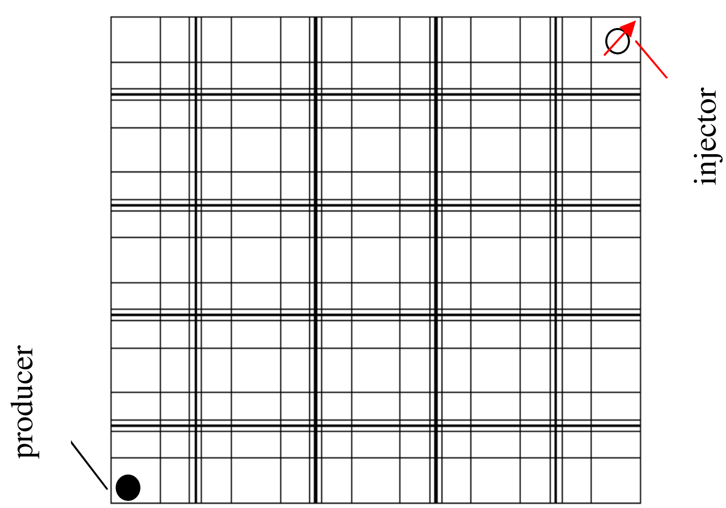


Fig. 5.1–CASE 5.A1 and CASE 5.A2 grid model (33 x 33 x 1)

With fully implicit scheme, both simulations ran relatively smooth, especially for CASE 5.A1. There were no serious numerical problems occurred during the simulations except for several times in CASE 5.A2 the simulation performed time step cuts and reached the maximum linear solver iteration. The detailed numerical performances of these simulations are presented in **Table 5.2.** The material balance error vs. time plot is depicted in **Fig. 5.2**.

Table 5.2-Numerical information and simulation time of CASE 5.A1 and CASE 5.A2

Numerical Performances	CASE 5.A1	CASE 5.A2
Maximum residual error	1.0E-3	1.0E-3
Max. Newton iteration	20	20
Max. linear solver iteration	30	30
Linear solver tolerance	1.0E-3	1.0E-3
Newton iteration	956	1,150
Solver iteration	11,703	29,061
Time step cut	0	10
Simulation time	475 sec.	873 sec.

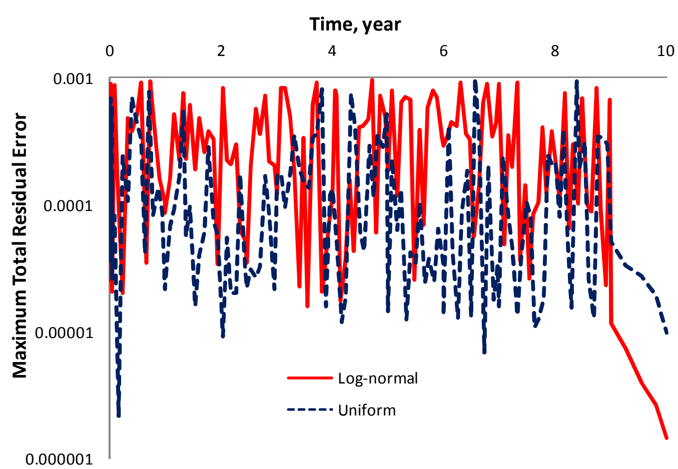


Fig. 5.2-Maximum total material balance error (CASE 5.A1 and CASE 5.A2)

Fig. 5.3, **Fig. 5.4, Fig. 5.5** and **Fig. 5.6** are the 2D visualizations of pressures and gas saturation after 90, 365, 900 and 3,650 days respectively. At the early time until end of simulation the constant fracture permeability case shows more uniform streamlines compared to the log-normally distributed fracture permeabilities case.

The gas front was moving relatively faster, more sporadic and some oil trapped behind the gas region due to the permeability field in the CASE 5.A2 model. The impacts of the permeability distributions can be clearly noticed on the recovery (**Fig. 5.7**), gas-oil ratio (**Fig. 5.8**), oil rate performances (**Fig. 5.9**), bottomhole pressure (**Fig. 5.10**) and wellblock pressure at the producer location (**Fig. 5.11**).

The recovery factors are 45% for CASE 5.A1 and 41.5% for CASE 5.A2. The gas breakthrough occurred after 3.5 and 4 years for CASE 5.A1 and CASE 5.A2 respectively.

These small differences of the recovery factors and breakthrough times were due to small number of fractures introduced in the model. We might be able to see more significant differences due to the fracture distributions if we had more extensive number of fractures in the models. In our model, the fractures are just occupied approximately 0.05% of the total pore volume.

Hopefully, from these exercises is able to convince many of us that besides fracture spacing, fracture aperture distribution plays very important role to the performances of reservoirs.

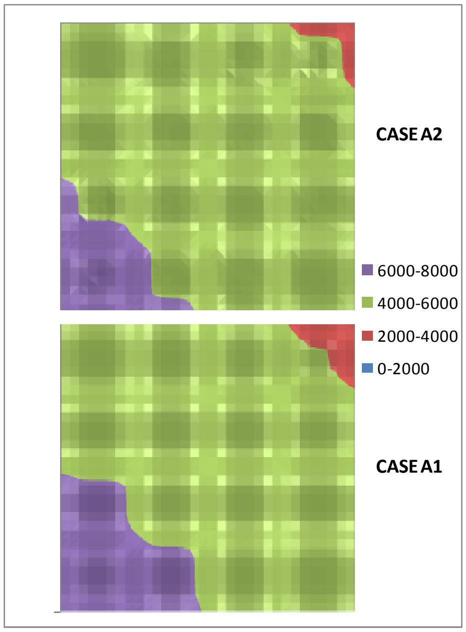


Fig. 5.3-Pressures and gas satutaration at time = 90 days

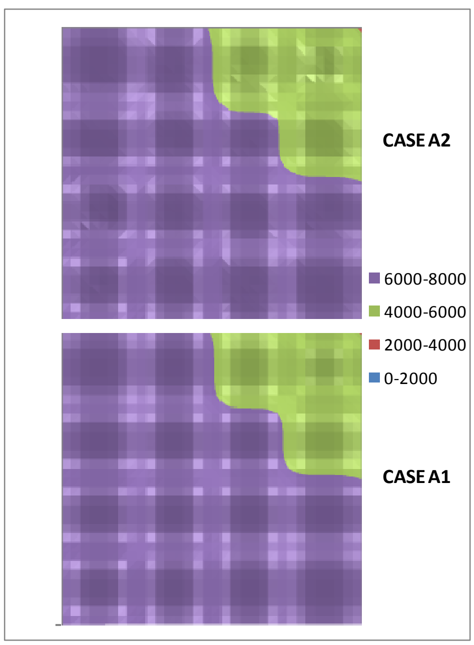


Fig. 5.4-Pressures and gas saturation at time = 365 days

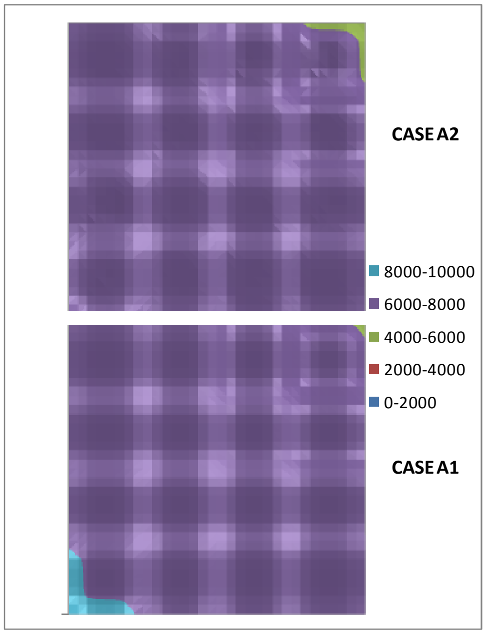


Fig. 5.5-Pressure and gas saturation at time = 900 days

Fig. 5.6 Pressure and gas saturation at the end of simulation (time = 3650 days)

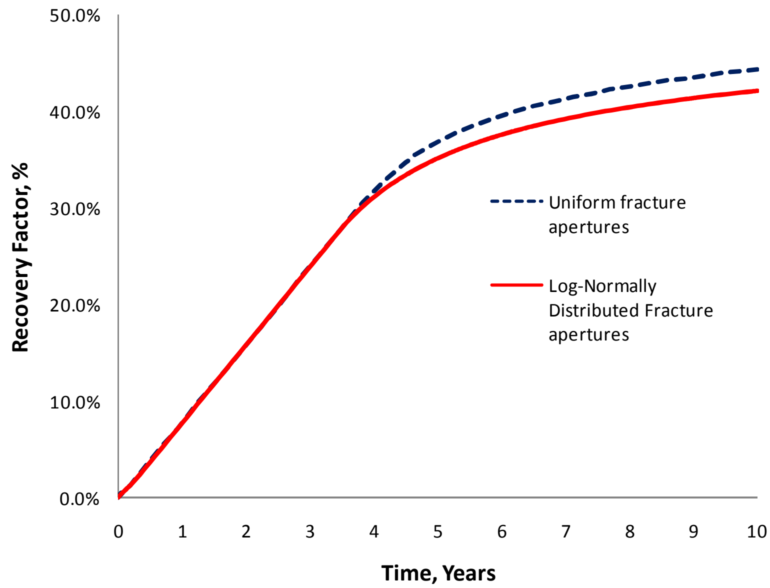


Fig. 5.7-Recovery factor (CASE 5.A1 and CASE 5.A2)

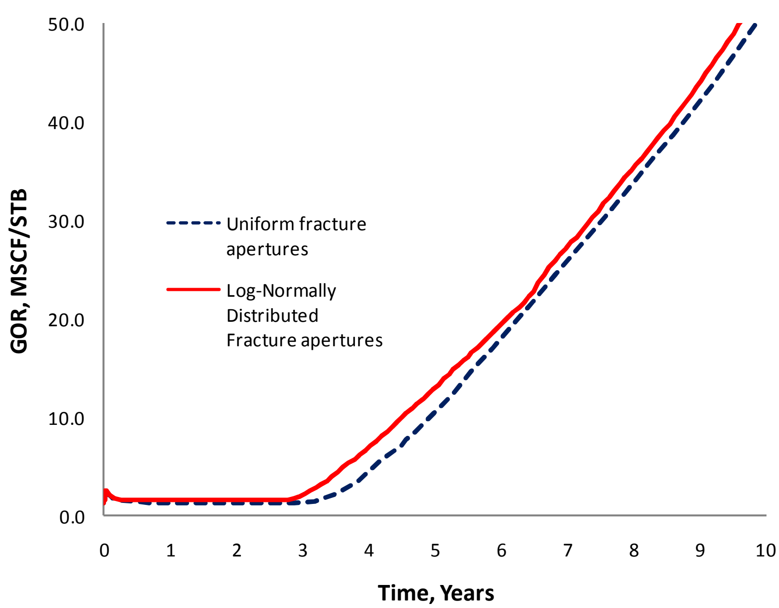


Fig. 5.8-Produce gas-oil ratio (CASE 5.A1 and CASE 5.A2)

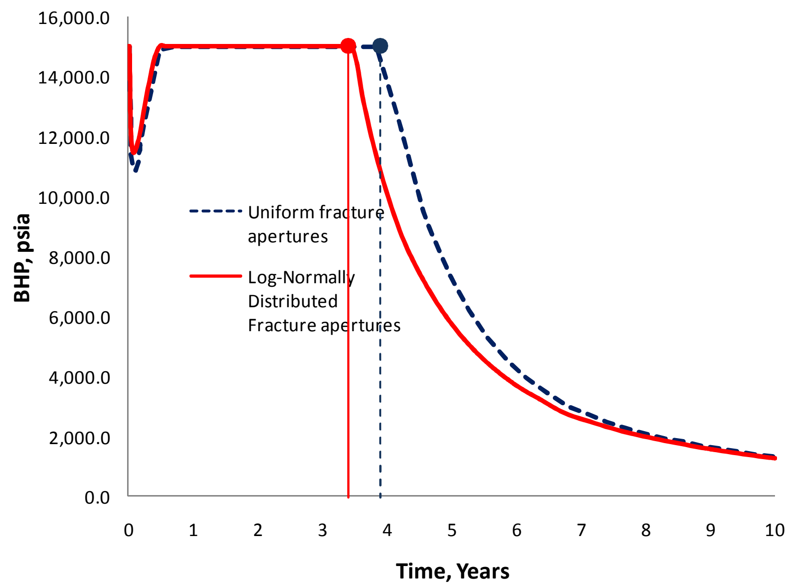


Fig. 5.9-Produced oil rate (CASE 5.A1 and CASE 5.A2)

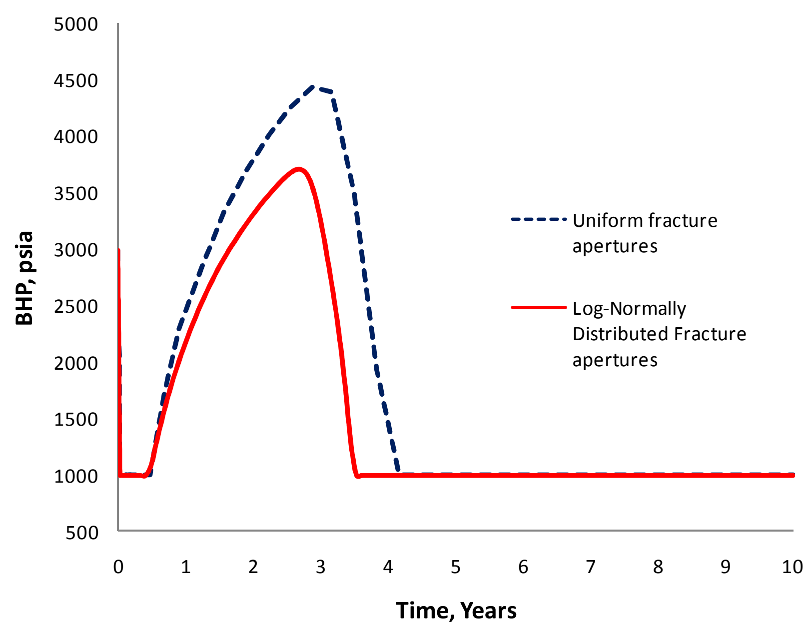


Fig. 5.10-Bottomhole pressures (CASE 5.A1 and CASE 5.A2)

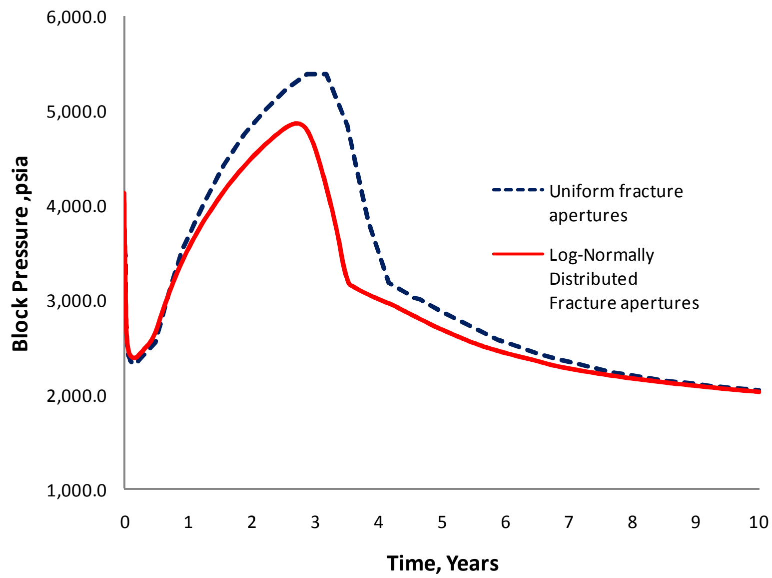


Fig. 5.11-Block pressures at the producer location (CASE 5.A1 and CASE 5.A2)

5.2 DFN Simulation of Multiple Fractures – Isolated Fractures

A relatively small 2D model was built with six vertical fractures. The model dimension is 100 ft x 100 ft x 20 ft. Each fracture has different length an orientation and they are not intersecting each other (isolated fractures). The fracture apertures is log-normally distributed with the mean of 0.01 ft and $\sigma^2 = 1.0$ (**Fig. 5.12**). we named this case as CASE 5. 2.

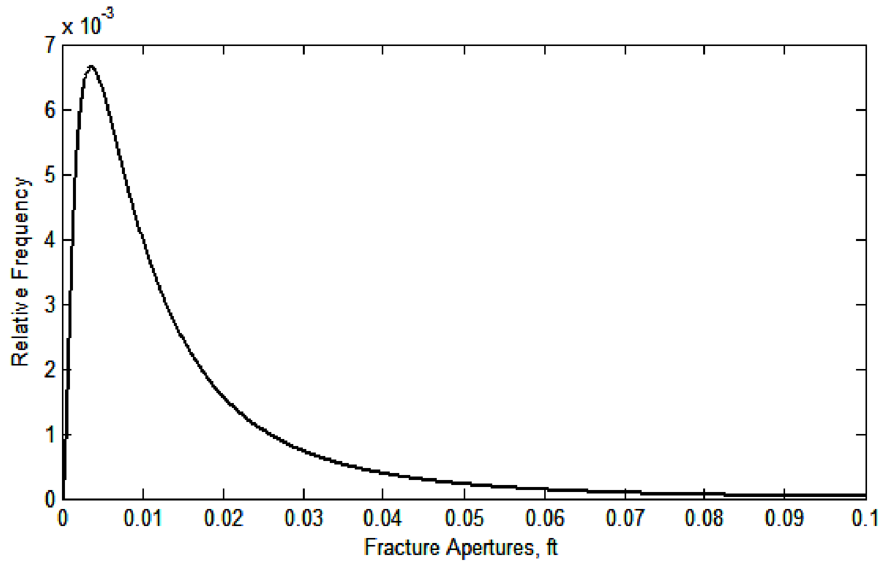


Fig. 5.12-Fracture apertures (log normal distribution)

Prior to building the grids for CASE 5.2, firstly we need to determine the number Control Volumes that we want to place in the computational domain to represent the fractures (there is no CV in the geometrical domain for fractures). The number of CV in this exercise is proportional to the length of each fracture. The longer the fracture the more CVs are needed to be placed in the computational domain.

The nodes population technique to grid up the fractures was described in the previous chapter. Initially, nodes should be populated such that the Voronoi edges are aligned with the fractures. These nodes later are going to be the CVs of the matrix blocks. The initial grid model of CASE 5.2 is depicted in Fig. 5.13.

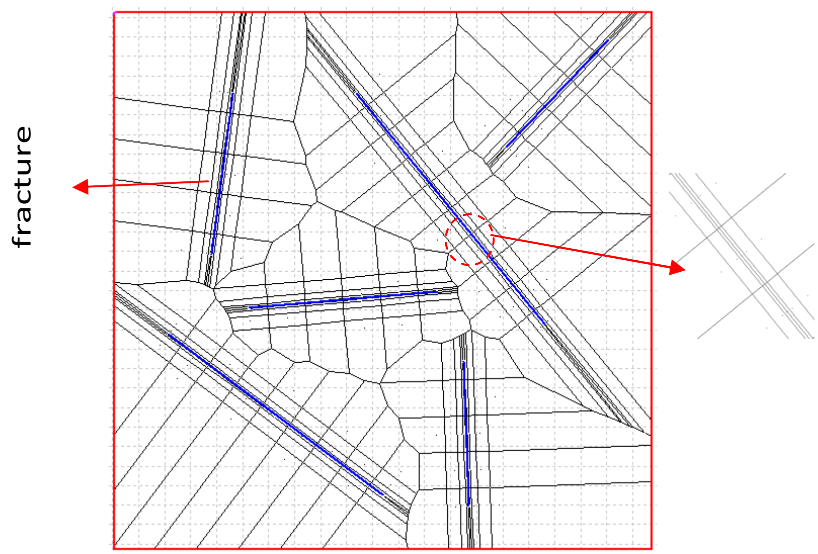


Fig. 5.13-Grids model of disconnected fracture (initial grid model = 504 blocks)

This initial model (**Fig. 5.13**) is quite coarse due to insufficient nodes in the matrix region. However, the initial grid model has 504 nodes (matrix blocks) caused by the grid refinement near the fractures. The number of grids to represent the fracture blocks in the computational domain is 40 blocks. Thus, the total number of blocks both in the geometrical and computational domains of the initial grid model is 504 + 40 = 544 blocks.

Manually, more nodes were added to refine the matrix region and the final grid number of the model becomes 640. **Fig. 5.14** shows the final grid model of this exercise.

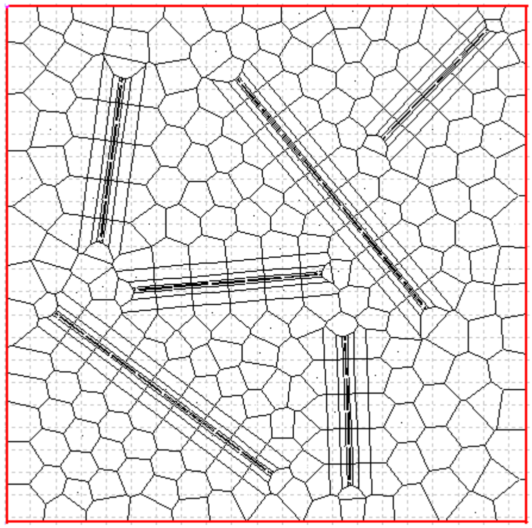


Fig. 5.14 CASE 5.2 final grid model (640 blocks)

The matrix permeability of the model is 100 md and log-normally distributed permeabilities applied for the fractures. The fractures permeabilities are in the range of 0.25 md to 1,500 md. SPE-1 fluid properties were used as the other previous exercises.

A producer is located in the bottom-left corner, while the gas injector is located in the top-right corner of the model. The oil was withdrawn constantly from the producer with the rate of 2 STB/D. 3,000 SCF/D of gas was injected constantly through the injector well. In this exercise, the simulation was run for 2 years or 730 days.

For a comparison, a similar model with no fracture was built to show the different of the pressures and saturations profiles due to the isolated fracture network introduced in the system. The model with no fracture contains 275 control volumes.

The simulation of the no fracture model was running smoothly without any numerical difficulties. There was no time step cut and the residual error set (1.0E-4) was reach after few Newton iterations.

Contrary to the isolated fracture system, the simulation was posing serious numerical challenge. Frequently the simulation could not satisfy the linear solver tolerance

(1.0E-2). Although we have doubled (from 20 to 40) the number of iteration, the tolerance yet could not be satisfied. Both models were using the same linear solver method, GMRES.

This difficulty occurred was most likely due to the volume contrast of the fracture blocks and matrix blocks. In this model, the minimum volume ratio between the fracture and matrix blocks could be as small as 0.0001. However, after cutting the time step for many times and performed more Newton iterations, the simulation finally could achieve the residual error of 1.0E-4.

The numerical performances of these two models are provided in **Table 5.3** and the plot of material balance error is depicted in **Fig. 5.15.**

Table 5.3-Numerical information and simulation time of CASE 5.2

Numerical Controls	**No Fracture**	**Isolated Fractures (No intersections) Case 5.2**
Maximum residual error	1.0E-4	1.0E-4
Max. Newton iteration	25	25
Max. linear solver iteration	40	40
Linear solver tolerance	1.0E-5	1.0E-5
Total time steps	152	324
Newton iterations	976	6,576
Solver iterations	28,315	216,445
Solver failures	0	5
Time step cuts	7	183
Simulation time	458 sec.	8,009 sec.

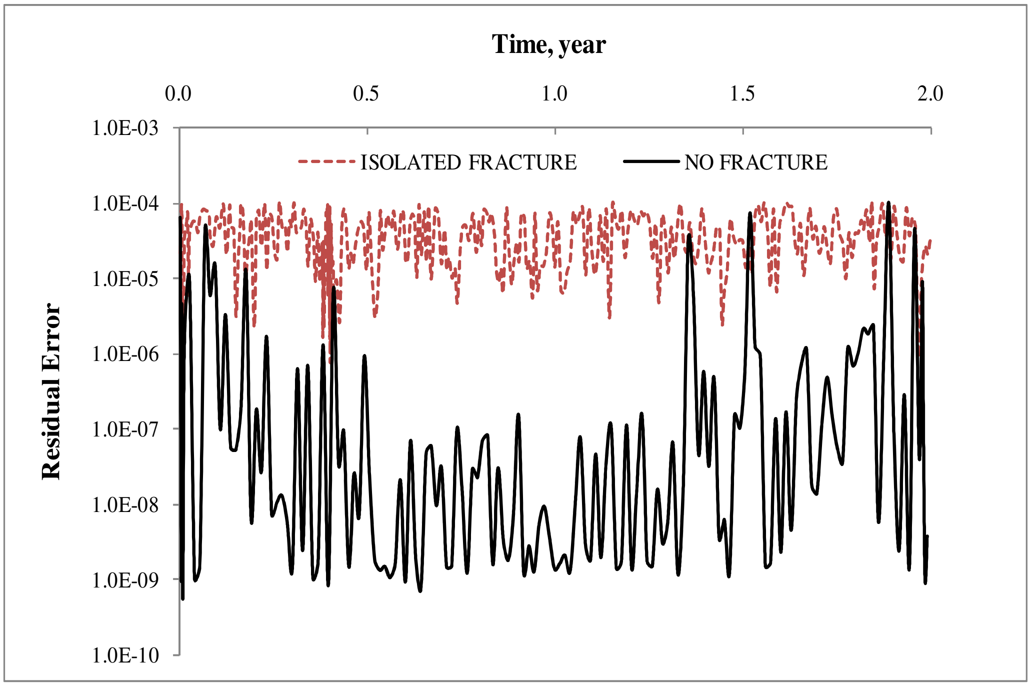


Fig. 5.15- Residual errors (Isolated fractures and no fracture)

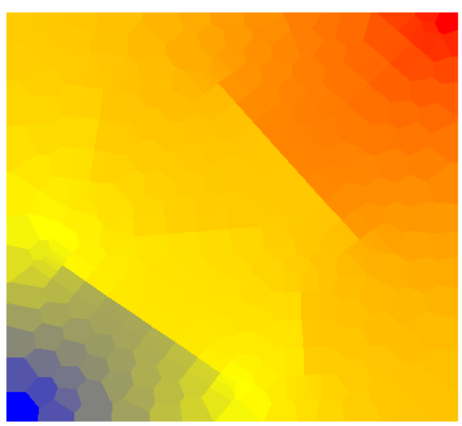


Fig. 5.16- Pressure field of CASE 5.2 at t = 1 day

(Isolated fractures and no fracture)

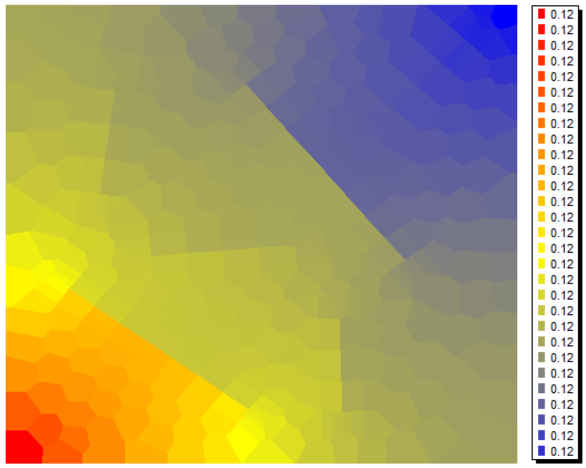


Fig. 5.17- Water saturation of CASE 5.2 at time = 1 day

(Isolated fractures and no fracture)

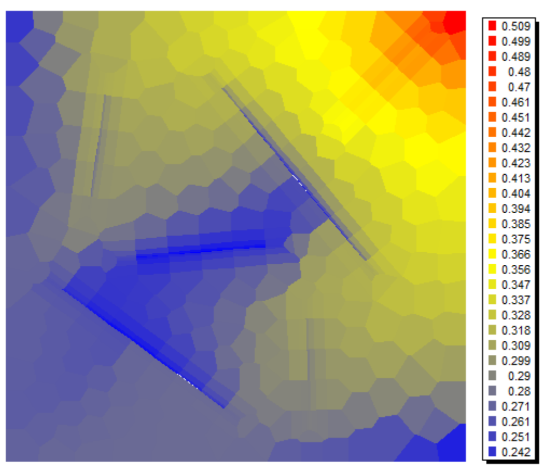


Fig. 5.18- Gas saturation of CASE 5.2 at time = 730 days

(Isolated fractures and no fracture)

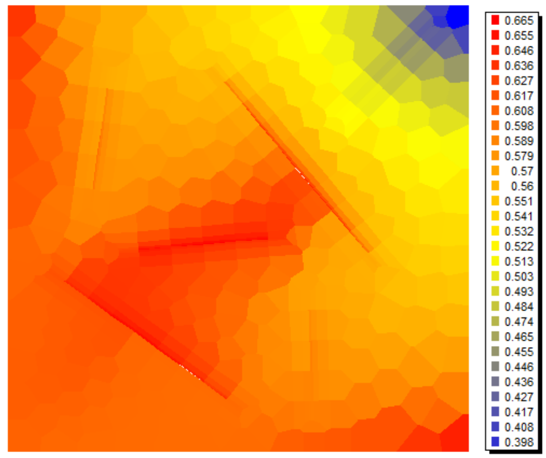


Fig. 5.19- Oil saturation of CASE 5.2 at time = 730 days
(Isolated fractures and no fracture)

From the simulation results (**Fig. 5.16-5.17**), from early time (time = 1 day), it is clearly seen that the fractures in particular condition could be an excellent conduit for hydrocarbon. However, when the aperture is very small, the fracture behavior could be the opposite of its definitions. In the later condition, we can interpret that the more fracture segments are closing (apertures ≈ 0) and acting as flow barrier rather than excellent flow conduit.

Additional 2D visualizations of Oil and gas saturations at the end of simulation (time = 730 days) and GOR, block pressures, oil and water saturation are depicted in **Fig. 5.18** -**Fig. 5.23** respectively.

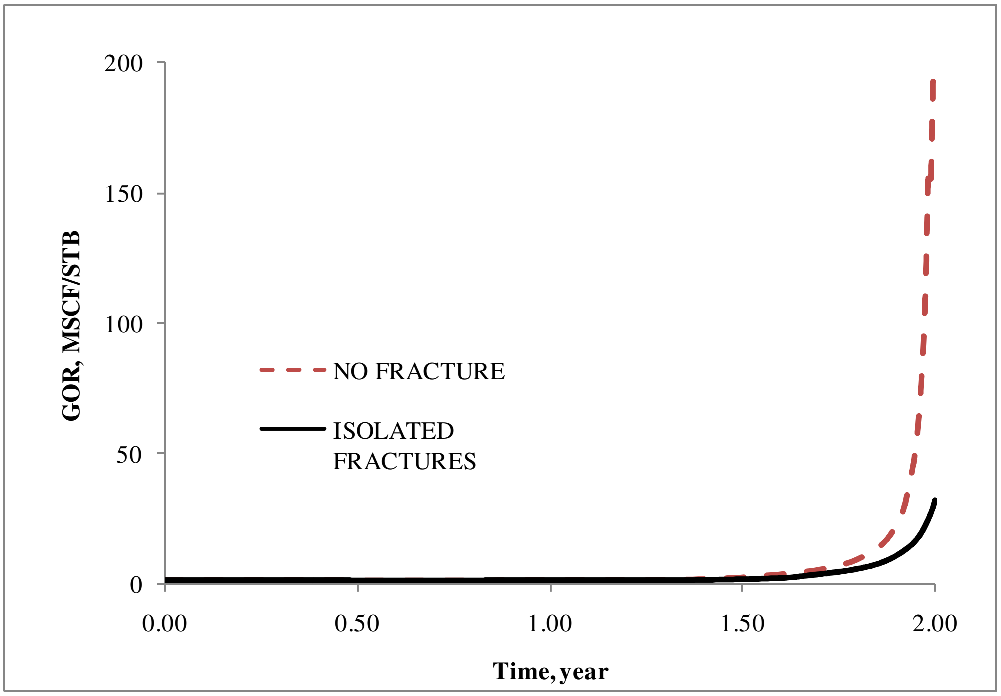


Fig. 5.20- GOR of CASE 5.2 (Isolated fractures and no fracture)

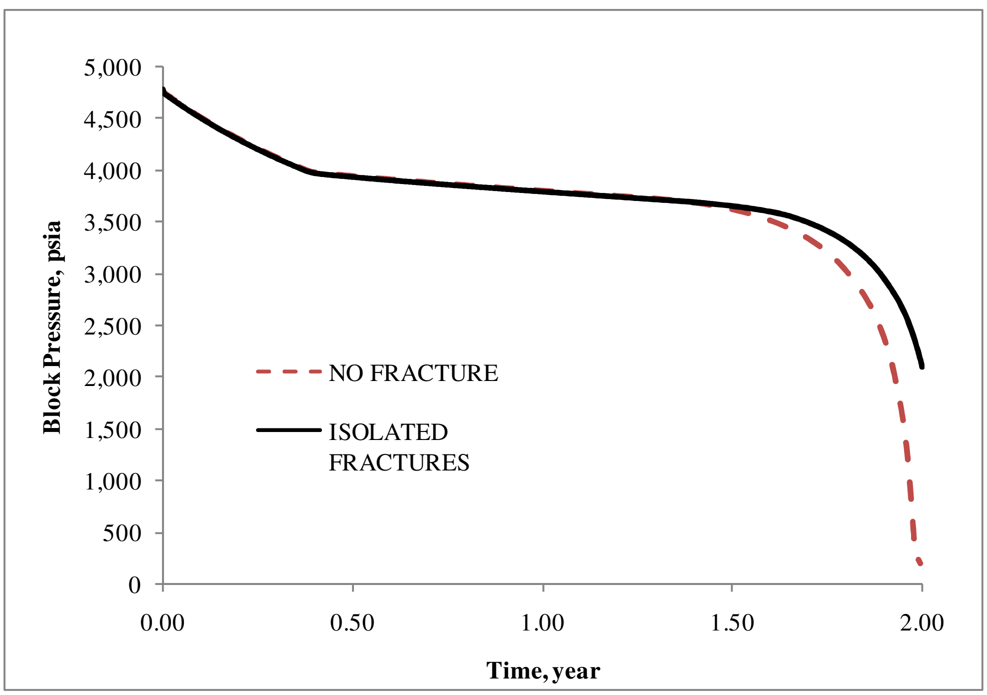


Fig. 5.21- Block pressures at producer of CASE 5.2

(Isolated fractures and no fracture)

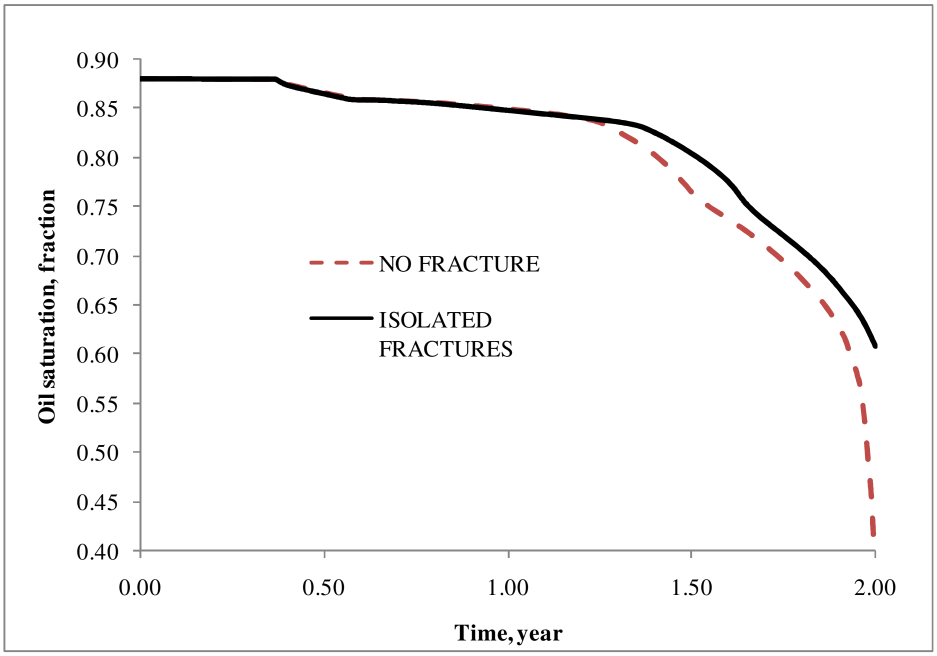


Fig. 5.22- Oil saturation at producer of CASE 5.2 (Isolated fractures and no fracture)

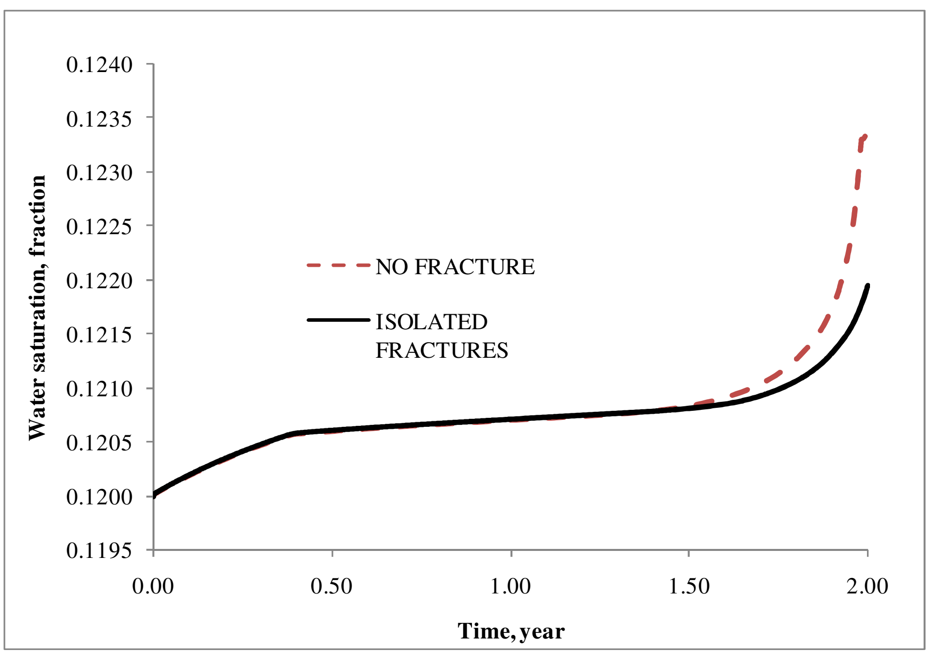


Fig. 5.23- Water saturation at producer of CASE 5.2 (Isolated fractures and no fracture)

5.3 DFN Simulation of Complex Fracture Networks

The fracture network model presented in this section was provided by the work of KIM et al. (2007). The network was simulated using fractal geometry by a given fracture length, fracture distribution and fractal dimension. We will not discuss how the geometry created in detail. We simply created the grid model based on the provided network. The detailed procedures of the fracture network were presented by KIM et al.[19].

5.3.1 2D Fracture Network Generation Based on Fractal Geometry

Kim et al.[19] had developed a methodology to construct DFN using a fractal approach (FDFN). The fracture length and orientation are randomly generated using Monte Carlo simulation. The basic characteristics of fractal geometry, *self affine* and *self similar* are maintained during the process.

2D fractal codes developed by KIM were used to generate the fracture networks used in this study. The fracture network created by the code is named Fractal Discrete Fracture Network (FDFN). The network was set up using a synthetic dataset as follows:

- Fractal dimension of fracture center, F_{Dc} =1.3125
- Fractal dimension of length, F_{Dl} = 0.655
- Side Length of the Domain, L = 100 ft
- Boundary Effect Flag, b_{Flag} = 5;
- Fracture Density, *alpha* =1.5
- Min. Fracture Length, *lmin* =5 ft

The specific definition of these parameters can be found in Kim[19].

Below is the rose diagram (**Fig. 5.24**) to describe the distribution of fractures, including their lengths and orientations. This diagram is determined by analysis of outcrop in Briger Gap, Wyoming[26]. **Fig. 5.25** illustrates the DFN model (Case 5.3) produced by the code.

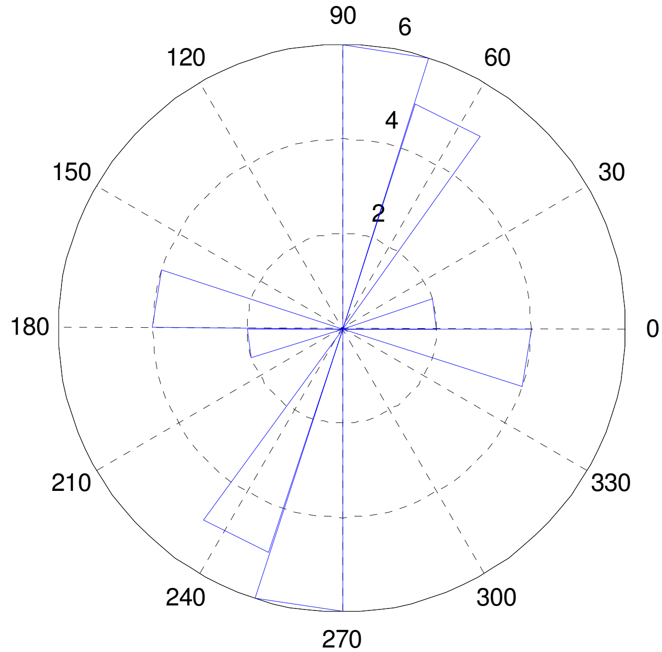


Fig. 5.24-FDFN rose diagram of connected fracture network

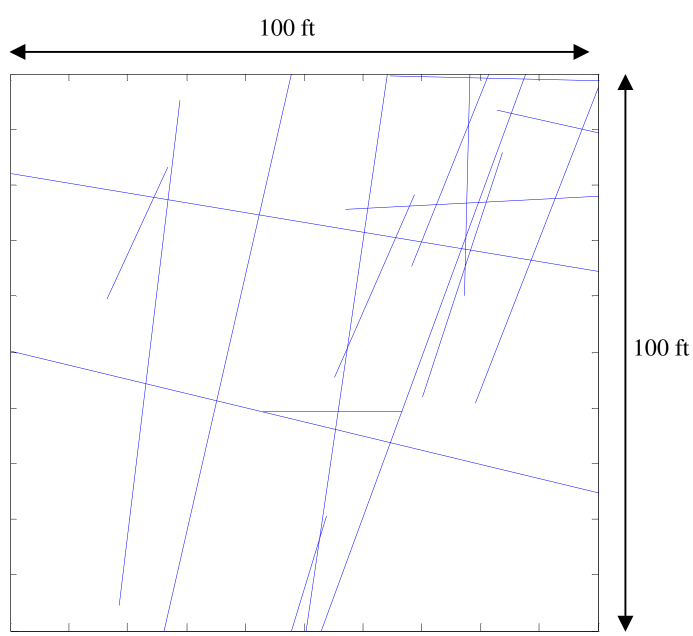


Fig. 5.25- Fracture network generated based on fractal geometry

As illustrated in **Fig. 5.25** the fractures are intersecting in many places inside the model. Prior to gridding the fractures, we need to determine the coordinates of all intersections.

To find the intersection of two straight lines: first we need the equations of the two lines. We will assume the following equations:

Fracture-1 (Line-1): $y = m_1 x + c_1$

Fracture-2 (Line-2): $y = m_2 x + c_2$

where, m and c are the slope and intercept of a line.

The point of intersection of the two lines is (X_{int}, Y_{int}).

$$Y_{\text{int}} = m_1 X_{int} + c_1 = m_2 X_{int} + c_2$$

Thus, $X_{\text{int}} = \dfrac{c_2 - c_1}{m_1 - m_2}$ and $Y_{\text{int}} = m_1 X_{\text{int}} + c_1$

All the points of the intersecting fractures are shown in **Fig. 5.26.**

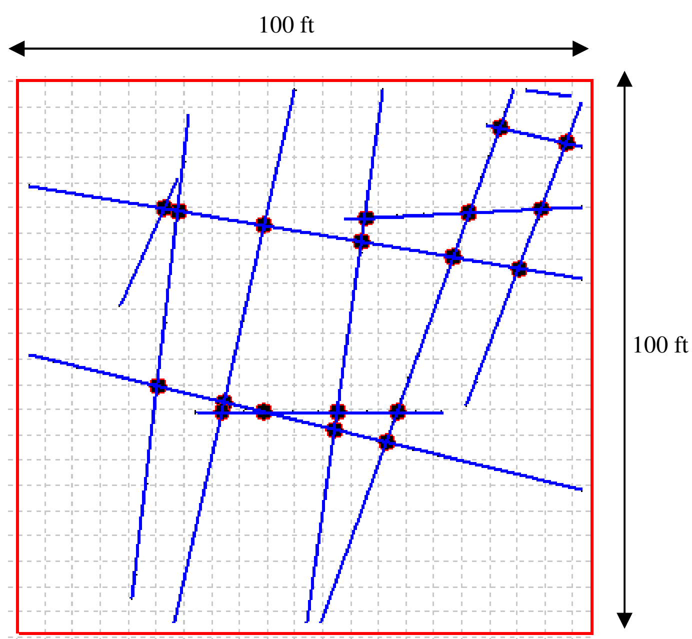
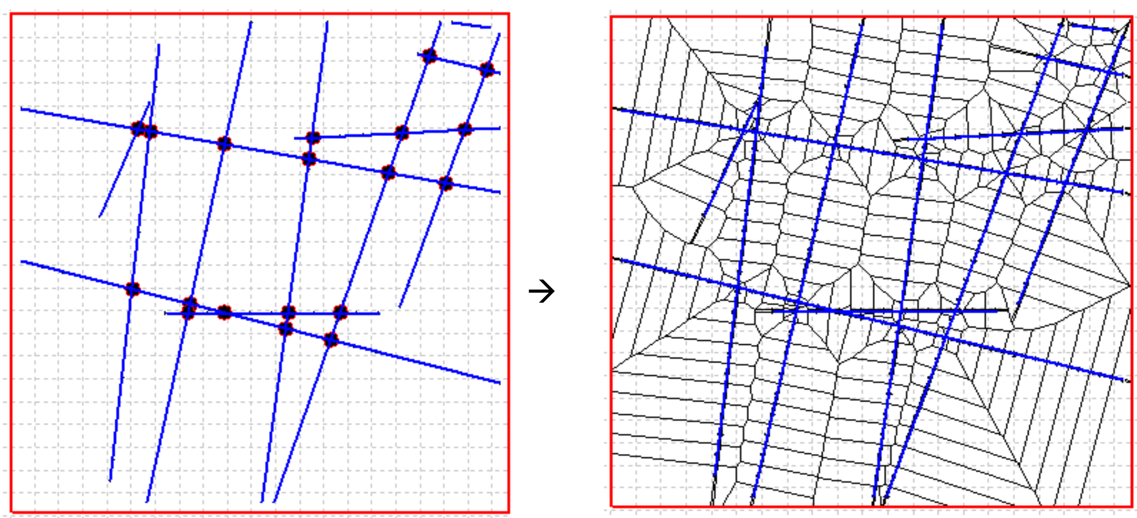


Fig. 5.26-19 Fracture intersections from the FDFN model

Once we had determined the intersecting points of the fractures, we can populate nodes surrounding the fractures and their intersections. The main concern here is to ensure that the edges of Voronoi grids are still aligned with the fracture. Gridding on intersection creates additional nodes. Once Voronoi polygons are created, the edge of the polygon may not be aligned with the fracture. Lack of alignment results in the need to re-grid the system. The process of these procedures is depicted in the **Fig. 5.27**. The initial number of control volumes in the model in Fig. 5.27 is 784.



(a) Fracture intersections (b) 784 nodes in the geometrical domain

Fig. 5.27-Fracture nodes and Voronoi grid (initial model = 784 blocks)

Furthermore, blocks refinement should be addressed for the matrix blocks by adding nodes into the initial grid model as we did in the previous exercise. We should remember that the additional nodes in the system should not deform the perfect alignment of the fracture lines and Voronoi edges constructed in the earlier steps. Deformation of the fracture grid will result in restarting the entire gridding processes.

In order to avoid the deformation, additional nodes were populated further away from the nodes used to shape the fracture lines after executing the Voronoi algorithm. **Fig. 5.28** illustrates the grid model for both fractures and matrix blocks. The final model contains 1,403 control volumes in the geometrical domain and an additional 190 control volumes in the computational domain to represent the fracture segments. Thus, the total number of control volumes is 1,593 (computational domain + geometrical domain).

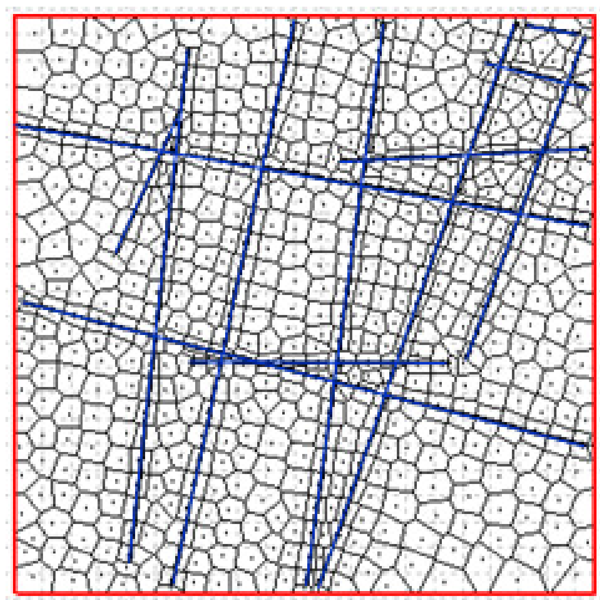


Fig. 5.28-Final grid model of the FDFN fracture network (1,593 grids)

The last step of building the grid model is to add control volumes to represent the fracture blocks. There are two steps that are needed to proceed; (1) volume corrections of the adjacent matrix blocks with fractures and (2) adjusting the connection properties for all the blocks (matrix and fractures) in the computational domain. All these aspects were discussed in Chapter II.

The fracture permeabilities are calculated using the cubic law and the same procedure as in the previous cases. In this model, the permeability of fractures is within the range of 0.1 md to 3000 md.

The simulation of this model was very challenging. As observed in the previous exercise with the disconnected fractures, this FDFN model poses very serious numerical challenges. The linear solver faced difficulty to satisfy the given tolerance, even though the number of iteration was increased to three times more than that of the disconnected fracture case.

Several other attempts were undertaken to tackle this highly non-linear problem by fine tuning the numerical controls, such as reducing the time step size, increasing the number of Newton iterations, or loosening the maximum pressure and saturation tolerance per-time step.

The simulation was successfully terminated after 730 days. The results of the simulation were extremely accurate. Throughout the simulation, the residual errors were kept at a maximum of 1.0E-4. The numerical performance of this case and the previous two cases are reported in the **Table 5.4**.

Table 5.4-Numerical information and simulation time of CASE 5.3

Numerical Controls	No Fracture Case 5.2 & 5.3	Isolated Fractures (No intersections), Case 5.2	FDFN Fracture Network, Case 5.3
Maximum residual error	1.0E-4	1.0E-4	1.0E-4
Max. Newton iteration	25	25	25
Max. linear solver iteration	40	40	140
Linear solver tolerance	1.0E-5	1.0E-5	1E-5
Total time steps	152	324	2,045
Newton iterations	976	6,576	34,285
Solver iterations	28,315	216,445	1,420,171
Solver failures	0	5	103
Time step cuts	7	183	228
Simulation time	458 sec.	8,009 sec.	56,125 sec.

The effect of fractures in this model is more pronounced compared to the unfractured or the isolated fractures models. The gas displacement during the injection is more sporadic due to the variation of conductivity along the fracture segments. The stream lines are more distorted compared to the previous cases. These behaviors can be clearly seen from the 2D visualization of pressures and saturations profiles from the early until the end time of simulation (**Fig. 5.29 – Fig. 5.32**).

Plots of fluids saturations and block pressures at the producers vs. time (**Fig. 5.33 – Fig. 5.36**) were also observed. There was no significant difference of the disconnected fractures and connected fractures profiles. However, based on the pressure and saturation 2D visualizations, if we continued the simulation, we should be able to see more significant differences of those three cases (no fracture, isolated and connected fractures).

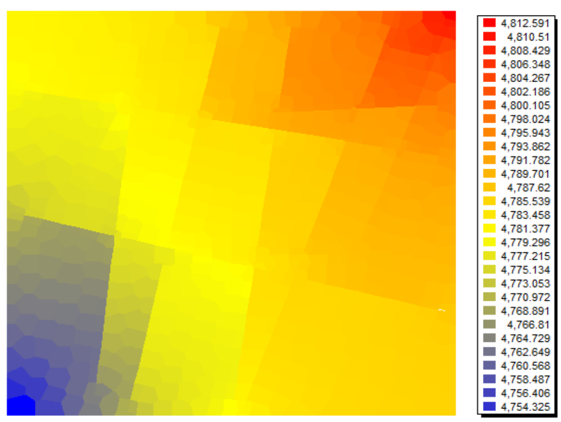


Fig. 5.29-Pressure profile of at time = 1 day
(onnected fractures and no fracture)

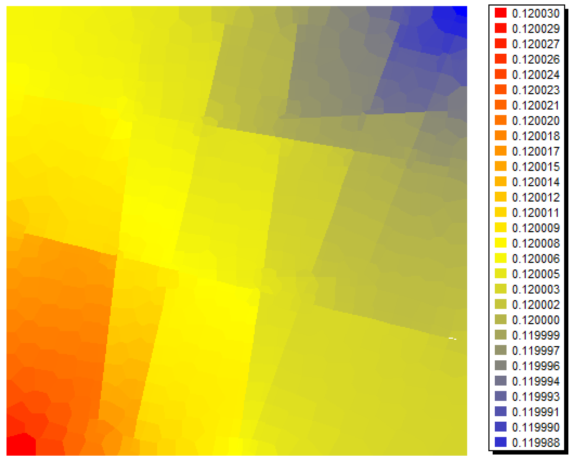


Fig. 5.30-Water saturation at time = 1 day

(Connected fractures and no fracture)

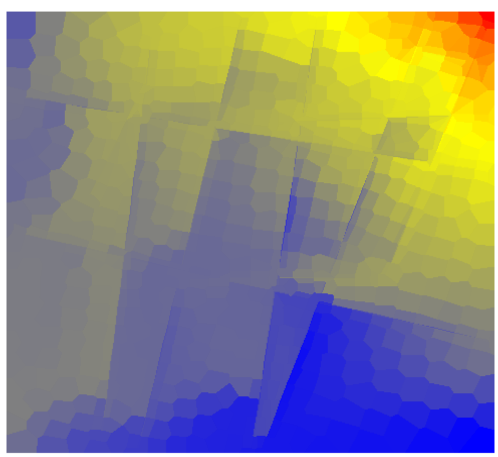


Fig. 5.31- Gas saturation of CASE 5.3 at time = 730 days

(Connected fractures and no fracture)

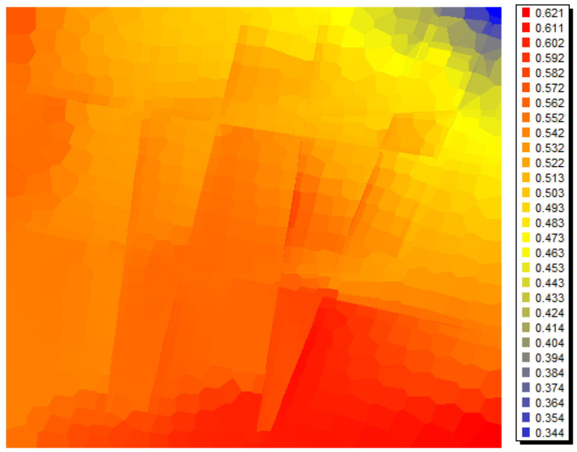


Fig. 5.32- Oil saturation of CASE 5.3 at time = 730 days (Connected fractures and no fracture)

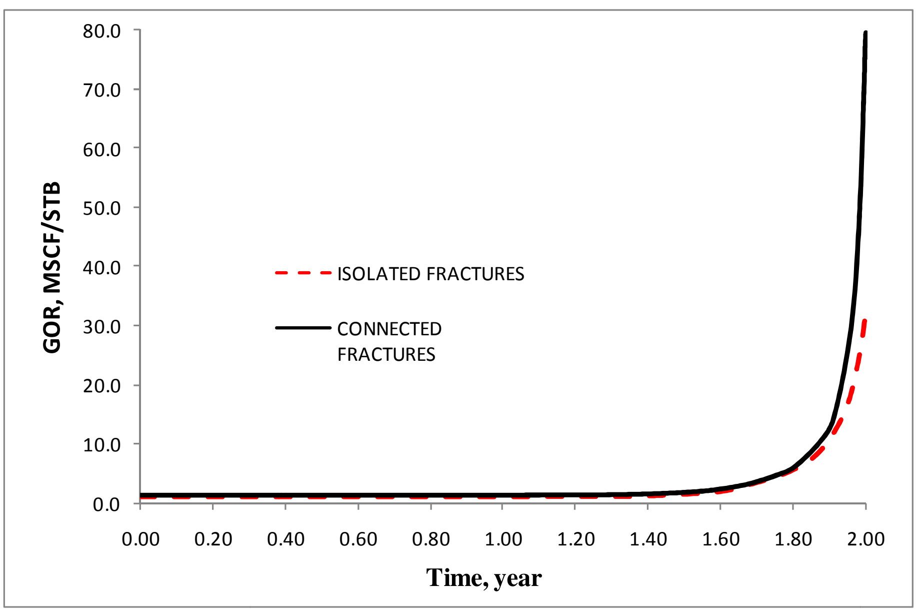


Fig. 5.33- GOR of CASE 5.3 (Connected and isolated fractures)

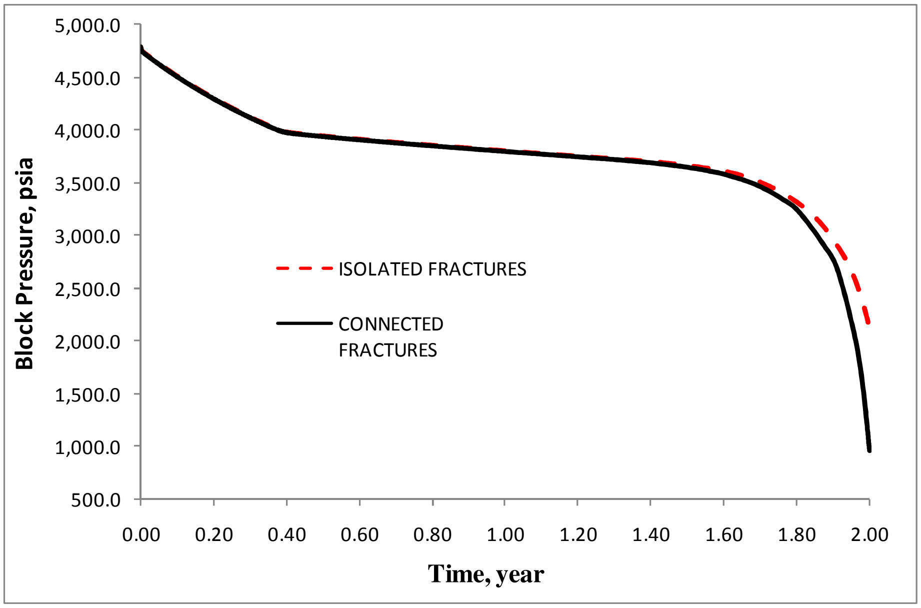


Fig. 5.34- Block pressures at the producer of CASE 5.3 (Connected and isolated fractures)

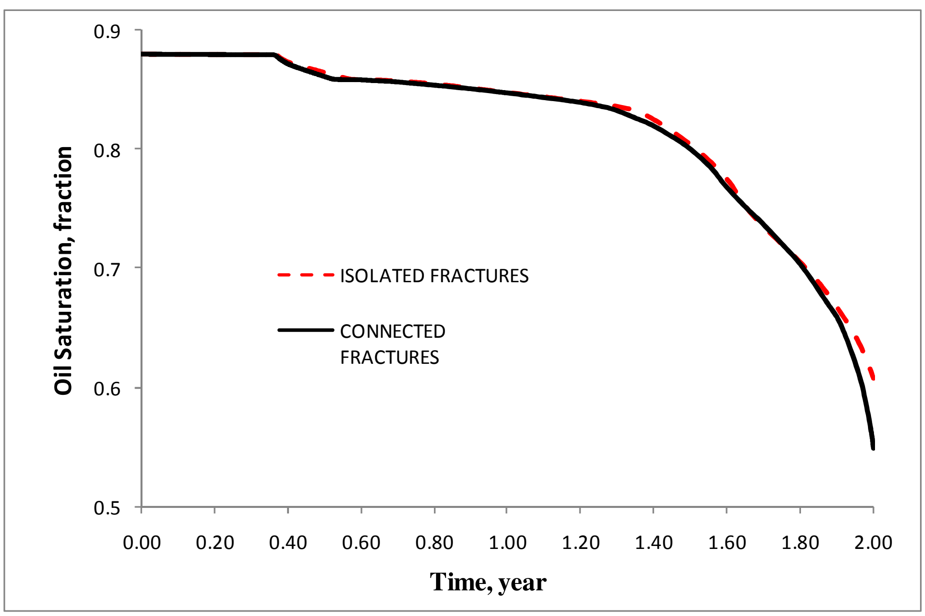


Fig. 5.35- Oil Saturations at the producer of CASE 5.3 (Connected and isolated fractures)

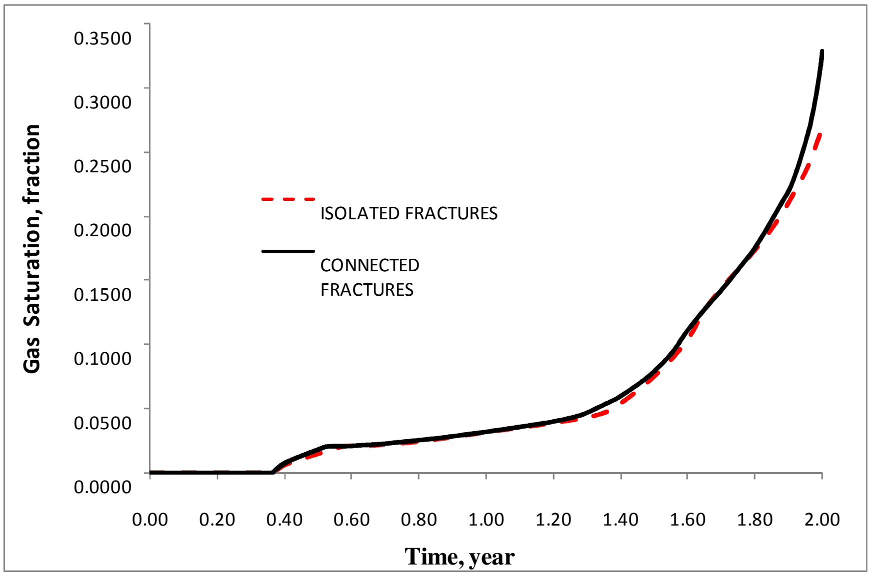


Fig. 5.36- Gas saturations at the producer of CASE 5.3 (Connected and isolated fractures)

5.4 DFN Simulator and Multi-Reservoir Simulation

Another unique feature in the DFN simulator is its capability to simulate multiple reservoir models simultaneously. This feature is enabled due to the control volume object implemented in the DFN simulator. Each grid block in the DFN is defined as a control volume object (Chapter II and Chapter III). The control volume object implemented in the DFN simulator has properties such as area, volume, thickness, porosity, permeability and most importantly each control volume can recognize its neighboring control volumes and their properties.

With its CV properties, DFN is capable of simulating multiple models with different grid systems, either structured or unstructured grids. Furthermore, the models may contain a fracture network or no fractures.

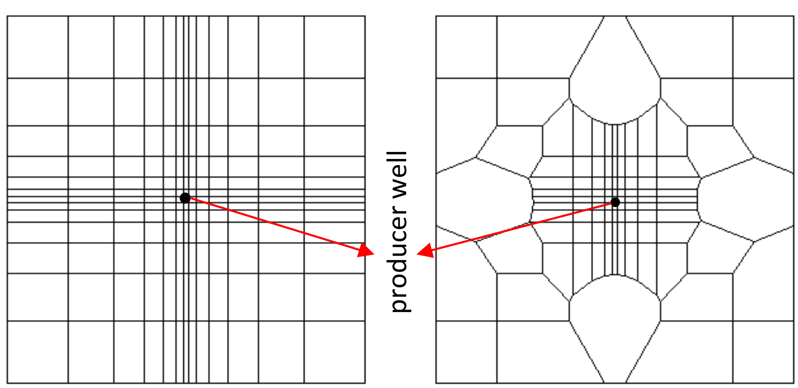
For the sake of simplicity, two simple 2D models were built to demonstrate the multi-reservoir simulation capability implemented in the DFN simulator. The grid dimensions of those models were identical, 6,000 ft x 6,000 ft x 100 ft. The lateral permeability was 215 md. All other rock, fluid properties and initial conditions remained identical with the first SPE comparative solution project. **Fig. 5.37** shows the two reservoir systems (Reservoir A and Reservoir B) that were built for this exercise.

Reservoir A was built using a regular Cartesian grid system (169 blocks). A producer well was located in the center of Reservoir A. The oil rate was set constant at 1,000 STB/D with minimum bottomhole pressure of 1,000 psia. Voronoi grid system of reservoir B (105 blocks) was built similar to Reservoir A with less number of grid blocks. Similar well location and operating conditions were used for Reservoir A. The simulation was run for ten years.

Since the size of the model, rock and fluid properties are identical; we may consider this exercise as a grid sensitivity study. Oil rates, bottomhole pressures, GORs and block pressure profiles are depicted in **Fig. 5.38**, **Fig. 5.39**, **Fig. 5.40** and **Fig. 5.41** respectively.

In addition to multiple reservoir simulations, the current stage of the DFN simulator is applying single numerical controls (residual error, number of iterations, time steps) for the entire model to get the solutions. Thus, we should consider the degree of difficulty of each sub-model prior to utilizing this capability in our studies. It is reasonable to suggest using this feature for sensitivity studies due to the similarity of the difficulty.

Total material balance error is depicted in **Fig. 5.42.** The material balance error was applied for the entire model (Reservoir A and Reservoir B).



Reservoir A (Number of grids: 169) **Reservoir B** (Number of grids: 105)

Fig. 5.37-Grid models of multi-field application (Reservoir A and B)

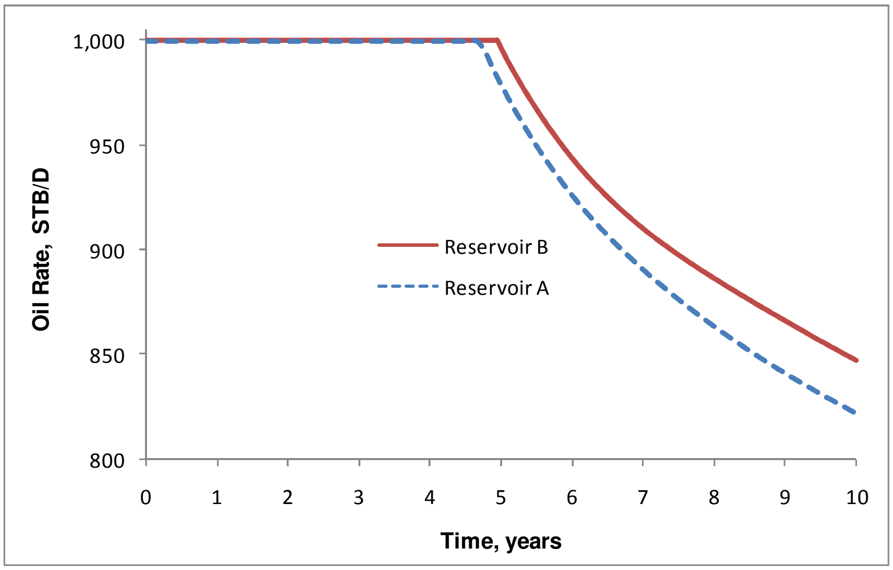


Fig. 5.38-Oil rate profiles (Reservoir A and Reservoir B)

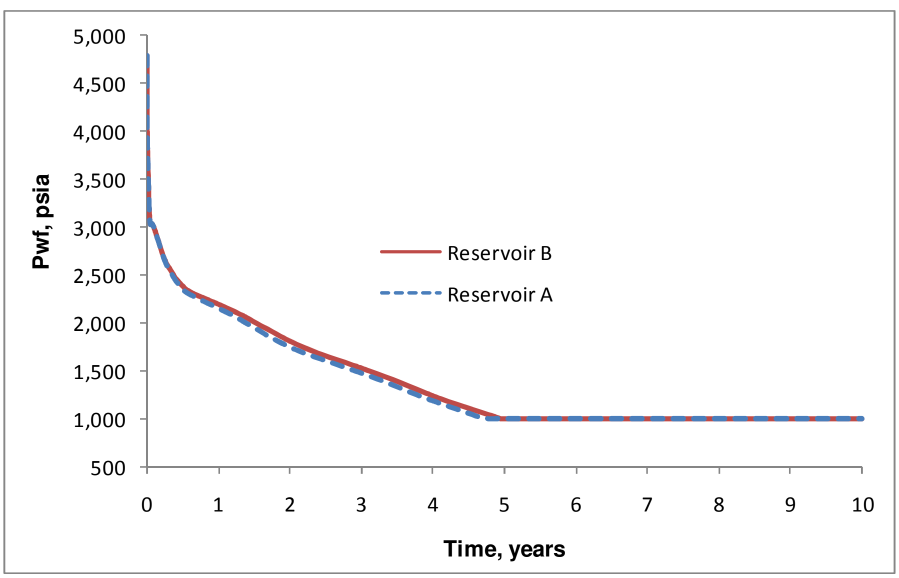


Fig. 5.39-Bottomhole pressure profiles (Reservoir A and Reservoir B)

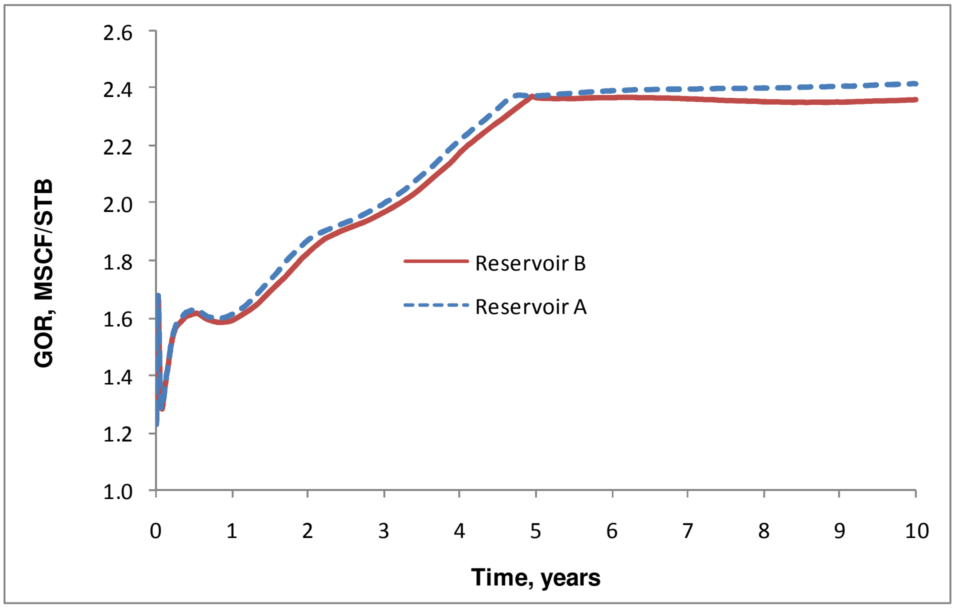


Fig. 5.40: GOR profiles (Reservoir A and Reservoir B)

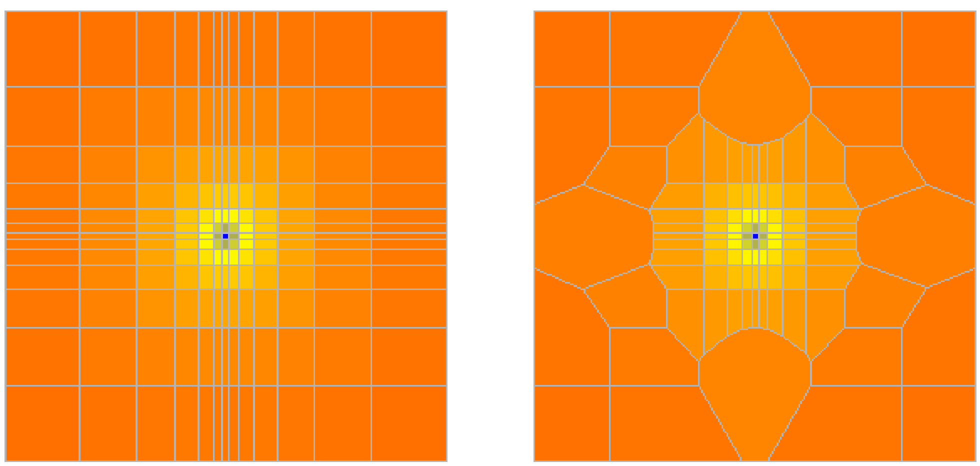


Fig. 5-41-Block pressure at time=10 year (Reservoir A and Reservoir B)

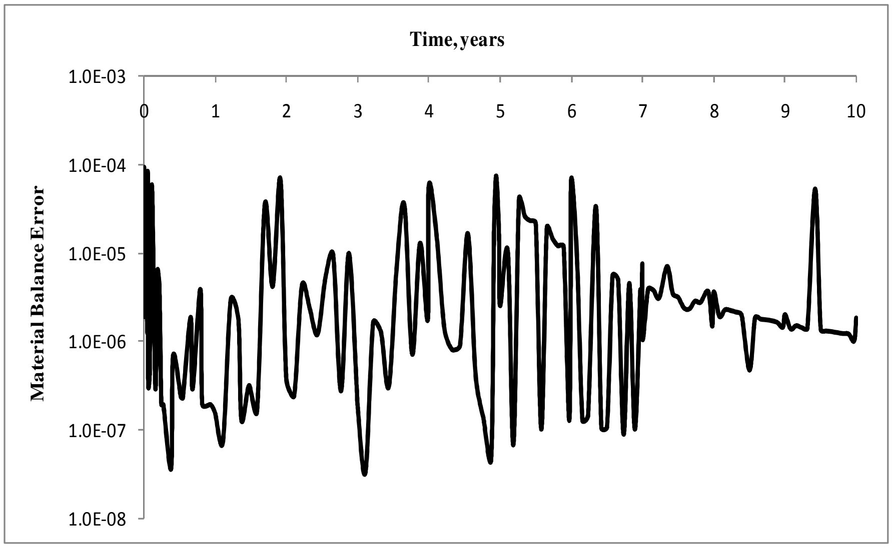


Fig. 5.42-Total material balance error (multi-reservoir simulation)

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Two major works have been accomplished in this research, the development of flexible gridding technique based on Voronoi grid system and the implementation of a new DFN simulator. Therefore, the following conclusions will be associated based on those two works.

The main conclusions of the generation of Voronoi grid system to model DFN are as follows:

1. Voronoi grid system is one of most general gridding technique compared to conventional gridding technique. Voronoi algorithm can be used to generate many other grid models, e.g. rectangular, rectilinear, hexagonal, and hybrid grid.
2. The Voronoi algorithm is capable and flexible to build grid model for both fractured and unfractured systems, structured and unstructured grid models.
3. The proposed mesh generation technique has demonstrated the range of capabilities from building the simplest unfractured, regular Cartesian grids until gridding of complex fracture networks generated based on fractal geometry.

The conclusions of the development of DFN simulator are as follows:

1. DFN simulator has been developed using Object Oriented Programming languages (Visual Basic and C++).
2. DFN simulator was satisfactorily validated against analytical solutions, a commercial simulator and an academic reservoir simulator.
3. DFN simulator is able to simulate model based on structured and unstructured grid systems.

4. DFN simulator capabilities were tested to obtain the dual-porosity shape factor under a constant draining rate conditions. As a function of fracture spacing, the shape factor obtained from DFN simulator is similar with the works done by Mora et al.[42] and Coats[43].
5. DFN simulator demonstrated the capabilities to model systems with fractures, isolated/disconnected and connected fracture network.
6. We have enabled the simulation to include the fracture apertures distribution that might be collected from X-Ray CT scanning experiment or other possible methods.
7. Based on the simulation conducted in this research, the aperture distribution plays very important role to the performance of a reservoir. In the gas injection model, the recovery could be as much as 4.5 % different between the model with uniform and log-normally distributed fracture apertures.
8. Numerically, simulation on fractured systems, disconnected or connected fractures model are very challenging. It requires an extensive amount of time to build the grid model and runs the simulation.
9. DFN simulator capability for multiple-reservoir simulation has been tested and it can be a potential tool for sensitivity studies.

6.2 Recommendations

The following are some recommendations of this research:

1. The current stage of our mesh generator is not so robust in term of the execution speed. It requires a massive amount of time to build grid model for a large system and containing complex fracture networks. It could be much faster if it was implemented using a more robust programming languages, such as C++ or .NET rather than Visual Basic 6.0.
2. DFN Simulator and its mesh generator are supposed to be one integrated package. Currently, the communication between those two applications needs manual works from user and some mistakes might be occurred during the process.

3. The developed mesh generator is not equipped with capabilities to read the grid properties from maps. An idea of adding a geostatistical module will give multiplicative values into the overall package of the simulator.
4. The simulations of fractured system conducted in this report have raised serious numerical challenges compared to the simulations of unfractured systems, especially for intersecting fractures and log-normally distributed fracture apertures. The linear solvers implemented in the DFN were frequently failed to get the solutions, even though the number of iteration was three times more compared to the simulations of uniform fracture apertures or unfractured cases.

   We haven't tried to tackle this challenge with other methods, such as high-order discretization of the flow equations or implementing linear solvers other than the solvers available in the DFN simulator (SparseLib++ library).
5. The large scale model with an extensive number of intersecting fractures has always been a great challenge in the DFN simulation. Besides upscaling techniques, enabling the simulation run with multi or parallel processors will open opportunities to better understanding the flow behavior of large scale fractured systems.

NOMENCLATURE

Variables

A	= Area, ft^2
B	= Formation volume factor, BBL/STB
d	= fracture width, ft
k	= Permeability, md
L	= Fracture spacing, ft
M	= Mobility term, 1/*cp*
μ	= Fluid viscosity, cp
p	= fluid pressure, psia
q	= Flow rate, ft^3
s	= Fluid saturation, fraction
T	= Transmissibility, *md-ft*
V	= Bulk volume, ft^3
w	= fracture aperture, ft
$\varnothing$	= porosity, fraction
γ	= specific gravity, air =1.0
r	= *residual error*

Subscripts

b	= bulk.
e	= Evaluated cell/block.
f	= Fracture.
m	= matrix.
o,g,w	= oil, gas and water phase.
sc	= Standard condition.

int = intersection.

Superscripts

n = previous time step.

n+1 = next time step.

REFERENCES

1 Warren, J.E. and Root, P.J. 1963. The Behavior of Naturally Fractured Reservoirs. *SPE Journal*, September, **228:** 245-255.

2 Karimi-Fard, M. and Firazoobadi, A. 2001. Numerical Simulation of Water Injection in 2D Fractured Media Using Discrete-Fracture Model, Paper SPE 71615 presented at the 2001 SPE Annual Technical Conference and Exhibition in New Orleans, Louisiana, September 30th – October 3rd.

3 Karimi-Fahd, M., Durlofsky, L. J., and Aziz, K. 2003. An Efficient Discrete Fracture Model Applicable for General Purpose Reservoir Simulators. Paper SPE 79699 presented at SPE Symposium of Reservoir Simulation, Houston, Texas, February 3-5, 2003.

4 Aziz, K. 1993. Reservoir Simulation Grids: Opportunities and Problems. Paper SPE 25233 presented at the 12th SPE Symposium of Reservoir Simulation, New Orleans, Louisiana, February 28-March 3.

5 Aronofsky, J. S. and A. S. Lee. 1957. A Linear Programming Model for Scheduling Crude Oil Production. *Journal of Petroleum Technology*, 213: 389-403

6 Azis, S. and Odeh. 1981. Comparison of Solutions to a Three-Dimensional Black-Oil Reservoir Simulation Problem. *SPE Journal*, **(33)**1: 13-25

7 Demmel, J.W. 1997. *Applied Numerical Algebra*. Philadelphia: SIAM.

8 Heinrich, B. 1987. *Finite Difference Methods on Irregular Networks.* International Series of Numerical Mathematics. Basel, Boston: Birkhauser

9 Heinemann, Z. E., Brand, C. W. 1989. Gridding Techniques in Reservoir Simulation. Proc. of the First and Second International Forum on Reservoir Simulation, Alpbach, Austria, September 12-16.

10 Wallis, J. R. 1983. Incomplete Gaussian Elimination as a Preconditioning for Generalized Conjugate Gradient Acceleration. Paper SPE 13536 presented at *the SPE Symposium of Reservoir Simulation* held in San Antonio, Texas, February 15-18.

11 Vinsome, P. W. 1976. ORTHOMIN, an Iterative Method for Solving Sparse Sets of Simultaneous Linear Equations. Paper SPE 5729 presented at the SPE Symposium of Reservoir Simulation, Los Angles, California, February 19-20.

12 Aziz K. and Settari A. 1979. *Petroleum Reservoir Simulation.* New York: Elsevier.

13 Palagi, C. and Aziz, K. 1992. Modeling of Vertical and Horizontal Well with Voronoi Grid. SPE paper 24072 presented at The SPE Western Regional Meeting, Bakersfield, California, 30 March–1 April.

14 Economides, M. J., Deimbacher, F. X., and Heinemann, Z. E. 1991. Comprehensive Simulation of Horizontal Well Performance, *SPEFE*, **6**(4): 418-426.

15 Chong, E., Syihab, Z., Putra, E., Hidayati, D. T., and Schechter, D. S. 2007. A New Grid Block System for Reducing Grid Orientation Effect. *Journal of Petroleum Science and Technology*, **25**:1473–1492.

16 Noorishad J. and Mehran M. 1982. An Upstream Finite Element Method for Solution of Transient Transport Equation in Fractured Porous Media. *Water Resources Research*, **18**(3): 588–596.

17 Pruess, K. 1991. TOUGH2: A general numerical simulator for multiphase fluid and heat flow. Lawrence Berkeley Laboratory Report LBL-29400, Berkeley, California.

18 Muralidharan, V., Putra, E., and Schechter, D.S. 2004. Investigating Fracture Aperture Distributions under Various Stress Conditions Using X-Ray CT Scanner; Canadian International Petroleum Conference, Calgary, Canada, June.8-10.

19 Tae H. K. and D. S. Schechter. 2007. Estimation of Fracture Porosity of Naturally Fractured Reservoirs with No Matrix Porosity Using Fractal Discrete Fracture Networks. The SPE Annual Technical Conference and Exhibition, Anaheim, California, November 11–14.

20 Watson, D. F. 1981. Computing the n-dimensional Tessellation with Application to Voronoi Polytopes. *The Computer Journal,* **2**(24): 167-172.

21 Wang, C. and Schubert L. 1987. An Optimal Algorithm for Constructing the Delaunay Triangulation of a Set of Line Segments, Proc., Third Annual Symposium on Computational Geometry, Waterloo, Ontario, Canada. **3**: 223–232. June 8-10.

22 Weisstein, E. W. 1999. *Voronoi Diagram*, http://mathworld.wolfram.com/ VoronoiDiagram.html.

23 Fortune, S. 1992. *Voronoi Diagrams and Delaunay Triangulations*: *Computing in Euclidean Geometry*, eds. D. Z. Du, and F.Hwang, Murray Hill, 193-223. New Jersey: World Scientific Publishing Co.

24 Hoff, K. E. III, Culver, T., Keyser, J., Lin, M, and Manocha Dinesh. 1999. Fast Computation of Generalized Voronoi Diagrams Using Graphics Hardware,pp. 277-281 Presented at Special Interest Group on GRAPHics and Interactive Techniques, Los Angeles, California, August 8– 13.

25 Okabe, A., Boots, B., Sugihara, K., and Sung, N. C. 2000. *Spatial Tessellations: Concepts and Applications of Voronoi Diagrams, 2nd* Ed. Chichester, England, John Wiley & Son Ltd.

26 Horstad, H. 1995. Characterization and Simulation of Naturally Fractured Sandstone, Green River Basin, Wyoming, MS Thesis, New Mexico: IMT, Soccoro, NM.

27 Alfred, D., Putra, E., and Schechter, D.S. 2004. Modeling Fluid Flow through Single Fractures Using Experimental, Stochastic and Simulation Approaches. Paper SPE/DOE 89442 presented at 2004 Improved Oil Recovery Symposium, Tulsa, Oklahoma, April 17–21.

28 Mattax, C.C. and Dalton R.L. 1990. Reservoir Simulation. SPE Monograph #13, Richardson, Texas.

29 Crichlow, H.B. 1977. *Modern Reservoir Engineering: A Simulation Approach*, Englewood Cliffs, New Jersey: Prentice Hall.

30 Peaceman, D.W. 1977. *Fundamentals of Numerical Reservoir Simulation.* New York: Elsevier.

31 Fanchi, J.R. 1997. Principles of Applied Reservoir Simulation. Houston: Gulf Publishing Company.

32 Wattenbarger, R.A. 2003. *PETE 603 Class Notes.* College Station: Texas A&M University.

33 Wattenbarger, R.A. 2005. *PETE 604 Class Notes.* College Station: Texas A&M University.

34 Wikipedia, Log-normal Distribution, May 2009, http://en.wikipedia.org/wiki/Log-normal_distribution.

35 Iwai, K. 1976. Fundamental Studies of Fluid Flow Through a Single Fracture. Ph.D. dissertation, Berkeley: University of California.

36 Brown, S.R. 1987. Fluid Flow through Rock Joints; The Effect of Surface Rougness. *Journal of Geophysical Research*, 92(B2):.1337-1347.

37 Tsang, Y.W. and Tsang, C.F. 1987. Channel Model of Flow through Fractured Media. *Water Resources Research*, **23**(3): 467-479.

38 Peaceman, D.W. 1977. Interpretation of Well-Block Pressures in Numerical Reservoir Simulation. Paper SPE 6893 presented at the 1977 SPE-AIME Annual Fall Technical Conference and Exhibition, Denver, Colorado, 9-12 Oct.

39 Peaceman, D.W. 1982. Interpretation of Well-Block Pressures in Numerical Reservoir Simulation with Nonsquare Grid Blocks and Anisotropic Permeability. Paper SPE 10528 presented at the 1982 SPE Reservoir Simulation Symposium, New Orleans, Louisiana, 31 Jan - 3 Feb.

40 Bertolazzi, E. 2008. C++ Vector/Matrix/Preconditioner Classes for Large Sparse System. http://math.nist.gov/sparselib++/.

41 Azis, S. and Odeh. 1981. Comparison of Solutions to a Three-Dimensional Black-Oil Reservoir Simulation Problem. *SPE Journal*, Jan, **(33)** 1:13-25.

42 C.A. Mora and R.A. Wattenbarger. 2009. Analysis and Verification of Dual Porosity and CBM Shape Factors, *JCPT*. **48**(2):1-5.

43 Coats, K. H. 1989. Implicit Compositional Simulation of Single-Porosity and Dual-Porosity Reservoirs. Paper SPE 18427 presented at the 1989 Symposium of Reservoir Simulation, Houston, 6-8 February.

44 Kazemi, H., Merril, JR., Porterfield, K.L., and Zeman, P.R. 1976. Numerical Simulation of Water-Oil Flow in Naturally Fractured Reservoirs. *SPE Journal*, **16**(6): 317-326.

45 Zimmerman, R.W. Chen, G., Hadgu, T., and Bodvarsson, G.S. 1993. A Numerical Dual-Porosity Model with Semianlytical Treatment of Fracture/matrix Flow, *Water Resources Research*, **29**: 2127-2137.

46 Lim, K.T. and Aziz, K. 1994. Matrix Fracture Transfer Shape Factors for Dual Porosity Simulators. Journal of Petroleum Science and Engineering, **13**: 169-178.

APPENDIX A

DFN SIMULATOR INTERFACES

A.1 Pre-processor

The pre-processor of DFN simulator includes features to build 2D or 3D grid model, fluids, rock properties and well modeling. Currently, all these features are not fully integrated with the processor of the simulator. The grid and well modeling features are what we currently used in the DFN simulator. The remaining features are not fully integrated as one simulator package. This integration effort considered minor and less important than all the works done in this dissertation.

The following appendix shows the screen captured to show the features of the package. The implementation of DFN simulator's pre-processor is very user-friendly and relatively similar compared to other simulators. Thus, it is not necessary to explain how to use this package.

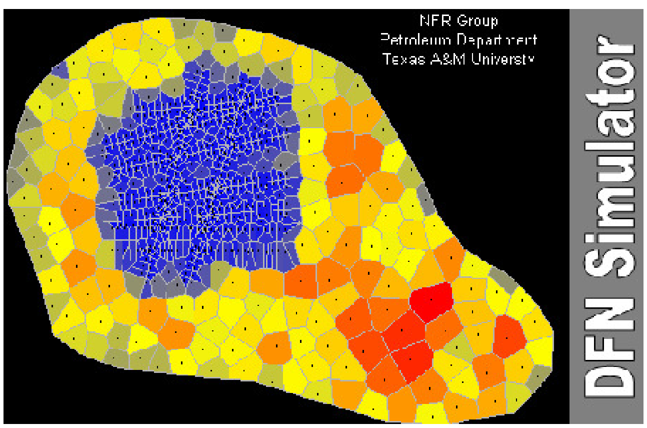


Fig. A.1-DFN simulator splash screen

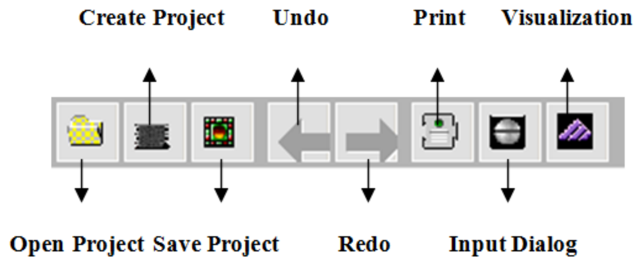
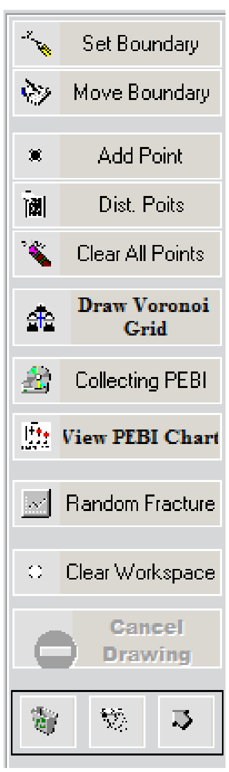


Fig. A.2-DFN simulator toolbar



Setting up the model boundaries

Move boundary/modifying boundary

Add node(s) to the model

Nodes distribution options (hexagonal, rectangular, random, rectilinear)

Clear nodes inside the model boundary

Perform Voronoi algorithm

Collecting the Voronoi grid and the connection lists

Visual the Voronoi grids with an interactive 2D visualization (zoom in/out)

Populate random fracture networks (not done yet)

Clear the workspace (boundaries, fractures, nodes, memory)

Cancel the process of drawing Voronoi grids

Toolboxes to erase, add nodes, and refine a region.

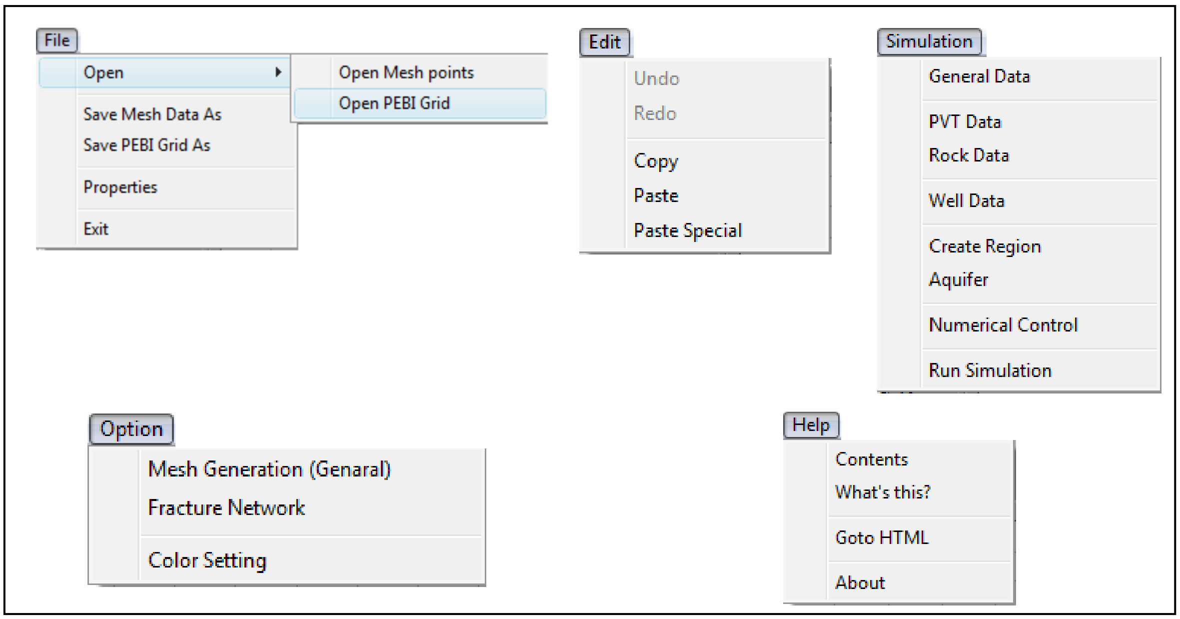


Fig. A.3-DFN simulator menu structure

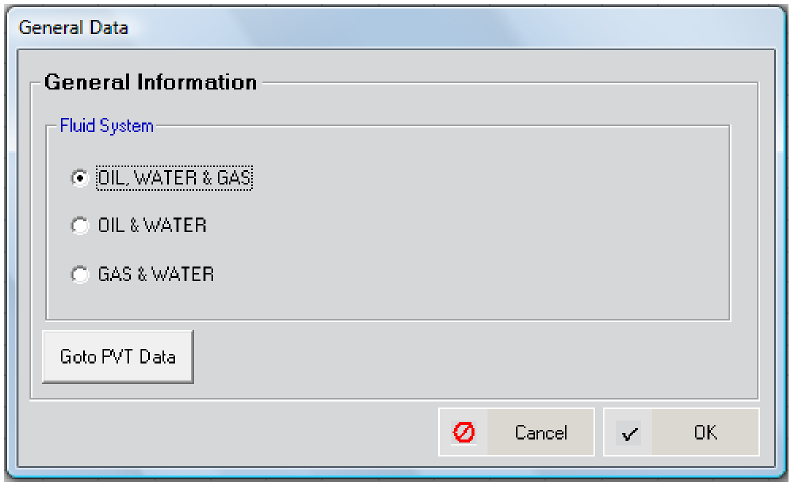


Fig. A.4- General data dialog

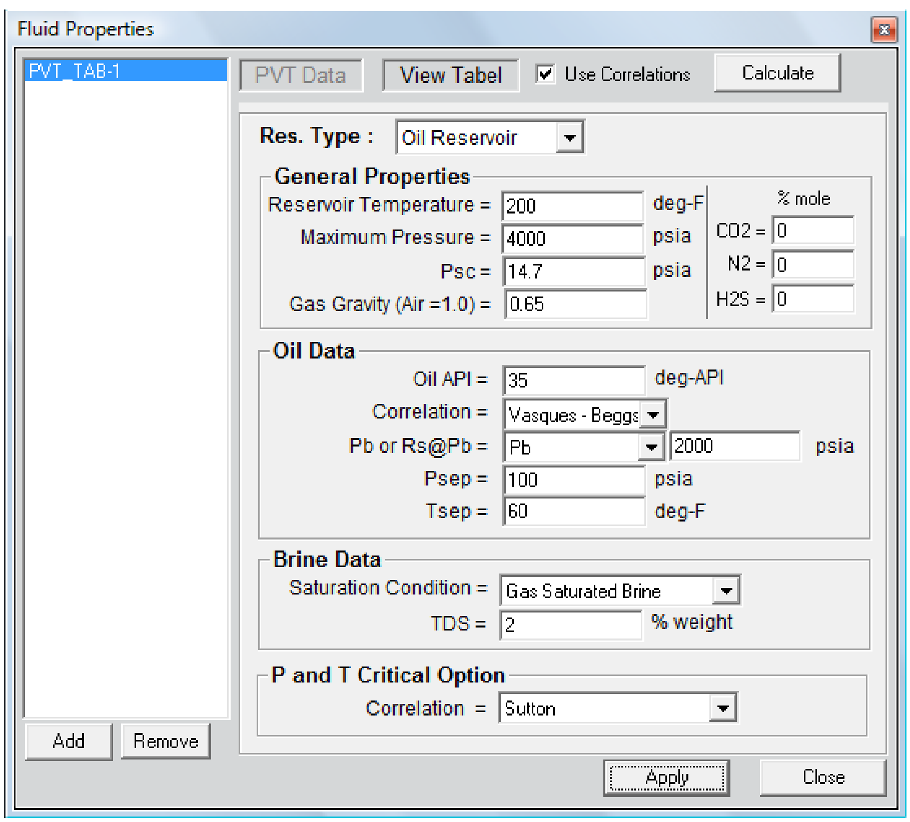


Fig. A.5-Fluid properties dialog (a)

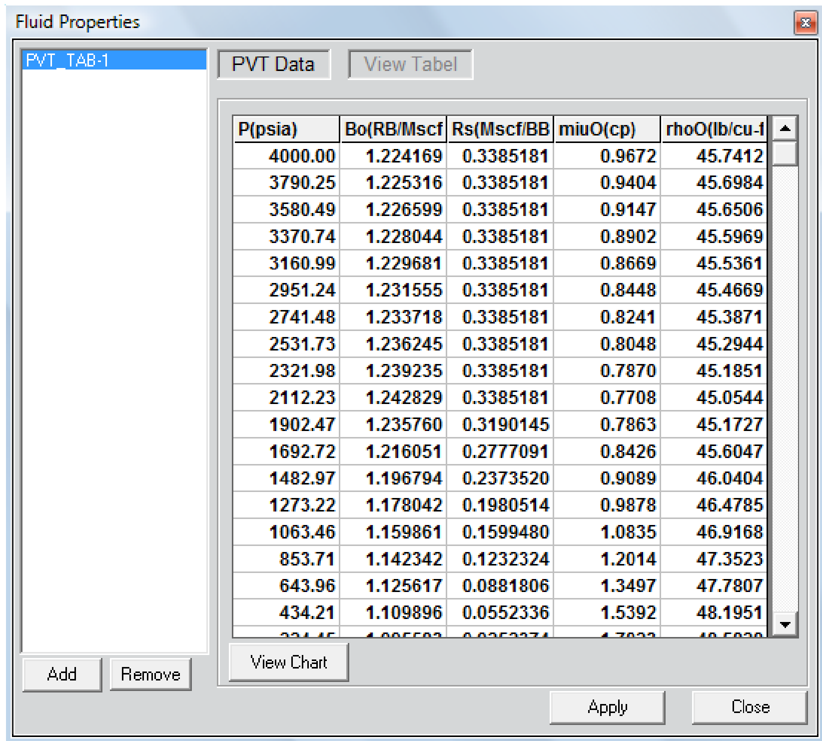


Fig. A.6-Fluid properties dialog (b)

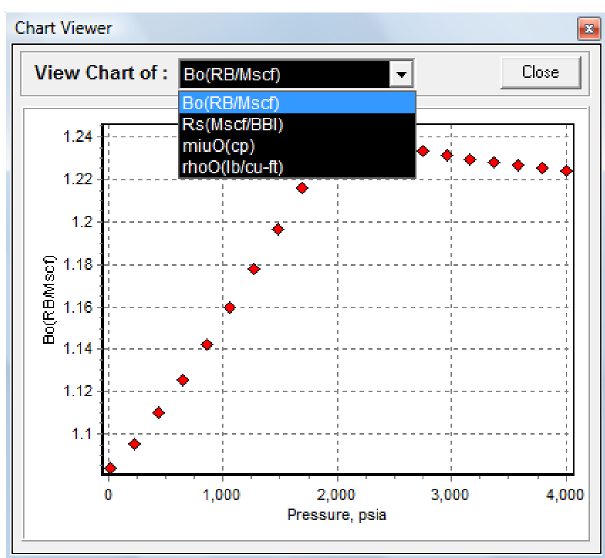


Fig. A.7-Fluid Properties Dialog (c)

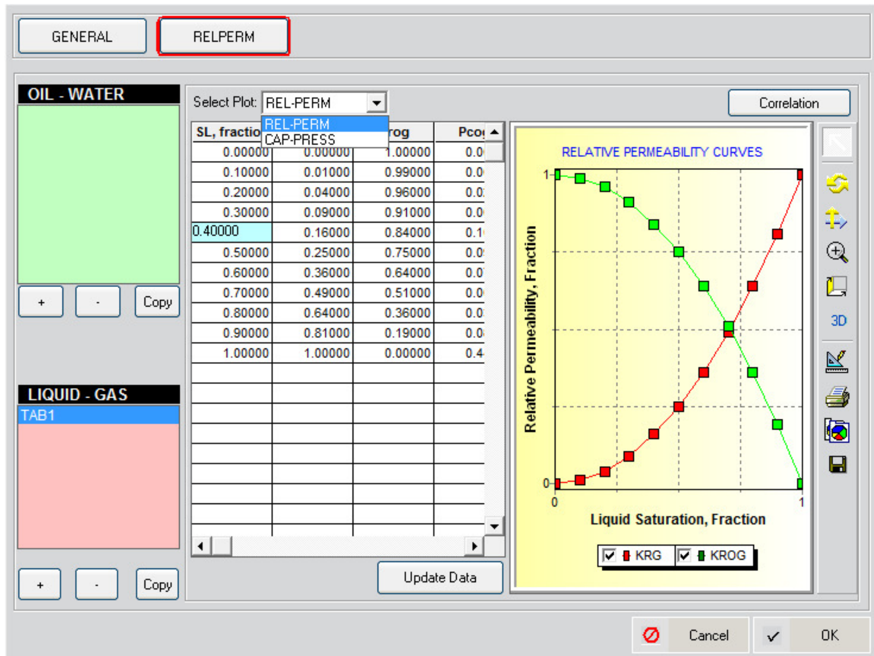


Fig. A.8-Rock properties dialog

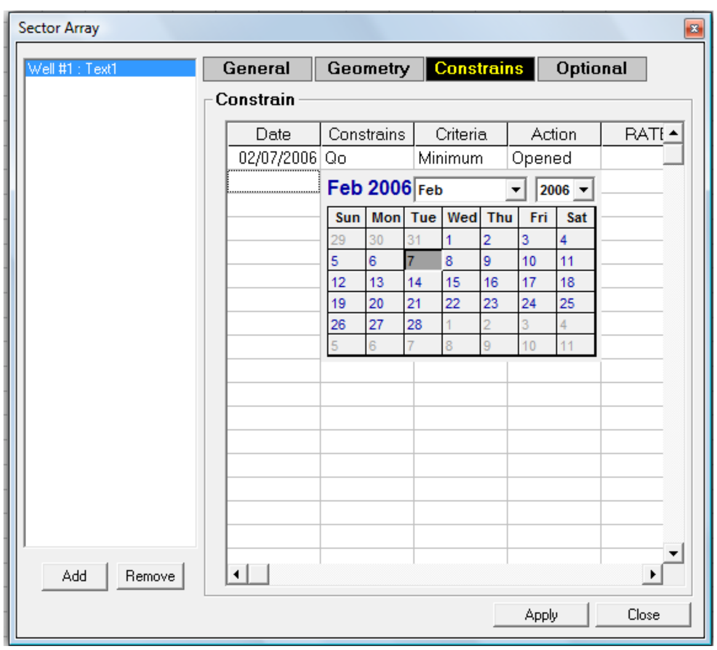


Fig. A.9-Well and recurrent data dialog

A.1.2 Voronoi Grid Examples from the DFN Simulator

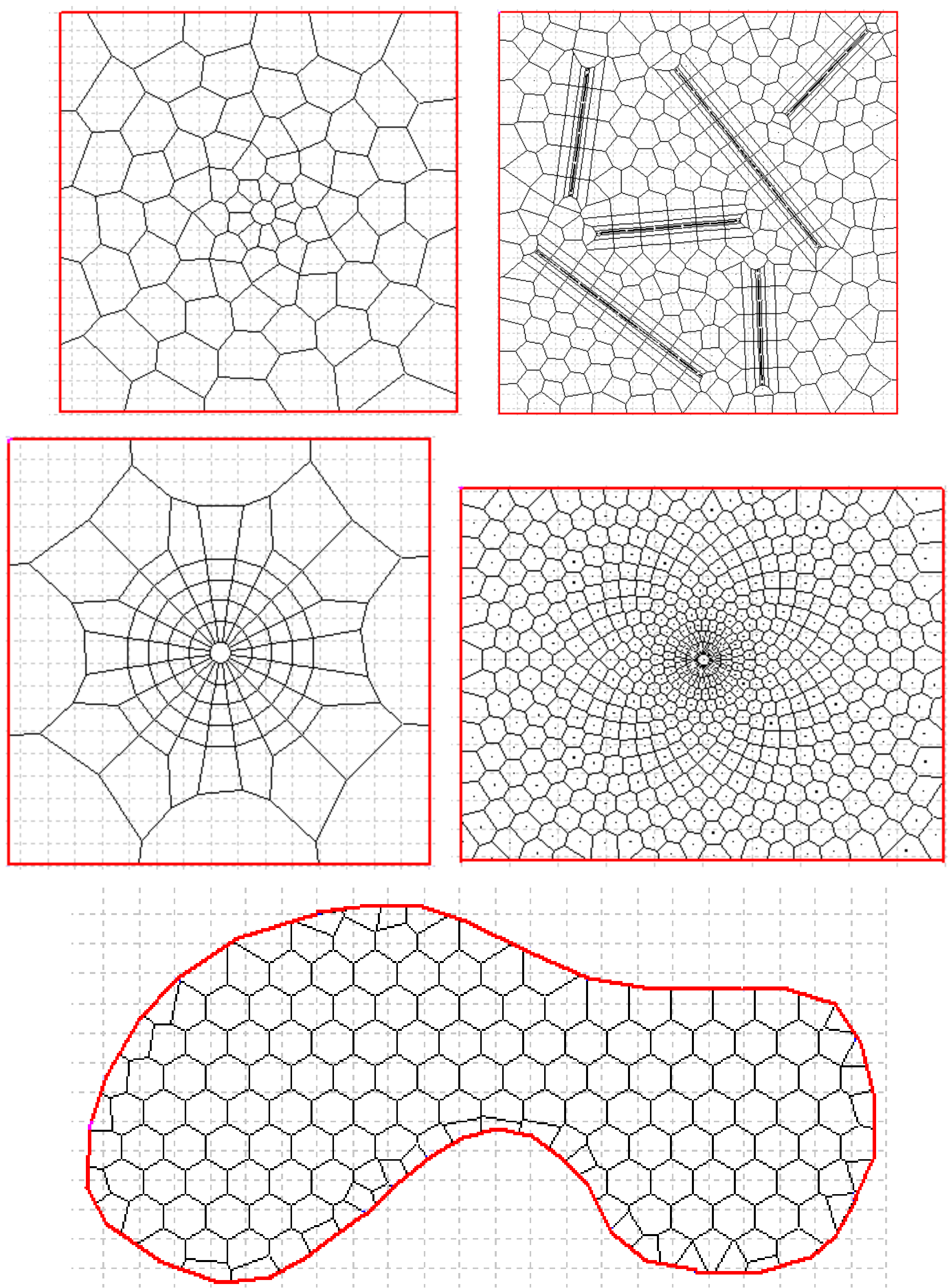


Fig. A.10-Examples of voronoi grids generated by the simulator's pre-processor

A.2 Processor

The simulator engine or processor was implemented using Microsoft Visual studio 2008 with C++ as the programming language. Several library/Header files (*.h) and source file were created as follows:

Header Files:

```
#include "stdafx.h"
#include <string>
#include <cstdlib>
#include <iostream>
#include "compcol_double.h"    // column matrix
#include "comprow_double.h"    // row matrix
#include "coord_double.h"      // I,J matrix
#include "ilupre_double.h"     // ILU(0) pre-conditioner
#include "icpre_double.h"
#include "diagpre_double.h"    // diagonal pre-conditioner
#include "gmres.h"             // GMRES solver
#include "bicg.h"              // Bi-Conjugate gradient solver
#include "cg.h"                // Conjugate gradient solver
#include "ir.h"                // Richardson Iteration solver
#include "cgs.h"               // Square conjugate gradient
#include "cheby.h"        // Cheby solver
#include "qmr.h"               // QMR solver
#include "bicgstab.h"          // Stabilized conjugate
gradient
#include <time.h>              // Read CPU time
#include "mvm.h"               // Solver data structure/class
#include <cstdlib>
#include <iostream>
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include "prepareLib.h"         // Library to read data from
file
#include "publicParamLib.h"     // parameter declarations
#include "allocMemoryLib.h"     // dynamic memory allocation
#include "publicFunctionLib.h" // general function of the
simulator
#include "matbalLib.h"          // material balances
```

```
#include "wellLib.h"               // sink & source term of the
equations
#include "pvtPropertiesLib.h"   // PVT properties (table
lookup)
#include "rockPropertiesLib.h" // Rock properties
#include "perturbationLib.h"   // Perturbation to construct
the elements of Jacobian matrix
#include "BICG_STABLib.h"       // Linear Solver (partially
not used anymore)
```

Source Files:

DFNSIM.cpp // Main Code

Processor Screen Captured:

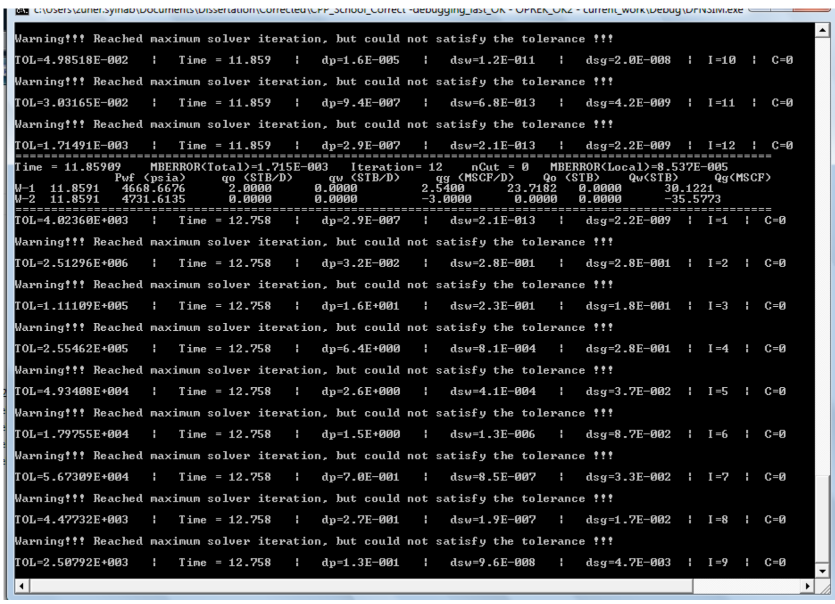


Fig. A.11-DFN simulator processor

A.3 Post-processor

From the pre-processor interface, we can easily activate the post-processor of the DFN simulator. The main feature of this interface is to show the 2D visualization of pressures, saturation pressures and saturations of each layer for 3D simulation model and every time step. The post-processor displays the

Voronoi grid system directly from the pre-processor and extracts the simulation results from the output files of the simulation.

The output file of the simulation contains the pressures, bubble-point pressures and saturation of each phase. The following is an example of the DFN simulation results:

```
NBLOCK 25

NLayer 1
NCols 5
TIME=0.20000000
BLOCK PRESSURE
4787.7072701  4789.8460889  4789.9896280  4789.9992984  4789.9999492
4789.8460889  4789.9806327  4789.9981266  4789.9998375  4789.9999857
4789.9896280  4789.9981266  4789.9997640  4789.9999749  4789.9999974
4789.9992984  4789.9998375  4789.9999749  4789.9999968  4789.9999996
4789.9999492  4789.9999857  4789.9999974  4789.9999996  4789.9999999

SATURATION PRESSURE
4014.7000000  4014.7000000  4014.7000000  4014.7000000  4014.7000000
4014.7000000  4014.7000000  4014.7000000  4014.7000000  4014.7000000
4014.7000000  4014.7000000  4014.7000000  4014.7000000  4014.7000000
4014.7000000  4014.7000000  4014.7000000  4014.7000000  4014.7000000
4014.7000000  4014.7000000  4014.7000000  4014.7000000  4014.7000000

WATER SATURATION
0.1200017  0.1200001  0.1200000  0.1200000  0.1200000
0.1200001  0.1200000  0.1200000  0.1200000  0.1200000
0.1200000  0.1200000  0.1200000  0.1200000  0.1200000
0.1200000  0.1200000  0.1200000  0.1200000  0.1200000
0.1200000  0.1200000  0.1200000  0.1200000  0.1200000

OIL SATURATION
0.8799983  0.8799999  0.8800000  0.8800000  0.8800000
0.8799999  0.8800000  0.8800000  0.8800000  0.8800000
0.8800000  0.8800000  0.8800000  0.8800000  0.8800000
0.8800000  0.8800000  0.8800000  0.8800000  0.8800000
0.8800000  0.8800000  0.8800000  0.8800000  0.8800000

GAS SATURATION
0.0000000  0.0000000  0.0000000  0.0000000  0.0000000
0.0000000  0.0000000  0.0000000  0.0000000  0.0000000
0.0000000  0.0000000  0.0000000  0.0000000  0.0000000
0.0000000  0.0000000  0.0000000  0.0000000  0.0000000
0.0000000  0.0000000  0.0000000  0.0000000  0.0000000

TIME=0.4
```

BLOCK PRESSURE

.

.

.

Post-Processor Interface

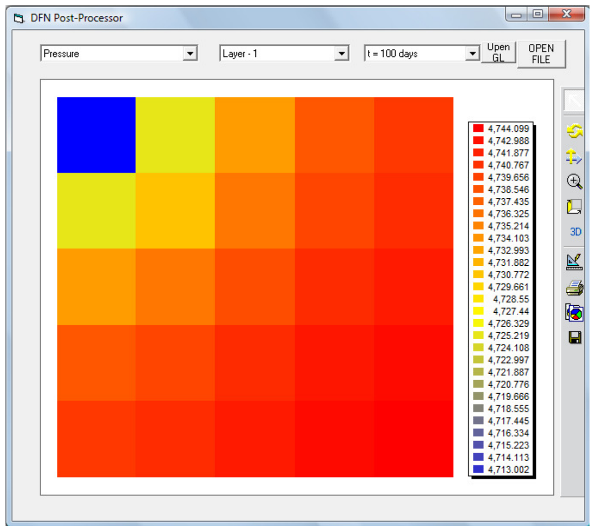


Fig. A.12-DFN simulator post-processor (no values displayed)

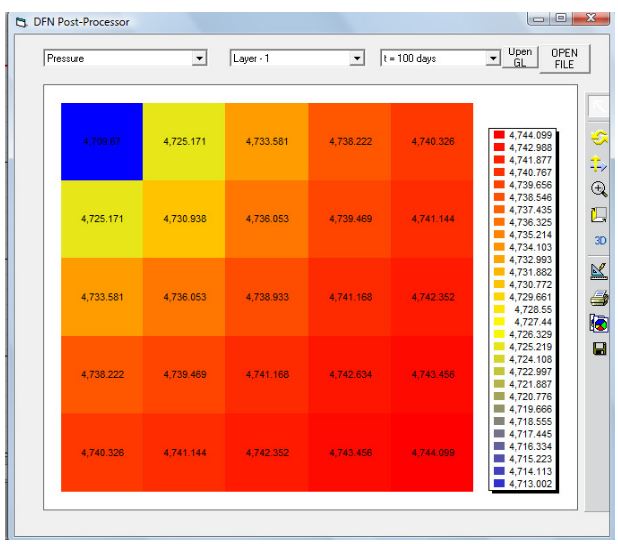


Fig. A.13-DFN simulator post-processor (values displayed)

APPENDIX B

OBJECTS AND DATA STRUCTURES OF DFN SIMULATOR

B.1 OBJECTS IMPLEMENTED IN THE DFN SIMULATOR

There are many objects or data types implemented in the DFN simulator. The following are the list of most important objects in the simulator.

B.1.1 Control Volume Object

```
typedef struct CV_type {
     int activeCV;        // active CV=1, Null =0
(default=active)
      int nconne;         // number of connection
   double zTop;           // grid top (ft)
   double area;           // X-Y block area (sq-ft)
   double pvMult;         // pore volume multiplier

   double por;       // porosity, fraction
   double kL;        // Lateral permeability, md
   double kV;        // Veritical permeability , md

   double thickness;      // grid thickness
      int rockID;         // rock ID, integer (default=0)
      int pvtID;          // pvt ID, integer (default=0)
     long *indexconne;    // lists of the adjacent CVs
     long *indexTo; // array of CVs connected to the
evaluated CV
   double *areaInt; // Area of interface
```

```
   double *transMult;    // transmissiblity multiplier
   double *LCV1, *LCV2;  // dist. Of CV to areaInt (to &
from)
} CVol;
```

B.1.2. Relative Permeabilities Object

```
typedef struct rockData {
  int    nRowSW, nRowSG;         // number of sw/sg in the
table
  double *swTable                // array of water
saturations
  double *kro_sw, *krw_sw, *pcow_sw;    // krows, krws &
pcows

  double *sgTable;               // array of gas saturations
  double *krg_sg, *krw_sg, *pcgw_sg;    // krgs, krwgs, pcgws

} rockTable;
```

B.1.3. Fluid Properties Object

```
typedef struct pvtData {
  int    nRow;
  double *pTable; // Pressure Table
  // Oil data
  double *rsoTable;  // rso
  double *moTable;   // oil viscosity, cp
  double *boTable;   // Oil FVF (Vol/std Vol)
```

```
  //Water data
  double *rswTable; // solution gas in water phase
  double *mwTable;  // water viscosity, cp
  double *bwTable;  // water FVF, vol/std. vol

  //Gas data
  double *mgTable;  // gas viscosity, cp
  double *bgTable;  // Gas FVF, vol/std. vol
} pvtTable;
```

B.1.4. Well Object

```
typedef struct well_type {
  double st_time; // well schedule
  double qo, qw, qg, qt, pwf, PI, BHPmin, qginj, qwinj;
  // PI = productivity Index ➔ calculated from the mesh
generator
  double qoMAX, qoMIN, qgMAX, qgMIN,qwMAX, qwMIN;
  long   IDCell; // well position

  int dir;       //0 vertical ; 1=horizontal
  int prod_inj;  // 0=prod // 1= inj
  int operate;   // 0= oil rate, 1 = g rate  2 = wrate , 3
pwf
  // injection (-), production (+)
  // all rate units are in std. condition (cu-ft)

} wellType;
```

B.2 DATA STRUCTURES OF DFN SIMULATOR

The data structures implemented in the DFN simulator, more or less similar to the data structure in many reservoir simulators. In order to keep the familiarity of users, DFN has been developed using "keyword" system. Each keyword represents a part or a section in the reservoir simulator dataset (grids, rocks, fluids, initialization, and well sections).

Since DFN simulator grid system is based on Voronoi grid, automatically, in the grid section keywords (DX, DY, DZ, NX, NY, NZ) as in many reservoir simulators are no longer applicable. Those keywords are replaced with a new structure of Control Volume object as discussed in some chapters of this dissertation.

Fig.B.1 will be used to explain how the data structure of grid section in the DFN Simulator. Each hexagonal grid is a CV object and has its own properties. The properties are listed in the data structure of CV (see section B.1.1).

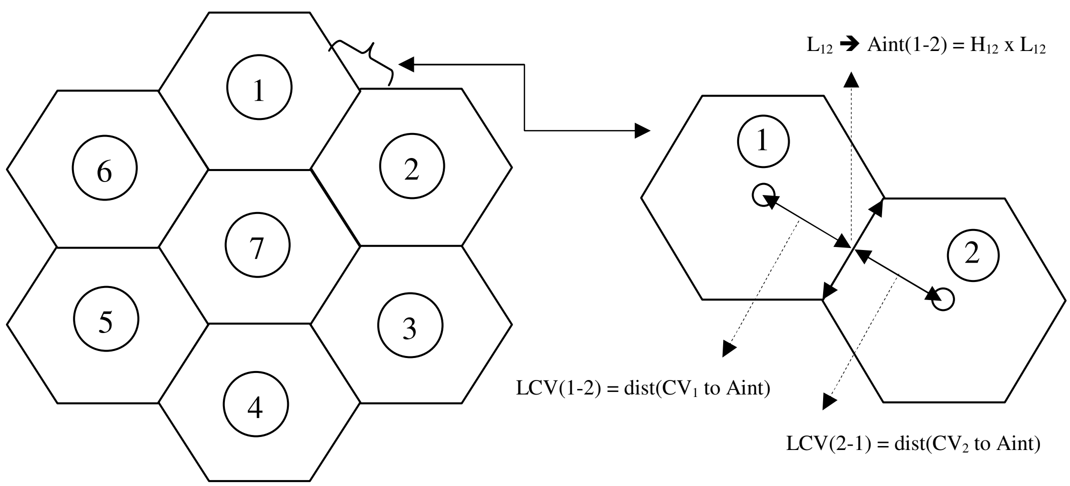


Fig.B.1-Control volume object (DFN grid system)

In orderly manner the grid section of DFN simulator begins with:

1. Keyword "**NXNY**" : number of CV in each layer
2. Keyword "**NZ**" : number of layer followed by array of thickness for each layer

3. Keyword “START_CV” : total number of CV and followed by CV object properties

This part contains of CV properties from grid #1 until grid #NXNY*NZ. Thus, the number of lines should be as many as total number of CV in the model.
Number of columns in every line depends on the number of connection of each CV. Total number of column in each line should be (10+4*Number of connection).
First column must be the number of connection +1 of the evaluated CV and column 11th contains array of connected CVs.

For an example, CV #1:

- Number of connection = 3 ➔ Column #1 = **4**
- Array of connected CVs = {2,6,7}

Another example, CV #7:

- Number of connection = 6 ➔ Column #1 = **7**
- Array of connected CVs = {1,2,3,4,5,6}

The grid section of the model illustrated in Fig.B.1 is as follows:

	Grid Section
1	**4** Top_1 A_1 por_1 kL_1 kv_1 $pvMult_1$ H_1 $RockID_1$ $pvtID_1$ **2 6 7** Aint(1-2) Aint(1-6) Aint(1-7) LCV(1-2) LCV(2-1) LCV(1-6) LCV(6-1) LCV(1-7) LCV(7-1)
2	**4** Top_2 A_2 por_2 kL_2 kv_2 $pvMult_2$ H_1 $RockID_2$ $pvtID_2$ **1 3 7** Aint(2-1) Aint(2-3) Aint(2-7) LCV(2-1) LCV(1-2) LCV(2-3) LCV(3-2) LCV(2-7) LCV(7-2)
3	**4** Top_3 A_3 por_3 kL_3 kv_3 $pvMult_3$ H_1 $RockID_3$ $pvtID_3$ **2 4 7 …**
4	**4** Top_4 A_4 por_4 kL_4 kv_4 $pvMult_4$ H_1 $RockID_4$ $pvtID_4$ **3 5 7 …**
5	**4** Top_5 A_5 por_5 kL_5 kv_5 $pvMult_5$ H_1 $RockID_5$ $pvtID_5$ **4 6 7 …**

6	**4** Top_6 A_6 por_6 kL_6 kv_6 $pvMult_6$ H_I $RockID_6$ $pvtID_6$ **1 5 7 …**
7	**7** Top_7 A_7 por_7 kL_7 kv_7 $pvMult_7$ H_I $RockID_7$ $pvtID_7$ **1 2 3 4 5 6 …**

4. Keyword "END_CV : end of grid section

<u>Note on symbols</u>:

- Top_I : grid top of CV_I, *ft*
- A_I : Area of CV_I, ft^2
- por_I : porosity of CV_I, fraction
- kL_I and kv_I : Lateral and vertical permeability of CV_I, *md*
- H_I : Thickness of CV_I, *ft*
- $RockID_I$: Rock ID of CV_I, integer
- $pvtID_I$: pvt ID of CV_I, integer
- Aint (I –J) : area of interface of CV_I and CV_J , ft^2
- LCV(I-J) : distance from CV_I to Aint(I-J), *ft*

The data structure of rocks, fluids and other sections are relatively similar with other simulators and specifically discussed in Chapter III of this dissertation.

APPENDIX C

SIMULATION DATASETS

Regular Fracture Spacing

```
NXNY 1089
NZ 1
100
```

START_CV 1089

```
3 2000 250000 0.25 50 5 1 100 1 1 2 34 50000 50000 250 250 150 150
4 2000 150000 0.25 50 5 1 100 1 1 1 3 35 50000 50000 30000 150 150 250 250 25 150
4 2000 25000 0.25 50 5 1 100 1 1 2 4 36 50000 50000 5000 25 25 250 150 5 150
4 2000 5000 0.25 50 5 1 100 1 1 3 5 37 50000 50000 1000 5 5 250 25 0.05 150
4 2000 50 0.5 4119.78876417698 411.978876417698 1 100 1 1 4 6 38 50000 50000 10 0.05 0.05 250 5 5 150
4 2000 5000 0.25 50 5 1 100 1 1 5 7 39 50000 50000 1000 5 5 250 0.05 25 150
4 2000 25000 0.25 50 5 1 100 1 1 6 8 40 50000 50000 5000 25 25 250 5 150 150
4 2000 150000 0.25 50 5 1 100 1 1 7 9 41 50000 50000 30000 150 150 250 25 250 150
4 2000 250000 0.25 50 5 1 100 1 1 8 10 42 50000 50000 50000 250 250 250 150 150 150
4 2000 150000 0.25 50 5 1 100 1 1 9 11 43 50000 50000 30000 150 150 250 250 25 150
4 2000 25000 0.25 50 5 1 100 1 1 10 12 44 50000 50000 5000 25 25 250 150 5 150
4 2000 5000 0.25 50 5 1 100 1 1 11 13 45 50000 50000 1000 5 5 250 25 0.05 150
4 2000 50 0.5 10652.0059145656 1065.20059145656 1 100 1 1 12 14 46 50000 50000 10 0.05 0.05 250 5 5
150
4 2000 5000 0.25 50 5 1 100 1 1 13 15 47 50000 50000 1000 5 5 250 0.05 25 150
4 2000 25000 0.25 50 5 1 100 1 1 14 16 48 50000 50000 5000 25 25 250 5 150 150
4 2000 150000 0.25 50 5 1 100 1 1 15 17 49 50000 50000 30000 150 150 250 25 250 150
4 2000 250000 0.25 50 5 1 100 1 1 16 18 50 50000 50000 50000 250 250 250 150 150 150
4 2000 150000 0.25 50 5 1 100 1 1 17 19 51 50000 50000 30000 150 150 250 250 25 150
4 2000 25000 0.25 50 5 1 100 1 1 18 20 52 50000 50000 5000 25 25 250 150 5 150
4 2000 5000 0.25 50 5 1 100 1 1 19 21 53 50000 50000 1000 5 5 250 25 0.05 150
4 2000 50 0.5 80297.143686223 8029.7143686223 1 100 1 1 20 22 54 50000 50000 10 0.05 0.05 250 5 5 150
4 2000 5000 0.25 50 5 1 100 1 1 21 23 55 50000 50000 1000 5 5 250 0.05 25 150
4 2000 25000 0.25 50 5 1 100 1 1 22 24 56 50000 50000 5000 25 25 250 5 150 150
4 2000 150000 0.25 50 5 1 100 1 1 23 25 57 50000 50000 30000 150 150 250 25 250 150
4 2000 250000 0.25 50 5 1 100 1 1 24 26 58 50000 50000 50000 250 250 250 150 150 150
4 2000 150000 0.25 50 5 1 100 1 1 25 27 59 50000 50000 30000 150 150 250 250 25 150
4 2000 25000 0.25 50 5 1 100 1 1 26 28 60 50000 50000 5000 25 25 250 150 5 150
4 2000 5000 0.25 50 5 1 100 1 1 27 29 61 50000 50000 1000 5 5 250 25 0.05 150
4 2000 50 0.5 338.911165423507 33.8911165423507 1 100 1 1 28 30 62 50000 50000 10 0.05 0.05 250 5 5
150
4 2000 5000 0.25 50 5 1 100 1 1 29 31 63 50000 50000 1000 5 5 250 0.05 25 150
4 2000 25000 0.25 50 5 1 100 1 1 30 32 64 50000 50000 5000 25 25 250 5 150 150
4 2000 150000 0.25 50 5 1 100 1 1 31 33 65 50000 50000 30000 150 150 250 25 250 150
3 2000 250000 0.25 50 5 1 100 1 1 32 66 50000 50000 250 250 150 150
4 2000 150000 0.25 50 5 1 100 1 1 35 1 67 30000 50000 50000 250 150 150 150 250 25
5 2000 90000 0.25 50 5 1 100 1 1 34 36 2 68 30000 30000 30000 30000 150 150 150 150 250 25 250 25
5 2000 15000 0.25 50 5 1 100 1 1 35 37 3 69 30000 30000 5000 5000 25 25 150 150 150 5 250 25
5 2000 3000 0.25 50 5 1 100 1 1 36 38 4 70 30000 30000 1000 1000 5 5 150 150 25 0.05 250 25
5 2000 30 0.5 36067.5079529739 3606.75079529739 1 100 1 1 37 39 5 71 30000 30000 10 10 0.05 0.05 150
150 5 5 250 25
5 2000 3000 0.25 50 5 1 100 1 1 38 40 6 72 30000 30000 1000 1000 5 5 150 150 0.05 25 250 25
5 2000 15000 0.25 50 5 1 100 1 1 39 41 7 73 30000 30000 5000 5000 25 25 150 150 5 150 250 25
5 2000 90000 0.25 50 5 1 100 1 1 40 42 8 74 30000 30000 30000 30000 150 150 150 150 25 250 250 25
5 2000 150000 0.25 50 5 1 100 1 1 41 43 9 75 30000 30000 50000 50000 250 250 150 150 150 150 250 25
5 2000 90000 0.25 50 5 1 100 1 1 42 44 10 76 30000 30000 30000 30000 150 150 150 150 250 25 250 25
5 2000 15000 0.25 50 5 1 100 1 1 43 45 11 77 30000 30000 5000 5000 25 25 150 150 150 5 250 25
5 2000 3000 0.25 50 5 1 100 1 1 44 46 12 78 30000 30000 1000 1000 5 5 150 150 25 0.05 250 25
5 2000 30 0.5 21893.2845107887 2189.32845107887 1 100 1 1 45 47 13 79 30000 30000 10 10 0.05 0.05 150
150 5 5 250 25
5 2000 3000 0.25 50 5 1 100 1 1 46 48 14 80 30000 30000 1000 1000 5 5 150 150 0.05 25 250 25
5 2000 15000 0.25 50 5 1 100 1 1 47 49 15 81 30000 30000 5000 5000 25 25 150 150 5 150 250 25
5 2000 90000 0.25 50 5 1 100 1 1 48 50 16 82 30000 30000 30000 30000 150 150 150 150 25 250 250 25
5 2000 150000 0.25 50 5 1 100 1 1 49 51 17 83 30000 30000 50000 50000 250 250 150 150 150 150 250 25
5 2000 90000 0.25 50 5 1 100 1 1 50 52 18 84 30000 30000 30000 30000 150 150 150 150 250 25 250 25
5 2000 15000 0.25 50 5 1 100 1 1 51 53 19 85 30000 30000 5000 5000 25 25 150 150 150 5 250 25
5 2000 3000 0.25 50 5 1 100 1 1 52 54 20 86 30000 30000 1000 1000 5 5 150 150 25 0.05 250 25
5 2000 30 0.5 215551.934816518 21555.1934816518 1 100 1 1 53 55 21 87 30000 30000 10 10 0.05 0.05 150
150 5 5 250 25
5 2000 3000 0.25 50 5 1 100 1 1 54 56 22 88 30000 30000 1000 1000 5 5 150 150 0.05 25 250 25
5 2000 15000 0.25 50 5 1 100 1 1 55 57 23 89 30000 30000 5000 5000 25 25 150 150 5 150 250 25
5 2000 90000 0.25 50 5 1 100 1 1 56 58 24 90 30000 30000 30000 30000 150 150 150 150 25 250 250 25
5 2000 150000 0.25 50 5 1 100 1 1 57 59 25 91 30000 30000 50000 50000 250 250 150 150 150 150 250 25
5 2000 90000 0.25 50 5 1 100 1 1 58 60 26 92 30000 30000 30000 30000 150 150 150 150 250 25 250 25
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5 2000 500 0.25 50 5 1 100 1 1 913 915 881 947 1000 1000 5000 5000 25 25 5 5 5 150 25 0.05
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5 2000 5000 0.25 50 5 1 100 1 1 965 967 933 999 1000 1000 50000 50000 250 250 5 5 150 150 0.05 25
5 2000 3000 0.25 50 5 1 100 1 1 966 968 934 1000 1000 1000 30000 30000 150 150 5 5 250 25 0.05 25
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5 2000 100 0.25 50 5 1 100 1 1 968 970 936 1002 1000 1000 1000 1000 5 5 5 5 25 0.05 0.05 25
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5 2000 500 0.25 50 5 1 100 1 1 971 973 939 1005 1000 1000 5000 5000 25 25 5 5 5 150 0.05 25
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5 2000 5000 0.25 50 5 1 100 1 1 981 983 949 1015 1000 1000 50000 50000 250 250 5 5 150 150 0.05 25
5 2000 3000 0.25 50 5 1 100 1 1 982 984 950 1016 1000 1000 30000 30000 150 150 5 5 250 25 0.05 25
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5 2000 5 0.5 305014.671740117 30501.4671740117 1 100 1 1 994 996 962 1028 5000 5000 10 10 0.05 0.05
25 25 5 5 5 150
5 2000 500 0.25 50 5 1 100 1 1 995 997 963 1029 5000 5000 1000 1000 5 5 25 25 0.05 25 5 150
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5 2000 2500 0.25 50 5 1 100 1 1 1000 1002 968 1034 5000 5000 5000 5000 25 25 25 25 150 5 5 150
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5 2000 5 0.5 101101.915801893 10110.1915801893 1 100 1 1 1002 1004 970 1036 5000 5000 10 10 0.05
0.05 25 25 5 5 5 150
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5 2000 2500 0.25 50 5 1 100 1 1 1004 1006 972 1038 5000 5000 5000 5000 25 25 25 25 5 150 5 150
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5 2000 25000 0.25 50 5 1 100 1 1 1006 1008 974 1040 5000 5000 50000 50000 250 250 25 25 150 150 5 150
5 2000 15000 0.25 50 5 1 100 1 1 1007 1009 975 1041 5000 5000 30000 30000 150 150 25 25 250 25 5 150
5 2000 2500 0.25 50 5 1 100 1 1 1008 1010 976 1042 5000 5000 5000 5000 25 25 25 25 150 5 5 150
5 2000 500 0.25 50 5 1 100 1 1 1009 1011 977 1043 5000 5000 1000 1000 5 5 25 25 25 0.05 5 150
5 2000 5 0.5 158007.881823489 15800.7881823489 1 100 1 1 1010 1012 978 1044 5000 5000 10 10 0.05
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5 2000 500 0.25 50 5 1 100 1 1 1011 1013 979 1045 5000 5000 1000 1000 5 5 25 25 0.05 25 5 150
5 2000 2500 0.25 50 5 1 100 1 1 1012 1014 980 1046 5000 5000 5000 5000 25 25 25 25 5 150 5 150
5 2000 15000 0.25 50 5 1 100 1 1 1013 1015 981 1047 5000 5000 30000 30000 150 150 25 25 25 250 5 150
5 2000 25000 0.25 50 5 1 100 1 1 1014 1016 982 1048 5000 5000 50000 50000 250 250 25 25 150 150 5 150
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5 2000 2500 0.25 50 5 1 100 1 1 1016 1018 984 1050 5000 5000 5000 5000 25 25 25 25 150 5 5 150
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0.05 25 25 5 5 5 150
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5 2000 15000 0.25 50 5 1 100 1 1 1021 1023 989 1055 5000 5000 30000 30000 150 150 25 25 25 250 5 150
4 2000 25000 0.25 50 5 1 100 1 1 1022 990 1056 5000 50000 50000 250 25 25 150 5 150
4 2000 150000 0.25 50 5 1 100 1 1 1025 991 1057 30000 50000 50000 250 150 150 150 25 250
5 2000 90000 0.25 50 5 1 100 1 1 1024 1026 992 1058 30000 30000 30000 30000 150 150 150 150 250 25 25
250
5 2000 15000 0.25 50 5 1 100 1 1 1025 1027 993 1059 30000 30000 5000 5000 25 25 150 150 150 5 25 250
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5 2000 3000 0.25 50 5 1 100 1 1 1034 1036 1002 1068 30000 30000 1000 1000 5 5 150 150 25 0.05 25 250
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0.05 0.05 150 150 5 5 25 250
END_CV

5 2000 3000 0.25 50 5 1 100 1 1 1036 1038 1004 1070 30000 30000 1000 1000 5 5 150 150 0.05 25 25 250
5 2000 15000 0.25 50 5 1 100 1 1 1037 1039 1005 1071 30000 30000 5000 5000 25 25 150 150 5 150 25 250
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150 25 250
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25 250
5 2000 15000 0.25 50 5 1 100 1 1 1041 1043 1009 1075 30000 30000 5000 5000 25 25 150 150 150 5 25 250
5 2000 3000 0.25 50 5 1 100 1 1 1042 1044 1010 1076 30000 30000 1000 1000 5 5 150 150 25 0.05 25 250
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150 25 250
5 2000 90000 0.25 50 5 1 100 1 1 1048 1050 1016 1082 30000 30000 30000 30000 150 150 150 150 250 25
25 250
5 2000 15000 0.25 50 5 1 100 1 1 1049 1051 1017 1083 30000 30000 5000 5000 25 25 150 150 150 5 25 250
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4 2000 150000 0.25 50 5 1 100 1 1 1055 1023 1089 30000 50000 50000 250 150 150 150 25 250
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250 5 5 150
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4 2000 250000 0.25 50 5 1 100 1 1 1064 1066 1032 50000 50000 50000 250 250 250 150 150 150
4 2000 150000 0.25 50 5 1 100 1 1 1065 1067 1033 50000 50000 30000 150 150 250 250 25 150
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4 2000 25000 0.25 50 5 1 100 1 1 1070 1072 1038 50000 50000 5000 25 25 250 5 150 150
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4 2000 250000 0.25 50 5 1 100 1 1 1072 1074 1040 50000 50000 50000 250 250 250 150 150 150
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4 2000 50 0.5 18195.5123304057 1819.55123304056 1 100 1 1 1076 1078 1044 50000 50000 10 0.05 0.05
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4 2000 150000 0.25 50 5 1 100 1 1 1079 1081 1047 50000 50000 30000 150 150 250 25 250 150
4 2000 250000 0.25 50 5 1 100 1 1 1080 1082 1048 50000 50000 50000 250 250 250 150 150 150
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4 2000 25000 0.25 50 5 1 100 1 1 1082 1084 1050 50000 50000 5000 25 25 250 150 5 150
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250 5 5 150
4 2000 5000 0.25 50 5 1 100 1 1 1085 1087 1053 50000 50000 1000 5 5 250 0.05 25 150
4 2000 25000 0.25 50 5 1 100 1 1 1086 1088 1054 50000 50000 5000 25 25 250 5 150 150
4 2000 150000 0.25 50 5 1 100 1 1 1087 1089 1055 50000 50000 30000 150 150 250 25 250 150
3 2000 250000 0.25 50 5 1 100 1 1 1088 1056 50000 50000 250 250 150 150

Disconnected Fracture Network

NXNY 620
NZ 1
100

START_CV 620
7 2000 0.23056 0.3 100 10 1 20 1 1 2 11 93 94 477 581 0.14313 0.14302 1.02387 1.02297 0.22811 0.00706 1.77E-03 1.77E-03 0.100004346 0.100009859 1.121933879 2.777779444 0.00177 0.00177 0.10001 0.10001 1.12193 2.77778
4 2000 0.32153 0.3 100 10 1 20 1 1 1 3 94 0.14313 0.10124 3.22618 1.77E-03 3.125003052 9.88E-02 0.00177 3.125 0.09875
4 2000 0.63279 0.3 100 10 1 20 1 1 2 4 96 0.10124 0.10125 6.25 3.125001526 3.125000037 9.88E-02 3.125 3.125 0.09875
4 2000 0.62385 0.3 100 10 1 20 1 1 3 5 98 0.10125 0.09838 6.25 3.124999962 3.125001526 9.88E-02 3.125 3.125 0.09875
4 2000 0.62385 0.3 100 10 1 20 1 1 4 6 100 0.09838 0.10124 6.25 3.125003052 3.125004501 9.88E-02 3.125 3.125 0.09875
4 2000 0.6328 0.3 100 10 1 20 1 1 5 7 102 0.10124 0.10124 6.25 3.125000074 3.125004501 9.88E-02 3.125 3.125 0.09875
4 2000 0.6328 0.3 100 10 1 20 1 1 6 8 104 0.10124 0.10125 6.25 3.125000074 3.125000037 9.88E-02 3.125 3.125 0.09875
4 2000 0.62364 0.3 100 10 1 20 1 1 7 9 106 0.10125 0.09831 6.25 3.124999962 3.12500152 9.88E-02 3.125 3.125 0.09875
4 2000 0.62364 0.3 100 10 1 20 1 1 8 10 108 0.09831 0.10124 6.25 3.125003057 3.125004501 9.88E-02 3.125 3.125 0.09875
5 2000 0.32151 0.3 100 10 1 20 1 1 9 19 20 110 0.10124 3.125 0.14304 3.22604 3.125000074 2.50E-03 1.76E-03 9.88E-02 3.125 0.0025 0.00177 0.09875
4 2000 0.32151 0.3 100 10 1 20 1 1 1 12 93 0.14302 0.10124 3.22602 1.77E-03 3.125001526 9.87E-02 0.00177 3.125 0.09875
4 2000 0.63258 0.3 100 10 1 20 1 1 11 13 95 0.10124 0.09831 6.25 3.125003052 3.125003057 9.88E-02 3.125 3.125 0.09875
4 2000 0.63258 0.3 100 10 1 20 1 1 12 14 97 0.09831 0.10125 6.25 3.12500152 3.124999962 9.88E-02 3.125 3.125 0.09875
4 2000 0.6328 0.3 100 10 1 20 1 1 13 15 99 0.10125 0.10124 6.25 3.125000037 3.125000074 9.88E-02 3.125 3.125 0.09875
4 2000 0.6328 0.3 100 10 1 20 1 1 14 16 101 0.10124 0.10124 6.25 3.125004501 3.125000074 9.88E-02 3.125 3.125 0.09875
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4 2000 0.71135 0.3 100 10 1 20 1 1 43 45 214 0.10131 0.10119 7.0256 3.512803616 3.512799993 0.098746645 3.5128 3.5128 0.09875
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4 2000 0.62318 0.3 100 10 1 20 1 1 52 54 264 0.10115 0.10118 6.16009 3.080049338 3.080050433 9.88E-02 3.08004 3.08004 0.09875
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4 2000 0.6237 0.3 100 10 1 20 1 1 58 60 255 0.10116 0.10116 6.16009 3.080046645 3.080046457 9.88E-02 3.08005 3.08005 0.09875
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4 2000 0.62368 0.3 100 10 1 20 1 1 60 62 259 0.10115 0.10114 6.16009 3.080042809 3.080043563 9.87E-02 3.08005 3.08005 0.09875
4 2000 0.62354 0.3 100 10 1 20 1 1 61 63 261 0.10114 0.10114 6.16009 3.080050444 3.080049292 9.88E-02 3.08004 3.08004 0.09875
4 2000 0.62369 0.3 100 10 1 20 1 1 62 64 263 0.10114 0.10118 6.16009 3.080042851 3.080043573 9.88E-02 3.08005 3.08005 0.09875
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5 2000 5.12233 0.3 100 10 1 20 1 1 109 125 145 436 4.30727 1.13749 4.69902 1.20307 0.337500209 3.125003611 0.800000004 1.22772696 0.3375 3.125 0.8 1.22773
5 2000 5.2041 0.3 100 10 1 20 1 1 110 126 146 436 4.3422 1.13749 4.80788 1.22913 0.337500121 3.125000966 0.799999695 1.254322682 0.3375 3.125 0.8 1.25433
6 2000 13.46852 0.3 100 10 1 20 1 1 111 131 147 477 480 4.73567 2.36249 5.74238 2.02803 1.11824 0.800000023 3.12500275 1.562499024 1.673915701 3.039117085 0.8 3.125 1.5625 1.67392 3.03912
6 2000 13.07216 0.3 100 10 1 20 1 1 112 132 148 477 479 4.72477 2.36249 5.47253 1.65091 1.33761 0.79999733 3.125001828 1.562499893 1.668496937 2.748419195 0.8 3.125 1.5625 1.66851 2.74842

5 2000 14.76564 0.3 100 10 1 20 1 1 113 129 133 149 6.25 2.36249 2.3625 6.25 0.800000381 3.125001828 3.12500275 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76562 0.3 100 10 1 20 1 1 114 130 134 150 6.25 2.36249 2.3625 6.25 0.800002289 3.12500275 3.12499725 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 115 131 135 151 6.25 2.3625 2.36249 6.25 0.800002289 3.12499725 3.12500275 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 116 132 136 152 6.25 2.3625 2.36249 6.25 0.800000381 3.12500275 3.125001828 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 117 133 137 153 6.25 2.36249 2.36249 6.25 0.800000381 3.125001828 3.12500275 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 118 134 138 154 6.25 2.36249 2.36249 6.25 0.800000381 3.12500275 3.125001828 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 119 135 139 155 6.25 2.36249 2.36249 6.25 0.800000381 3.125001828 3.12500275 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 120 136 140 156 6.25 2.36249 2.36249 6.25 0.800000381 3.12500275 3.125001828 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 121 137 141 157 6.25 2.36249 2.36249 6.25 0.800000381 3.125001828 3.12500275 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 122 138 142 158 6.25 2.36249 2.36249 6.25 0.800000381 3.12500275 3.125001828 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 123 139 143 159 6.25 2.36249 2.3625 6.25 0.800000381 3.125001828 3.12500275 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76562 0.3 100 10 1 20 1 1 124 140 144 160 6.25 2.36249 2.3625 6.25 0.800002289 3.12500275 3.12499725 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 125 141 145 161 6.25 2.3625 2.36249 6.25 0.800002289 3.12499725 3.12500275 1.5625 0.8 3.125 3.125 1.5625
5 2000 14.76564 0.3 100 10 1 20 1 1 126 142 146 162 6.25 2.3625 2.36249 6.25 0.800000381 3.12500275 3.125001828 1.5625 0.8 3.125 3.125 1.5625
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3.329716115 1.5625 3.125 3.125 3.54232 3.61857 2.44302 3.32971
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3.39705 1.91946 2.81164 2.59654
5 2000 28.40033 0.3 100 10 1 20 1 1 146 162 468 469 5.93301 3.19824 6.29203 6.75218 1.562502248 3.125002368 2.829282909 2.892927327 1.5625 3.125 2.82929 2.89293
6 2000 2.00617 0.3 100 10 1 20 1 1 21 22 167 175 499 0.68303 3.88438 0.43623 4.64473 0.43464 0.100007835 9.88E-02 3.783311502 0.337500287 0.787576389 0.10001 0.09875 3.78331 0.3375 0.78758
6 2000 1.99174 0.3 100 10 1 20 1 1 21 27 168 176 499 0.67171 3.88429 0.43623 4.58896 0.42911 0.100008788 9.88E-02 3.783308734 0.337500711 0.777297919 0.10001 0.09875 3.78331 0.3375 0.7773
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5 2000 3.30094 0.3 100 10 1 20 1 1 24 167 171 179 7.56662 0.43627 0.43619 7.56662 9.88E-02 3.783309268 3.78331268 0.337500211 0.09875 3.78331 3.78331 0.3375
5 2000 3.30093 0.3 100 10 1 20 1 1 29 168 172 180 7.56662 0.43623 0.43623 7.56662 9.87E-02 3.783311307 3.783312515 0.337500464 0.09875 3.78331 3.78331 0.3375
5 2000 3.30093 0.3 100 10 1 20 1 1 25 169 173 181 7.56662 0.43619 0.43624 7.56662 9.87E-02 3.783311337 3.783310626 0.337499645 0.09875 3.78331 3.78331 0.3375
5 2000 3.30093 0.3 100 10 1 20 1 1 30 170 174 182 7.56662 0.43623 0.43623 7.56662 9.87E-02 3.783311502 3.783310624 0.337500337 0.09875 3.78331 3.78331 0.3375
6 2000 2.11593 0.3 100 10 1 20 1 1 26 32 171 183 519 3.88431 0.97118 0.43624 4.87283 0.42443 9.88E-02 0.10000897 3.78330961 0.337498945 1.074756595 0.09875 0.10001 3.78331 0.3375 1.07476
6 2000 2.13035 0.3 100 10 1 20 1 1 31 32 172 184 519 3.88436 0.98297 0.43623 4.9288 0.42837 9.87E-02 0.100007139 3.783309611 0.337500025 1.085114179 0.09875 0.10001 3.78331 0.3375 1.08511
5 2000 5.68215 0.3 100 10 1 20 1 1 165 177 185 499 4.64473 1.1375 5.34588 1.33623 0.337499713 3.783311362 0.799999697 0.910394906 0.3375 3.78331 0.8 0.9104
5 2000 5.55159 0.3 100 10 1 20 1 1 166 178 186 499 4.58896 1.1375 5.17209 1.27826 0.337499289 3.783308874 0.800000374 0.870897186 0.3375 3.78331 0.8 0.8709
5 2000 8.60703 0.3 100 10 1 20 1 1 167 175 179 187 7.56662 1.1375 1.1375 7.56662 0.337499789 3.783308874 3.783311184 0.800000029 0.3375 3.78331 3.78331 0.8
5 2000 8.60703 0.3 100 10 1 20 1 1 168 176 180 188 7.56662 1.1375 1.1375 7.56662 0.337499789 3.783311362 3.783308799 0.800000029 0.3375 3.78331 3.78331 0.8
5 2000 8.60704 0.3 100 10 1 20 1 1 169 177 181 189 7.56662 1.1375 1.1375 7.56662 0.337499789 3.783308799 3.783311437 0.800000974 0.3375 3.78331 3.78331 0.8
5 2000 8.60703 0.3 100 10 1 20 1 1 170 178 182 190 7.56662 1.1375 1.1375 7.56662 0.337499536 3.783311184 3.783312655 0.800000281 0.3375 3.78331 3.78331 0.8
5 2000 8.60704 0.3 100 10 1 20 1 1 171 179 183 191 7.56662 1.1375 1.1375 7.56662 0.337500355 3.78331258 3.783309471 0.800000407 0.3375 3.78331 3.78331 0.8
5 2000 8.60702 0.3 100 10 1 20 1 1 172 180 184 192 7.56662 1.1375 1.1375 7.56662 0.337499663 3.783311362 3.783310764 0.800000029 0.3375 3.78331 3.78331 0.8
5 2000 5.77273 0.3 100 10 1 20 1 1 173 181 193 519 4.87283 1.1375 5.27702 1.20718 0.337501055 3.783310764 0.799999427 1.139634021 0.3375 3.78331 0.8 1.13963
5 2000 5.90378 0.3 100 10 1 20 1 1 174 182 194 519 4.9288 1.1375 5.45147 1.25183 0.337499975 3.783309471 0.799999582 1.181786477 0.3375 3.78331 0.8 1.18179
6 2000 15.94659 0.3 100 10 1 20 1 1 175 187 195 242 499 5.34588 2.3625 6.4883 1.53142 2.75653 0.800000303 3.783311006 1.562499993 2.886960216 1.494371829 0.8 3.78331 1.5625 2.88696 1.49437
7 2000 15.68742 0.3 100 10 1 20 1 1 176 188 196 499 500 501 5.17209 2.3625 6.90074 2.38811 0.72694 0.55693 0.799999626 3.78330923 1.562499563 1.426229807 3.211803876 3.188750113 0.8 3.78331
1.5625 1.42623 3.21181 3.18876
5 2000 17.87613 0.3 100 10 1 20 1 1 177 185 189 197 7.56662 2.3625 2.3625 7.56662 0.799999971 3.78330923 3.783310753 1.562499067 0.8 3.78331 3.78331 1.5625
5 2000 17.87614 0.3 100 10 1 20 1 1 178 186 190 198 7.56662 2.3625 2.3625 7.56662 0.799999971 3.783311006 3.78330923 1.562500013 0.8 3.78331 3.78331 1.5625
5 2000 17.87613 0.3 100 10 1 20 1 1 179 187 191 199 7.56662 2.3625 2.3625 7.56662 0.799999026 3.78330923 3.78331092 1.562499067 0.8 3.78331 3.78331 1.5625
5 2000 17.87615 0.3 100 10 1 20 1 1 180 188 192 200 7.56662 2.3625 2.3625 7.56662 0.799999719 3.783310753 3.783313011 1.562500265 0.8 3.78331 3.78331 1.5625
5 2000 17.87615 0.3 100 10 1 20 1 1 181 189 193 201 7.56662 2.3625 2.3625 7.56662 0.799999593 3.783313097 3.783310839 1.562501211 0.8 3.78331 3.78331 1.5625
5 2000 17.87614 0.3 100 10 1 20 1 1 182 190 194 202 7.56662 2.3625 2.3625 7.56662 0.799999971 3.783311006 3.78330923 1.562500013 0.8 3.78331 3.78331 1.5625
5 2000 15.53764 0.3 100 10 1 20 1 1 183 191 203 519 5.27702 2.3625 7.87653 3.51267 0.800000573 3.783309397 1.56249991 1.596650584 0.8 3.78331 1.5625 1.59665
5 2000 16.2404 0.3 100 10 1 20 1 1 184 192 204 519 5.45147 2.3625 8.29702 3.69845 0.800000418 3.783311006 1.562500178 1.68109871 0.8 3.78331 1.5625 1.6811
6 2000 21.32414 0.3 100 10 1 20 1 1 185 197 242 244 415 6.4883 1.07119 6.37777 0.01147 6.29414 1.562500007 3.783308171 1.903028635 4.274772024 2.585187539 1.5625 3.78331 1.90303 4.27451 2.58519
6 2000 29.96087 0.3 100 10 1 20 1 1 186 198 501 502 506 6.90074 3.63644 7.06716 0.18537 4.79866 1.562500437 3.783310484 2.218366137 4.881909694 3.917564725 1.5625 3.78331 2.21837 4.88192
3.91756
6 2000 28.9175 0.3 100 10 1 20 1 1 187 195 199 415 509 7.56662 1.07119 3.2145 6.17838 4.1456 1.562500933 3.783312065 3.783309619 2.449359294 3.537475796 1.5625 3.78331 3.78331 2.44936 3.53748
6 2000 35.97333 0.3 100 10 1 20 1 1 188 196 200 506 507 7.56662 3.63644 3.45525 5.48383 3.583 1.562499987 3.783309752 3.783310174 3.46820108 3.984013734 1.5625 3.78331 3.78331 3.4682 3.98401
6 2000 33.29997 0.3 100 10 1 20 1 1 189 197 201 509 510 7.56662 3.2145 2.98121 4.80904 4.38522 1.562500933 3.783310364 3.783311801 3.365866904 3.454822481 1.5625 3.78331 3.78331 3.36586 3.45482
6 2000 33.92361 0.3 100 10 1 20 1 1 190 198 202 507 573 7.56662 3.45525 3.92466 5.71093 2.6256 1.562499735 3.783309809 3.783313163 3.054727855 4.059454696 1.5625 3.78331 3.78331 3.05473 4.05945
6 2000 33.61978 0.3 100 10 1 20 1 1 191 199 203 510 511 7.56662 2.98121 3.3648 5.34548 3.83158 1.562498789 3.783312216 3.783310384 3.174973252 3.76763848 1.5625 3.78331 3.78331 3.17497 3.76764

6 2000 37.63896 0.3 100 10 1 20 1 1 192 200 204 508 573 7.56662 3.92466 4.21266 3.6394 4.77139 1.562499987 3.783310854 3.783310181 4.103042216 3.717246873 1.5625 3.78331 3.78331 4.10304 3.71725
8 2000 28.87609 0.3 100 10 1 20 1 1 193 201 511 519 520 522 526 7.87653 3.3648 2.93461 0.37918 0.54356 6.28798 1.24569 1.56250009 3.783309852 3.27684967 2.946722913 4.49566657 2.235238022 4.401237762 1.5625 3.78331 3.27685 2.94671 4.49567 2.23524 4.40123
7 2000 35.46322 0.3 100 10 1 20 1 1 194 202 508 519 570 571 8.29702 4.21266 2.98358 0.73866 6.64826 1.96337 1.562499822 3.783310055 4.091846818 3.051142289 2.833448386 4.443869568 1.5625 3.78331 4.09185 3.05113 2.83345 4.44387
6 2000 1.83567 0.3 100 10 1 20 1 1 33 34 207 217 414 0.58237 3.61419 0.43625 4.22945 0.43023 0.100010899 9.88E-02 3.512802329 0.337502535 0.688704074 0.1 0.09874 3.5128 0.3375 0.6887
6 2000 1.85475 0.3 100 10 1 20 1 1 33 40 208 218 414 0.59732 3.61422 0.43625 4.30346 0.43853 0.100009257 9.87E-02 3.512802257 0.337500929 0.702296295 0.10001 0.09875 3.5128 0.3375 0.7023
5 2000 3.06491 0.3 100 10 1 20 1 1 35 205 209 219 7.0256 0.43625 0.43625 7.0256 9.87E-02 3.512802257 3.512802329 0.33750056 0.09875 3.5128 3.5128 0.3375
5 2000 3.06491 0.3 100 10 1 20 1 1 41 206 210 220 7.0256 0.43625 0.43625 7.0256 0.098747514 3.512802329 3.512801754 0.33750056 0.09875 3.5128 3.5128 0.3375
5 2000 3.06492 0.3 100 10 1 20 1 1 36 207 211 221 7.0256 0.43625 0.43625 7.0256 9.87E-02 3.512802257 3.512802581 0.33750056 0.09875 3.5128 3.5128 0.3375
5 2000 3.06491 0.3 100 10 1 20 1 1 42 208 212 222 7.0256 0.43625 0.43624 7.0256 9.87E-02 3.512802833 3.512802257 0.33750056 0.09874 3.5128 3.5128 0.3375
5 2000 3.06491 0.3 100 10 1 20 1 1 37 209 213 223 7.0256 0.43625 0.43624 7.0256 9.87E-02 3.512802005 3.512802654 0.33750056 0.09875 3.5128 3.5128 0.3375
5 2000 3.06491 0.3 100 10 1 20 1 1 43 210 214 224 7.0256 0.43624 0.43624 7.0256 9.87E-02 3.512802329 3.512802257 0.33750056 0.09874 3.5128 3.5128 0.3375
5 2000 3.06492 0.3 100 10 1 20 1 1 38 211 215 225 7.0256 0.43624 0.43625 7.0256 9.87E-02 3.512802257 3.51280172 0.337500397 0.09875 3.5128 3.5128 0.3375
5 2000 3.06492 0.3 100 10 1 20 1 1 44 212 216 226 7.0256 0.43624 0.43625 7.0256 9.87E-02 3.512802654 3.512802866 0.337500397 0.09875 3.5128 3.5128 0.3375
6 2000 1.82035 0.3 100 10 1 20 1 1 39 46 213 227 422 3.61438 0.49941 0.43625 4.24059 0.44833 0.098749876 0.100010032 3.512802866 0.337501801 0.602579214 0.09875 0.10001 3.5128 0.3375 0.60258
6 2000 1.78651 0.3 100 10 1 20 1 1 45 46 214 228 422 3.61432 0.47325 0.43625 4.10953 0.4309 9.87E-02 0.100007049 3.51280172 0.337500509 0.578723982 0.09875 0.10001 3.5128 0.3375 0.57872
5 2000 5.17864 0.3 100 10 1 20 1 1 205 219 229 414 4.22945 1.1375 4.87586 1.30834 0.337497465 3.512803086 0.80000216 0.789814497 0.3375 3.5128 0.8 0.78982
5 2000 5.35191 0.3 100 10 1 20 1 1 206 220 230 414 4.30346 1.1375 5.10649 1.3924 0.337499071 3.5128015 0.800000795 0.84055742 0.3375 3.5128 0.8 0.84056
5 2000 7.99162 0.3 100 10 1 20 1 1 207 217 221 231 7.0256 1.1375 1.1375 7.0256 0.33749944 3.5128015 3.512803086 0.800000089 0.3375 3.5128 3.5128 0.8
5 2000 7.99162 0.3 100 10 1 20 1 1 208 218 222 232 7.0256 1.1375 1.1375 7.0256 0.33749944 3.512803086 3.5128015 0.800000089 0.3375 3.5128 3.5128 0.8
5 2000 7.99162 0.3 100 10 1 20 1 1 209 219 223 233 7.0256 1.1375 1.1375 7.0256 0.33749944 3.5128015 3.512803086 0.800000088 0.3375 3.5128 3.5128 0.8
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5 2000 7.9916 0.3 100 10 1 20 1 1 211 221 225 235 7.0256 1.1375 1.13749 7.0256 0.33749944 3.5128015 3.512803279 0.800000088 0.3375 3.5128 3.5128 0.8
5 2000 7.99162 0.3 100 10 1 20 1 1 212 222 226 236 7.0256 1.1375 1.13749 7.0256 0.33749944 3.512803086 3.512801729 0.800000088 0.3375 3.5128 3.5128 0.8
5 2000 7.99161 0.3 100 10 1 20 1 1 213 223 227 237 7.0256 1.13749 1.1375 7.0256 0.337499603 3.512801632 3.512801541 0.799998351 0.3375 3.5128 3.5128 0.8
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5 2000 14.55321 0.3 100 10 1 20 1 1 289 307 311 329 6.16009 2.3625 2.36249 6.16009 0.800000683 3.080045876 3.080049135 1.562500417 0.8 3.08005 3.08004 1.5625
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6 2000 24.42284 0.3 100 10 1 20 1 1 293 315 528 529 565 5.77411 3.97111 2.94402 2.71955 3.93388 1.56250073 3.080046327 2.786662396 3.322017513 2.632018463 1.5625 3.08005 2.78666 3.32201 2.63202
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3.05127
6 2000 23.94176 0.3 100 10 1 20 1 1 303 321 325 534 535 6.16009 2.69845 2.65496 3.97374 3.86058 1.562500787 3.080046443 3.080047018 2.764150581 2.793779906 1.5625 3.08005 3.08005 2.76415
2.79378
6 2000 21.81996 0.3 100 10 1 20 1 1 252 304 322 326 419 5.52808 6.16009 2.62237 1.47583 3.33467 2.021815418 1.562501337 3.080046323 3.080051733 3.063381688 2.02182 1.5625 3.08005 3.08005
3.06338
6 2000 23.95185 0.3 100 10 1 20 1 1 305 323 327 535 536 6.16009 2.65496 3.32701 4.21667 2.97107 1.562501337 3.08004995 3.080045894 2.531948977 3.088918653 1.5625 3.08005 3.08005 2.53195 3.08892
7 2000 18.42309 0.3 100 10 1 20 1 1 240 252 306 324 328 420 1.57273 3.1056 6.16009 1.47583 1.26862 3.82175 2.404124914 2.267393528 1.562500787 3.080045234 3.080044805 2.078989423 2.40412
2.2674 1.5625 3.08005 3.08005 2.07899
6 2000 25.43822 0.3 100 10 1 20 1 1 307 325 329 536 537 6.16009 3.32701 3.14695 3.44517 3.67748 1.562499583 3.080046257 3.080047698 3.053017964 2.934887964 1.5625 3.08005 3.08004 3.05302
2.93488
6 2000 19.30721 0.3 100 10 1 20 1 1 308 326 330 420 421 6.16009 1.26862 1.80465 4.68408 4.20466 1.562499583 3.080047346 3.0800467 2.08364762 2.322062009 1.5625 3.08004 3.08004 2.08365 2.32205
6 2000 26.08294 0.3 100 10 1 20 1 1 309 327 331 537 538 6.16009 3.14695 2.86942 4.30743 3.58904 1.562499583 3.080043352 3.080046312 2.978274486 3.115410385 1.5625 3.08005 3.08005 2.97827 3.1154
6 2000 18.6454 0.3 100 10 1 20 1 1 310 328 332 421 423 6.16009 1.80465 1.86163 3.65771 4.14544 1.562498378 3.080044351 3.080047928 2.213707967 1.996469361 1.5625 3.08005 3.08004 2.2137 1.99647
6 2000 26.02352 0.3 100 10 1 20 1 1 311 329 538 575 579 7.46903 2.86942 5.46068 0.24912 5.28862 1.562498119 3.080045839 2.340200583 4.542274052 3.33321775 1.5625 3.08005 2.3402 4.54234 3.33322
8 2000 24.90258 0.3 100 10 1 20 1 1 312 330 403 423 449 450 574 7.37974 1.86163 1.62618 3.44796 6.0025 0.15597 0.65737 1.562502642 3.080044223 3.010183668 2.546286931 2.708804072 4.937732235
2.79306031 1.5625 3.08005 3.01018 2.54629 2.7088 4.93776 2.79304
6 2000 1.94025 0.3 100 10 1 20 1 1 69 70 335 343 533 0.88383 3.55008 0.4362 4.48518 0.42827 0.10000667 9.87E-02 3.448914861 0.337500881 0.988337878 0.10001 0.09875 3.44892 0.3375 0.98834
6 2000 1.93511 0.3 100 10 1 20 1 1 69 75 336 344 533 0.87943 3.55025 0.43621 4.46494 0.4267 0.100009053 9.87E-02 3.448914653 0.337499517 0.984592802 0.10001 0.09875 3.44892 0.3375 0.98459

5 2000 3.0092 0.3 100 10 1 20 1 1 71 333 337 345 6.89783 0.4362 0.43622 6.89783 9.88E-02 3.448916793 3.448913471 0.337499693 0.09875 3.44891 3.44892 0.3375
5 2000 3.00915 0.3 100 10 1 20 1 1 76 334 338 346 6.89783 0.43621 0.43621 6.89783 0.098748668 3.448917001 3.448913703 0.337500487 0.09875 3.44891 3.44892 0.3375
5 2000 3.00918 0.3 100 10 1 20 1 1 72 335 339 347 6.89783 0.43622 0.4362 6.89783 9.88E-02 3.448915418 3.44891229 0.337498379 0.09875 3.44891 3.44892 0.3375
5 2000 3.00913 0.3 100 10 1 20 1 1 77 336 340 348 6.89783 0.43621 0.43621 6.89783 9.87E-02 3.448915186 3.448914773 0.337499693 0.09875 3.44891 3.44892 0.3375
5 2000 3.0092 0.3 100 10 1 20 1 1 73 337 341 349 6.89783 0.4362 0.43624 6.89783 9.88E-02 3.448917982 3.448913139 0.337499693 0.09875 3.44891 3.44891 0.3375
5 2000 3.00916 0.3 100 10 1 20 1 1 78 338 342 350 6.89783 0.43621 0.43625 6.89783 9.87E-02 3.448915499 3.448913047 0.337498379 0.09875 3.44891 3.44891 0.3375
6 2000 1.82021 0.3 100 10 1 20 1 1 74 80 339 351 544 3.55025 0.62303 0.43624 4.18298 0.42856 9.87E-02 0.100006057 3.448913259 0.337501558 0.726197754 0.09875 0.10001 3.44891 0.3375 0.7262
6 2000 1.85207 0.3 100 10 1 20 1 1 79 80 340 352 544 3.5503 0.64814 0.43625 4.30658 0.4416 9.87E-02 0.100005864 3.448913352 0.337499418 0.748831449 0.09875 0.10001 3.44891 0.3375 0.74884
5 2000 5.40254 0.3 100 10 1 20 1 1 333 345 353 533 4.48518 1.1375 5.01379 1.25432 0.337499119 3.448915896 0.800001745 1.08198271 0.3375 3.44892 0.8 1.08199
5 2000 5.35515 0.3 100 10 1 20 1 1 334 346 354 533 4.46494 1.1375 4.95071 1.23688 0.337500483 3.448915348 0.800000897 1.066940357 0.3375 3.44892 0.8 1.06694
5 2000 7.84628 0.3 100 10 1 20 1 1 335 343 347 355 6.89783 1.1375 1.13749 6.89783 0.337500307 3.448915759 3.448914924 0.79999925 0.3375 3.44892 3.44891 0.8
5 2000 7.84626 0.3 100 10 1 20 1 1 336 344 348 356 6.89783 1.1375 1.13749 6.89783 0.337499513 3.448916306 3.448913966 0.800000701 0.3375 3.44892 3.44891 0.8
5 2000 7.8463 0.3 100 10 1 20 1 1 337 345 349 357 6.89783 1.13749 1.1375 6.89783 0.337501621 3.448913966 3.448914924 0.800001358 0.3375 3.44891 3.44892 0.8
5 2000 7.84627 0.3 100 10 1 20 1 1 338 346 350 358 6.89783 1.13749 1.1375 6.89783 0.337500307 3.448914924 3.448915348 0.79999925 0.3375 3.44891 3.44891 0.8
5 2000 7.84627 0.3 100 10 1 20 1 1 339 347 351 359 6.89783 1.1375 1.1375 6.89783 0.337500307 3.448915348 3.44891261 0.79999925 0.3375 3.44891 3.44891 0.8
5 2000 7.8463 0.3 100 10 1 20 1 1 340 348 352 360 6.89783 1.1375 1.1375 6.89783 0.337501621 3.448914924 3.448913789 0.800001358 0.3375 3.44892 3.44891 0.8
5 2000 5.07361 0.3 100 10 1 20 1 1 341 349 361 544 4.18298 1.1375 4.73766 1.26553 0.337498442 3.448913789 0.799999063 0.807727721 0.3375 3.44891 0.8 0.80773
5 2000 5.36299 0.3 100 10 1 20 1 1 342 350 362 544 4.30658 1.1375 5.12284 1.40006 0.337500582 3.44891261 0.799998876 0.893592434 0.3375 3.44891 0.8 0.89359
6 2000 14.56859 0.3 100 10 1 20 1 1 343 355 363 533 534 5.01379 2.3625 6.68626 1.79773 1.28154 0.799998255 3.448913491 1.562499803 1.593811736 2.860304047 0.8 3.44892 1.5625 1.59382 2.8603
6 2000 13.40639 0.3 100 10 1 20 1 1 344 356 364 532 533 4.95071 2.3625 5.31751 1.62053 1.58603 0.799999103 3.448917695 1.562500075 2.415029053 1.564864952 0.8 3.44891 1.5625 2.41503 1.56486
5 2000 16.29613 0.3 100 10 1 20 1 1 345 353 357 365 6.89783 2.3625 2.36249 6.89783 0.80000075 3.448918163 3.448916053 1.562500595 0.8 3.44891 3.44891 1.5625
5 2000 16.29609 0.3 100 10 1 20 1 1 346 354 358 366 6.89783 2.3625 2.36249 6.89783 0.799999299 3.44891396 3.448912836 1.562499281 0.8 3.44892 3.44892 1.5625
5 2000 16.2961 0.3 100 10 1 20 1 1 347 355 359 367 6.89783 2.36249 2.3625 6.89783 0.799998642 3.448912836 3.448913045 1.562499281 0.8 3.44892 3.44892 1.5625
5 2000 16.29611 0.3 100 10 1 20 1 1 348 356 360 368 6.89783 2.36249 2.3625 6.89783 0.80000075 3.448916053 3.448917227 1.562499938 0.8 3.44891 3.44891 1.5625
5 2000 16.29612 0.3 100 10 1 20 1 1 349 357 361 369 6.89783 2.3625 2.3625 6.89783 0.80000075 3.448917227 3.44891396 1.562499938 0.8 3.44891 3.44891 1.5625
5 2000 16.2961 0.3 100 10 1 20 1 1 350 358 362 370 6.89783 2.3625 2.3625 6.89783 0.799998642 3.448913045 3.448912205 1.562498953 0.8 3.44892 3.44891 1.5625
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1.5625 2.56566 1.3634 2.45415
6 2000 12.64593 0.3 100 10 1 20 1 1 352 360 372 544 545 5.12284 2.3625 5.5682 0.01846 2.39242 0.800001124 3.448914194 1.562498921 1.507396102 1.804610872 0.8 3.44891 1.5625 1.50728 1.80461
6 2000 32.38505 0.3 100 10 1 20 1 1 353 365 534 535 539 6.68626 3.33681 1.24385 5.46978 6.12238 1.562500197 3.448917492 3.522343414 3.51582315 3.136426035 1.5625 3.44891 3.52235 3.51582 3.13642
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6 2000 29.57187 0.3 100 10 1 20 1 1 355 363 367 539 540 6.89783 3.33681 2.81053 3.73385 4.73877 1.562499405 3.448914162 3.448914522 3.463733577 3.003139395 1.5625 3.44892 3.44891 3.46373
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6 2000 30.74066 0.3 100 10 1 20 1 1 356 364 368 556 559 6.89783 3.57319 3.48584 3.60645 4.23259 1.562500719 3.448917008 3.448914017 3.472995045 3.268038623 1.5625 3.44891 3.44891 3.47299
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6 2000 27.80333 0.3 100 10 1 20 1 1 357 365 369 540 541 6.89783 2.81053 2.60055 4.42456 4.27656 1.562500719 3.448914368 3.448915517 3.001872913 3.012818942 1.5625 3.44891 3.44891 3.00187
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6 2000 32.68142 0.3 100 10 1 20 1 1 358 366 370 559 560 6.89783 3.48584 4.06279 3.916 4.00035 1.562500062 3.448914872 3.448914193 3.527786925 3.683569678 1.5625 3.44891 3.44892 3.52779 3.68357
6 2000 27.35981 0.3 100 10 1 20 1 1 359 367 371 541 542 6.89783 2.60055 2.7244 4.89324 3.79571 1.562500062 3.448914755 3.448913277 2.758267533 3.182432981 1.5625 3.44892 3.44891 2.75827 3.18244
5 2000 41.38715 0.3 100 10 1 20 1 1 360 368 372 560 6.89783 4.06279 6.84959 7.11323 1.562501047 3.448916079 3.448913353 3.894302223 1.5625 3.44891 3.44891 3.8943
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4 2000 22.07402 0.3 100 10 1 20 1 1 362 370 545 5.5682 6.84959 0.68242 1.562501079 3.448913046 2.590310198 1.5625 3.44891 2.5903
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6 2000 1.89132 0.3 100 10 1 20 1 1 81 82 376 384 424 0.88153 3.47997 0.43591 4.33041 0.42648 0.100011724 0.098755179 3.37776733 0.337499177 0.97468562 0.1 0.09875 3.37777 0.3375 0.97468
5 2000 2.94558 0.3 100 10 1 20 1 1 88 373 377 385 6.75552 0.43578 0.43578 6.75549 9.88E-02 3.377769517 3.377771703 0.337501666 0.09875 3.37777 3.37777 0.3375
5 2000 2.94712 0.3 100 10 1 20 1 1 83 374 378 386 6.75553 0.43591 0.43578 6.75549 9.88E-02 3.377767989 3.37777124 0.337501948 0.09875 3.37777 3.37777 0.3375
5 2000 2.94558 0.3 100 10 1 20 1 1 89 375 379 387 6.75553 0.43578 0.43578 6.7555 9.88E-02 3.37777124 3.377771703 0.337501807 0.09875 3.37777 3.37777 0.3375
5 2000 2.94713 0.3 100 10 1 20 1 1 84 376 380 388 6.75553 0.43578 0.43578 6.7555 9.88E-02 3.377771703 3.37777124 0.337501807 0.09875 3.37777 3.37777 0.3375
5 2000 2.94558 0.3 100 10 1 20 1 1 90 377 381 389 6.75553 0.43578 0.43591 6.75549 9.88E-02 3.37777124 3.377767989 0.337501948 0.09875 3.37777 3.37777 0.3375
5 2000 2.94712 0.3 100 10 1 20 1 1 85 378 382 390 6.75552 0.43578 0.43578 6.75549 9.88E-02 3.377771703 3.377769517 0.337501666 0.09875 3.37777 3.37777 0.3375
6 2000 1.87307 0.3 100 10 1 20 1 1 91 92 379 391 444 3.47997 0.80386 0.43591 4.32237 0.42806 9.88E-02 0.100012036 3.37776733 0.337499568 0.910323045 0.09875 0.1 3.37777 0.3375 0.91032
6 2000 1.87846 0.3 100 10 1 20 1 1 86 92 380 392 444 3.47987 0.80834 0.43578 4.34356 0.42984 0.098754739 0.100011028 3.377765802 0.337497828 0.914241145 0.09875 0.1 3.37777 0.3375 0.91424
5 2000 5.54452 0.3 100 10 1 20 1 1 373 385 393 424 4.51937 1.13704 5.23123 1.3419 0.337499843 3.377765006 0.800000715 1.14678538 0.3375 3.37777 0.8 1.14678
5 2000 5.10326 0.3 100 10 1 20 1 1 374 386 394 424 4.33041 1.13704 4.64236 1.17951 0.337500823 3.377770313 0.799999578 1.008006168 0.3375 3.37777 0.8 1.008
5 2000 7.68285 0.3 100 10 1 20 1 1 375 383 387 395 6.75549 1.13704 1.13704 6.75543 0.337498334 3.377770313 3.37777263 0.799998742 0.3375 3.37777 3.37777 0.8
5 2000 7.68431 0.3 100 10 1 20 1 1 376 384 388 396 6.75549 1.13704 1.13704 6.75543 0.337498052 3.377765006 3.377770313 0.799998742 0.3375 3.37777 3.37777 0.8
5 2000 7.68285 0.3 100 10 1 20 1 1 377 385 389 397 6.7555 1.13704 1.13704 6.75543 0.337498193 3.377770313 3.37777263 0.799998742 0.3375 3.37777 3.37777 0.8
5 2000 7.68432 0.3 100 10 1 20 1 1 378 386 390 398 6.7555 1.13704 1.13704 6.75543 0.337498193 3.37777263 3.377770313 0.799998742 0.3375 3.37777 3.37777 0.8
5 2000 7.68284 0.3 100 10 1 20 1 1 379 387 391 399 6.75549 1.13704 1.13704 6.75543 0.337498052 3.377770313 3.377765006 0.799998742 0.3375 3.37777 3.37777 0.8
5 2000 7.68432 0.3 100 10 1 20 1 1 380 388 392 400 6.75549 1.13704 1.13704 6.75543 0.337498334 3.37777263 3.377770313 0.799998742 0.3375 3.37777 3.37777 0.8
5 2000 5.21613 0.3 100 10 1 20 1 1 381 389 401 444 4.32237 1.13704 4.84884 1.25344 0.337500432 3.377770313 0.800002976 0.999017445 0.3375 3.37777 0.8 0.99901
5 2000 5.26572 0.3 100 10 1 20 1 1 382 390 402 444 4.34356 1.13704 4.91486 1.27292 0.337502172 3.377765006 0.799998944 1.014548326 0.3375 3.37777 0.8 1.01454
6 2000 14.26972 0.3 100 10 1 20 1 1 383 395 403 423 424 5.23123 2.36204 5.56161 1.76062 1.73251 0.799999285 3.377770272 1.562502178 2.681917938 1.711283844 0.8 3.37777 1.5625 2.68191 1.7113
6 2000 13.77132 0.3 100 10 1 20 1 1 384 396 404 424 425 4.64236 2.36204 6.14902 2.80089 0.73745 0.800000422 3.377765047 1.562502065 1.443142613 2.981885164 0.8 3.37777 1.5625 1.44314 2.98188
5 2000 15.95829 0.3 100 10 1 20 1 1 385 393 397 405 6.75543 2.36204 2.36204 6.75533 0.800001258 3.377765047 3.377770272 1.562500826 0.8 3.37777 3.37777 1.5625
5 2000 15.95959 0.3 100 10 1 20 1 1 386 394 398 406 6.75543 2.36204 2.36204 6.75533 0.800001258 3.377770272 3.377772671 1.562501109 0.8 3.37777 3.37777 1.5625
5 2000 15.9583 0.3 100 10 1 20 1 1 387 395 399 407 6.75543 2.36204 2.36204 6.75533 0.800001258 3.377772671 3.377770272 1.562500968 0.8 3.37777 3.37777 1.5625
5 2000 15.9596 0.3 100 10 1 20 1 1 388 396 400 408 6.75543 2.36204 2.36204 6.75533 0.800001258 3.377770272 3.377772671 1.562500968 0.8 3.37777 3.37777 1.5625
5 2000 15.9583 0.3 100 10 1 20 1 1 389 397 401 409 6.75543 2.36204 2.36204 6.75533 0.800001258 3.377772671 3.377770272 1.562501109 0.8 3.37777 3.37777 1.5625
5 2000 15.95959 0.3 100 10 1 20 1 1 390 398 402 410 6.75543 2.36204 2.36204 6.75533 0.800001258 3.377770272 3.377765047 1.562500826 0.8 3.37777 3.37777 1.5625
6 2000 14.21826 0.3 100 10 1 20 1 1 391 399 411 444 465 4.84884 2.36204 6.13297 2.20546 1.15402 0.799997024 3.377765047 1.562502002 1.519678935 3.1570428 0.8 3.37777 1.5625 1.51969 3.15704
6 2000 13.84841 0.3 100 10 1 20 1 1 392 400 412 444 466 4.91486 2.36204 5.84373 1.66225 1.45101 0.800001056 3.377770272 1.562501769 1.548509935 2.812012277 0.8 3.37777 1.5625 1.54851 2.81202
6 2000 21.07564 0.3 100 10 1 20 1 1 332 393 405 423 449 1.62618 5.56161 2.68992 3.88841 4.45286 3.010182083 1.562497822 3.377766442 2.102287108 2.538974029 3.01018 1.5625 3.37777 2.10229
2.53897
5 2000 20.23304 0.3 100 10 1 20 1 1 394 406 425 439 6.14902 2.07703 5.49541 5.23111 1.562497935 3.377767315 2.052759369 2.40108352 1.5625 3.37777 2.05275 2.40108

6 2000 25.85187 0.3 100 10 1 20 1 1 395 403 407 448 449 6.75533 2.68992 2.93127 4.97513 3.00719 1.562499174 3.377768877 3.377772614 2.536637519 3.172409312 1.5625 3.37777 3.37777 2.53664 3.17241

6 2000 22.35016 0.3 100 10 1 20 1 1 396 404 408 438 439 6.75533 2.07703 1.55542 5.19494 3.897 1.562498891 3.377768004 3.377774103 2.136564283 2.764858054 1.5625 3.37777 3.37777 2.13656 2.76485

6 2000 27.2743 0.3 100 10 1 20 1 1 397 405 409 447 448 6.75533 2.93127 2.76494 5.14621 3.23462 1.562499032 3.377770329 3.377773467 2.686310922 3.378229456 1.5625 3.37777 3.37777 2.68631 3.37823

6 2000 21.68616 0.3 100 10 1 20 1 1 398 406 410 437 438 6.75533 1.55542 1.19931 5.48423 4.53671 1.562499032 3.37776884 3.377768174 2.126344093 2.61186129 1.5625 3.37777 3.37777 2.12634 2.61186

6 2000 28.04993 0.3 100 10 1 20 1 1 399 407 411 446 447 6.75533 2.76494 2.902 4.50245 4.0749 1.562498891 3.377769476 3.377764927 3.023637132 3.138242467 1.5625 3.37777 3.37777 3.02364 3.13825

7 2000 21.64412 0.3 100 10 1 20 1 1 163 400 408 412 435 437 0.71376 6.75533 1.19931 0.86701 5.1019 4.8096 3.397054956 1.562499174 3.37777477 3.377764962 2.303580835 2.407138087 3.39706 1.5625 3.37777 3.37777 2.30358 2.40714

6 2000 29.00204 0.3 100 10 1 20 1 1 401 409 446 453 465 6.13297 2.902 5.47491 2.68077 4.06876 1.562497998 3.377770392 2.988194691 3.941966935 2.873157143 1.5625 3.37776 2.9882 3.94197 2.87315

6 2000 21.33698 0.3 100 10 1 20 1 1 402 410 435 466 467 5.84373 0.86701 5.04566 3.51513 3.63495 1.562498231 3.377770357 2.049245205 2.795241145 2.874642115 1.5625 3.37776 2.04924 2.79525 2.87464

7 2000 25.06227 0.3 100 10 1 20 1 1 147 149 230 242 414 500 3.02437 4.39794 1.41014 0.99063 4.25097 5.77116 2.583562053 2.443018034 3.325338788 3.940579497 2.651937879 2.027404542 2.58356 2.44302 3.32534 3.94058 2.65194 2.0274

10 2000 13.19777 0.3 100 10 1 20 1 1 33 149 205 206 217 218 229 230 413 0.21777 1.71735 0.43023 0.43853 1.30834 1.3924 2.48827 2.07797 4.25097 0.687060656 3.329712937 0.68870267 0.702299471 0.789815827 0.840560257 1.374110407 1.456770964 2.651938071 0.68706 3.32972 0.6887 0.7023 0.78981 0.84056 1.3741 1.45677 2.65194

6 2000 35.44833 0.3 100 10 1 20 1 1 195 197 244 416 509 6.29414 6.17838 3.30588 5.48839 2.19266 2.585187531 2.449357028 3.887921848 3.23988901 4.039544261 2.58519 2.44936 3.88792 3.23989 4.03955

7 2000 40.73914 0.3 100 10 1 20 1 1 244 246 415 417 509 516 4.48567 3.40127 5.48839 3.1648 2.64822 4.92096 3.483422099 3.793032086 3.23988928 3.40298331 3.955742746 2.829646727 3.48342 3.79303 3.23989 3.40299 3.95575 2.82965

7 2000 37.64983 0.3 100 10 1 20 1 1 246 248 416 418 516 517 4.50375 3.22796 3.1648 4.24645 3.78581 4.02127 3.553492453 3.958231242 3.402985746 3.47141951 2.63395784 2.744397197 3.55349 3.95823 3.40298 3.47142 2.63396 2.7444

8 2000 36.73827 0.3 100 10 1 20 1 1 248 250 417 419 514 515 517 4.63082 2.27443 4.24645 2.40692 1.25148 5.71282 2.42155 3.647906335 4.080727973 3.471418436 3.320290614 3.596469498 1.952176837 3.681994667 3.6479 4.08073 3.47142 3.32029 3.59647 1.95218 3.682

7 2000 29.29087 0.3 100 10 1 20 1 1 250 252 322 324 418 515 5.45054 1.12738 4.86246 3.33467 2.40692 3.63488 3.042426498 3.779489976 2.043643257 3.063379021 3.320292936 2.639365286 3.04243 3.77949 2.04365 3.06338 3.32029 2.63936

7 2000 17.15851 0.3 100 10 1 20 1 1 239 240 326 328 421 422 1.65852 0.48518 3.82175 4.68408 1.8816 4.27116 2.361906553 2.182400904 2.07899036 2.083648487 3.173956193 1.325967278 2.36191 2.18241 2.07899 2.08365 3.17395 1.32597

8 2000 28.58073 0.3 100 10 1 20 1 1 239 251 328 330 420 423 424 0.66946 3.37524 4.20466 3.65771 1.8816 3.27389 3.02035 3.720569794 3.468777144 2.322054927 2.213704182 3.173947806 2.594880458 3.521029409 3.72057 3.46878 2.32206 2.21371 3.17396 2.59488 3.52103

9 2000 5.65604 0.3 100 10 1 20 1 1 46 215 216 227 228 239 240 420 0.21624 0.44833 0.4309 1.51438 1.34749 1.00161 1.13903 4.27116 0.581006392 0.602583083 0.578719686 0.7694617 0.684660383 1.429975295 1.302317422 1.325968813 0.58101 0.60258 0.57872 0.76946 0.68466 1.42996 1.30231 1.32597

7 2000 21.63737 0.3 100 10 1 20 1 1 330 332 393 403 421 424 4.14544 3.44796 1.76062 3.88841 3.27389 1.47303 1.996471278 2.54629195 2.681908664 2.102285683 2.594884673 3.277080427 1.99647 2.54629 2.68192 2.10229 2.59488 3.27707

12 2000 20.18364 0.3 100 10 1 20 1 1 81 251 373 374 383 384 393 394 421 423 425 0.22825 3.38913 0.44105 0.42648 1.3419 1.17951 1.73251 2.80089 3.02035 1.47303 0.71011 0.985786643 3.427236181 1.009142104 0.974681494 1.146779351 1.008000376 1.711298258 1.443144502 3.521028619 3.277071824 3.477577461 0.98579 3.42724 1.00913 0.97469 1.14679 1.00801 1.71128 1.44314 3.52103 3.27708 3.47757

8 2000 27.24869 0.3 100 10 1 20 1 1 249 251 394 404 424 426 439 4.63725 5.46669 0.73745 5.49541 0.71011 2.37391 1.31135 2.711176245 2.328662029 2.981875452 2.05275246 3.477569837 3.616892214 3.553267773 2.71118 2.32867 2.98189 2.05276 3.47758 3.61689 3.55327

7 2000 32.78107 0.3 100 10 1 20 1 1 247 249 425 427 439 440 5.0219 5.06887 2.37391 0.86612 2.88844 6.05162 2.759396275 2.52744804 3.616889879 3.934664297 3.813233487 2.624925197 2.7594 2.52745 3.61689 3.93467 3.81323 2.62492

7 2000 28.91051 0.3 100 10 1 20 1 1 245 247 426 428 440 441 5.2831 5.07708 0.86612 1.37911 2.58811 6.03882 2.382671106 2.720259446 3.934668216 3.59514741 3.639811604 2.25804283 2.38267 2.72026 3.93466 3.59515 3.63981 2.25804

7 2000 25.29541 0.3 100 10 1 20 1 1 243 245 427 430 431 441 4.4595 4.48341 1.37911 4.8199 3.00925 1.25084 2.306961209 2.760858791 3.595148482 1.906616976 3.059606513 3.653493904 2.30696 2.76086 3.59515 1.90662 3.0596 3.65349

6 2000 19.04833 0.3 100 10 1 20 1 1 151 153 241 243 430 0.72363 4.17841 4.59323 4.71311 3.20706 3.036525289 1.859805389 2.373232099 2.219409068 2.110097034 3.03652 1.8598 2.37323 2.21941 2.11009

7 2000 19.24457 0.3 100 10 1 20 1 1 153 155 243 428 429 431 3.08275 4.08283 0.3867 4.8199 3.20706 1.57832 2.239662519 2.366889417 2.926330715 1.906616624 2.110092934 3.061935565 2.23966 2.36689 2.92634 1.90662 2.1101 3.06193

7 2000 25.17072 0.3 100 10 1 20 1 1 155 157 428 430 432 441 4.0638 3.90451 3.00925 1.57832 1.28485 5.57749 2.431129762 2.642874543 3.059604337 3.061932508 3.295155559 2.128035214 2.43113 2.64287 3.05961 3.06194 3.29515 2.12803

7 2000 26.65865 0.3 100 10 1 20 1 1 157 159 431 433 441 442 4.21784 3.92401 1.28485 1.71379 3.70312 4.88431 2.510578704 2.512900694 3.295153956 3.125673429 2.976156898 2.50923041 2.51058 2.5129 3.29516 3.12567 2.97615 2.50923

7 2000 25.28437 0.3 100 10 1 20 1 1 159 161 432 434 442 443 4.28307 4.7594 1.71379 1.28942 2.56407 4.85434 2.315154007 2.330029782 3.125674802 3.521703191 2.964157104 2.48544616 2.31515 2.33003 3.12567 3.5217 2.96415 2.48544

7 2000 23.75639 0.3 100 10 1 20 1 1 161 163 433 437 438 443 4.46077 4.22107 1.28942 5.14967 1.45544 2.3689 2.461018172 1.919456559 3.521704338 1.862492011 3.793869698 3.705798262 2.46102 1.91946 3.5217 1.86249 3.79386 3.7058

7 2000 23.77088 0.3 100 10 1 20 1 1 145 163 410 412 436 467 0.97485 3.28509 5.1019 5.04566 1.98822 2.54163 3.098215286 2.811644379 2.303583239 2.049244734 3.009494312 2.836360656 3.09821 2.81164 2.30358 2.04925 3.0095 2.83636

11 2000 15.67895 0.3 100 10 1 20 1 1 20 109 110 127 128 145 146 435 467 468 0.22918 0.42363 0.42589 1.20307 1.22913 2.12994 2.17548 1.98822 4.69737 1.06996 1.16018014 1.162486383 1.168958964 1.227731391 1.254327447 1.669421069 1.724439977 3.009497942 2.194000114 3.258170484 1.16018 1.16249 1.16896 1.22773 1.25432 1.66942 1.72444 3.00949 2.194 3.25818

6 2000 21.44595 0.3 100 10 1 20 1 1 163 408 410 434 438 2.35675 5.48423 4.8096 5.14967 1.11802 2.59654153 2.126342384 2.407135494 1.86248742 3.526422193 2.59655 2.12634 2.40714 1.86249 3.52642

7 2000 26.10698 0.3 100 10 1 20 1 1 406 408 434 437 439 443 5.19494 4.53671 1.45544 1.11802 1.84004 6.16791 2.136560673 2.611858763 3.793864992 3.526421334 3.334573947 2.215552596 2.13656 2.61186 3.79387 3.52642 3.33457 2.21556

9 2000 35.60661 0.3 100 10 1 20 1 1 404 406 425 426 438 440 442 443 5.23111 3.897 1.31135 2.88844 1.84004 3.89779 0.40047 2.95209 2.401081159 2.764852015 3.553271485 3.813231231 3.334570805 3.548586761 4.147505835 3.582570224 2.40108 2.76486 3.55327 3.81323 3.33457 3.54858 4.1475 3.58257

6 2000 31.5112 0.3 100 10 1 20 1 1 426 427 439 441 442 6.05162 2.58811 3.89779 3.04869 6.69819 2.624920311 3.639811649 3.54858463 3.377758026 2.028576988 2.62493 3.63981 3.54859 3.37776 2.02857

7 2000 27.70682 0.3 100 10 1 20 1 1 427 428 431 432 440 442 6.03882 1.25084 5.57749 3.70312 3.04869 1.10662 2.258044513 3.653493715 2.128033417 2.976152426 3.377758026 3.632622584 2.25804 3.65349 2.12804 2.97616 3.37776 3.63262

7 2000 26.08904 0.3 100 10 1 20 1 1 432 433 439 440 441 443 4.88431 2.56407 0.40047 6.69819 1.10662 5.00925 2.509228655 2.964149475 4.147499686 2.028574935 3.632623576 2.605840873 2.50923 2.96416 4.14751 2.02858 3.63262 2.60584

6 2000 29.06928 0.3 100 10 1 20 1 1 433 434 438 439 442 4.85434 2.3689 6.16791 2.95209 5.00925 2.48544261 3.705796461 2.215555044 3.582567045 2.605844613 2.48545 3.7058 2.21555 3.58257 2.60584

11 2000 10.68216 0.3 100 10 1 20 1 1 92 381 382 391 392 401 402 445 465 466 0.22248 0.42806 0.42984 1.25344 1.27292 2.20546 1.66225 4.84737 0.36425 0.8714 0.905546075 0.910319833 0.914236188 0.999012027 1.014539664 1.519690456 1.548513401 1.724721753 3.213381571 2.731375619 0.90555 0.91032 0.91424 0.99902 1.01455 1.51968 1.54851 1.72472 3.21338 2.73138

4 2000 20.46875 0.3 100 10 1 20 1 1 444 465 466 4.84737 4.57813 4.38742 1.724720419 2.554276482 2.072603707 1.72472 2.55428 2.07261

7 2000 47.43941 0.3 100 10 1 20 1 1 409 411 447 452 453 454 4.50245 5.47491 3.44673 6.27574 3.56967 2.76174 3.02364053 2.988195822 3.801371006 3.584559068 4.438076116 4.875332961 3.02364 2.98819 3.80137 3.58456 4.43808 4.87533

7 2000 43.25865 0.3 100 10 1 20 1 1 407 409 446 448 451 452 5.14621 4.0749 3.44673 3.47061 5.22341 3.29298 2.686309525 3.138251225 3.801374284 3.72497723 3.761159016 4.320891517 2.68631 3.13824 3.80137 3.72498 3.76116 4.32089

7 2000 40.60183 0.3 100 10 1 20 1 1 405 407 447 449 450 451 4.97513 3.23462 3.47061 3.93284 4.18873 4.01437 2.536635439 3.378229531 3.724981915 3.177691773 3.785714132 4.078759691 2.53664 3.37823 3.72498 3.17769 3.78572 4.07876

6 2000 34.78861 0.3 100 10 1 20 1 1 332 403 405 448 450 6.0025 4.45286 3.00719 3.93284 5.62147 2.708802198 2.538973193 3.17240879 3.177692403 3.553268281 2.7088 2.53897 3.17241 3.17769 3.55327

8 2000 49.42689 0.3 100 10 1 20 1 1 332 448 449 451 455 574 575 0.15597 4.18873 5.62147 3.97733 5.61441 0.74179 6.69496 4.937760413 3.785719068 3.553270977 4.150364362 3.55861664 4.856778797 3.310258521 4.93773 3.78571 3.55327 4.15036 3.55861 4.85678 3.31026

7 2000 53.60525 0.3 100 10 1 20 1 1 447 448 450 452 455 458 5.22341 4.01437 3.97733 3.76683 4.6011 5.85683 3.761164749 4.078762912 4.150364996 4.072351486 4.095620834 3.500045737 3.76116 4.07876 4.15036 4.07235 4.09562 3.50005

7 2000 52.46041 0.3 100 10 1 20 1 1 446 447 451 454 458 459 6.27574 3.29298 3.76683 4.0658 5.29862 4.57656 3.584557613 4.320892008 4.072350564 4.13717896 3.531132381 3.785714939 3.58456 4.32089 4.07235 4.13718 3.53113 3.78572

5 2000 50.30428 0.3 100 10 1 20 1 1 411 446 454 465 2.68077 3.56967 8.4072 5.22476 3.941971157 4.438076428 3.977307145 3.040131911 3.94197 4.43808 3.97731 3.04013

6 2000 57.49347 0.3 100 10 1 20 1 1 446 452 453 459 460 2.76174 4.0658 8.4072 5.94869 7.74198 4.875327156 4.137178886 3.97730655 3.133269956 3.53113646 4.87533 4.13718 3.97731 3.13327 3.53114

8 2000 55.17443 0.3 100 10 1 20 1 1 450 451 456 457 458 575 576 5.61441 4.6011 4.08864 6.05959 0.81148 2.53234 4.16302 3.558610699 4.09561816 4.232558822 3.434261336 4.6875 4.429495998 4.417142959 3.55862 4.09562 4.23256 3.43426 4.6875 4.4295 4.41715

6 2000 49.45949 0.3 100 10 1 20 1 1 455 457 463 576 577 4.08864 2.99046 4.55423 3.55759 4.6756 4.232560405 3.785715717 3.515625 4.35975816 3.853515642 4.23256 3.78572 3.51563 4.35975 3.85352

6 2000 37.4025 0.3 100 10 1 20 1 1 455 456 458 462 463 6.05959 2.99046 8.07469 0.46945 7.94463 3.434259245 3.785717484 2.926237708 5.088984925 2.09654388 3.43426 3.78572 2.92624 5.08898 2.09654

7 2000 51.03179 0.3 100 10 1 20 1 1 451 452 455 457 459 462 5.85683 5.29862 0.81148 8.07469 4.45405 3.25107 3.500046006 3.531134686 4.6875 2.926238232 4.293866354 5.012776851 3.50005 3.53113 4.6875 2.92624 4.29386 5.01278

7 2000 42.36044 0.3 100 10 1 20 1 1 452 454 458 460 462 464 4.57656 5.94869 4.45405 0.53418 2.77951 7.25872 3.785718261 3.133267936 4.293864943 4.219072657 4.199875986 2.163468837 3.78571 3.13327 4.29387 4.21906 4.19987 2.16347

5 2000 39.73261 0.3 100 10 1 20 1 1 454 459 461 464 7.74198 0.53418 4.20032 4.44051 3.531136564 4.219059017 3.637850285 3.452890908 3.53114 4.21907 3.63785 3.45289

4 2000 43.10384 0.3 100 10 1 20 1 1 460 462 464 4.20032 1.47728 6.67052 3.637849227 5.239424564 3.230340529 3.63785 5.23942 3.23034

7 2000 56.66079 0.3 100 10 1 20 1 1 457 458 459 461 463 464 0.46945 3.25107 2.77951 1.47728 5.86108 6.68619 5.08897867 5.012776395 4.199873822 5.239418153 4.274454926 3.40577539 5.08898 5.01278 4.19988 5.23942 4.27446 3.40578

4 2000 40.53002 0.3 100 10 1 20 1 1 456 457 462 4.55423 7.94463 5.86108 3.515625 2.096539638 4.274455045 3.51563 2.09654 4.27445

5 2000 37.67815 0.3 100 10 1 20 1 1 459 460 461 462 7.25872 4.44051 6.67052 6.68619 2.163466407 3.452892212 3.23033975 3.405775853 2.16347 3.45289 3.23034 3.40578

6 2000 29.31496 0.3 100 10 1 20 1 1 401 411 444 445 453 1.15402 4.06876 0.36425 4.57813 5.22476 3.157036731 2.873153285 3.213380698 2.554275048 3.04012881 3.15704 2.87316 3.21338 2.55428 3.04013

6 2000 31.15217 0.3 100 10 1 20 1 1 402 412 444 445 467 1.45101 3.51513 0.8714 4.38742 4.73114 2.812015645 2.795245625 2.731380341 2.07260929 3.856596718 2.81201 2.79524 2.73138 2.0726 3.8566

6 2000 32.83192 0.3 100 10 1 20 1 1 412 435 436 466 468 3.63495 2.54163 4.69737 4.73114 7.23959 2.874638231 2.836355737 2.194002001 3.856600558 2.587543446 2.87464 2.83636 2.194 3.8566 2.58754

5 2000 33.15196 0.3 100 10 1 20 1 1 146 164 436 467 1.02001 6.29203 1.06996 7.23959 3.213158552 2.829287806 3.25817542 2.587544813 3.21315 2.82928 3.25817 2.58754

5 2000 35.6762 0.3 100 10 1 20 1 1 162 164 470 487 3.71341 6.75218 1.70861 4.8587 3.129454242 2.892927036 3.461823706 2.71042167 3.12946 2.89293 3.46182 2.71042

7 2000 30.55298 0.3 100 10 1 20 1 1 160 162 469 471 486 487 3.63102 3.78229 1.70861 2.85586 3.61338 5.41017 3.03471103 3.143525097 3.461822102 3.080499075 2.984124763 2.347802087 3.03471 3.14353 3.46182 3.0805 2.98413 2.3478

7 2000 30.32805 0.3 100 10 1 20 1 1 158 160 470 472 485 486 4.31266 3.66321 2.85586 2.34331 3.02852 4.49506 2.892806737 2.953750178 3.080503291 3.518325308 3.110433981 2.424471854 2.89281 2.95375 3.0805 3.51833 3.11044 2.42447

7 2000 30.62294 0.3 100 10 1 20 1 1 156 158 471 473 484 485 3.88685 3.24147 2.34331 3.46401 3.14545 4.67666 2.836355131 3.292811596 3.518327642 2.745263077 2.926238697 2.691952648 2.83635 3.29281 3.51833 2.74526 2.92624 2.69195

7 2000 29.92069 0.3 100 10 1 20 1 1 154 156 472 474 483 484 3.80377 3.18942 3.46401 3.21686 2.52804 4.25528 2.923497983 2.993418753 2.745264453 3.186651662 3.343824359 2.5755785 2.9235 2.99342 2.74526 3.18665 3.34382 2.57558

7 2000 32.59021 0.3 100 10 1 20 1 1 152 154 473 475 482 483 4.03745 3.64564 3.21686 3.07028 2.90537 4.46698 2.798176178 2.935452881 3.186652352 3.240622504 3.410657227 2.926239708 2.79817 2.93545 3.18665 3.24062 3.41066 2.92624

7 2000 32.14844 0.3 100 10 1 20 1 1 150 152 474 476 481 482 4.38657 3.52069 3.07028 2.44658 3.38668 4.44076 2.680782985 2.948177108 3.240623054 3.380569789 3.23107767 2.926239059 2.68078 2.94818 3.24062 3.38057 3.23108 2.92624

6 2000 45.29385 0.3 100 10 1 20 1 1 148 150 475 479 481 7.64668 3.33489 2.44658 0.95101 7.60414 2.44095735 3.007182633 3.380568083 4.582946612 2.811957965 2.44096 3.00718 3.38057 4.58292 2.81196

11 2000 16.27162 0.3 100 10 1 20 1 1 1 93 94 111 112 129 130 478 479 480 0.22811 0.42524 0.42501 1.2221 1.21941 2.02803 1.65091 3.34562 2.88872 1.79813 1.121931798 1.127950194 1.127301206 1.206708553 1.204055312 1.67391743 1.668508097 2.731379334 2.638463558 3.045594432 1.12193 1.12795 1.1273 1.20671 1.20406 1.67392 1.6685 2.73138 2.63847 3.04559

5 2000 47.02437 0.3 100 10 1 20 1 1 477 479 480 502 3.34562 5.20614 6.83616 4.63151 2.73138052 2.960945717 2.373966377 5.179220545 2.73138 2.96095 2.37397 5.17922

6 2000 38.98889 0.3 100 10 1 20 1 1 130 148 476 477 478 1.33761 6.26294 0.95101 2.88872 5.20614 2.748418779 2.637722484 4.582921941 2.638465078 2.960949509 2.74842 2.63773 4.58295 2.63846 2.96095

8 2000 29.84673 0.3 100 10 1 20 1 1 129 147 477 478 500 501 502 1.11824 3.89891 1.79813 6.83616 0.75032 7.50556 0.65103 3.03911567 2.730663454 3.045594502 2.373967031 3.731350478 2.376968308 5.073548327 3.03912 2.73066 3.04559 2.37397 3.73135 2.37697 5.07355

5 2000 42.40722 0.3 100 10 1 20 1 1 475 476 482 494 3.38668 7.60414 3.0034 6.27685 3.231076779 2.811956727 3.269093044 2.775391618 3.23108 2.81196 3.26909 2.77539

7 2000 35.1014 0.3 100 10 1 20 1 1 474 475 481 483 494 495 2.90537 4.44076 3.0034 3.6453 3.92752 4.23328 3.410657227 2.92623769 3.269090655 3.240623439 3.139328522 3.150663328 3.41066 2.92624 3.26909 3.24062 3.13933 3.15066

7 2000 34.75217 0.3 100 10 1 20 1 1 473 474 482 484 495 496 2.52804 4.46698 3.6453 3.63797 3.84151 3.92552 3.343823075 2.926237042 3.240622118 3.040129869 3.292267221 3.173951178 3.34382 2.92624 3.24062 3.04013 3.29227 3.17395

7 2000 31.79754 0.3 100 10 1 20 1 1 472 473 483 485 496 497 3.14545 4.25528 3.63797 3.11411 3.54354 3.38568 2.926238906 2.575580836 3.04012977 3.30954271 3.086665271 3.286490828 2.92624 2.57558 3.04013 3.30954 3.08666 3.28649

8 2000 37.83611 0.3 100 10 1 20 1 1 471 472 484 486 488 489 497 3.02852 4.67666 3.11411 4.53616 2.25514 0.70949 4.97183 3.11043516 2.69195146 3.309544583 2.925427383 4.166366323 4.673800259 3.49461251 3.11043 2.69195 3.30954 2.92543 4.16636 4.67379 3.49461

6 2000 31.10874 0.3 100 10 1 20 1 1 470 471 485 487 488 3.61338 4.49506 4.53616 2.55574 6.72517 2.984125125 2.424472075 2.925425003 3.690375497 2.651937013 2.98412 2.42447 2.92543 3.69037 2.65194

5 2000 31.18421 0.3 100 10 1 20 1 1 469 470 486 488 4.8587 5.41017 2.55574 2.36068 2.710421533 2.347800916 3.690373794 4.356487555 2.71042 2.3478 3.69038 4.35649

5 2000 35.58977 0.3 100 10 1 20 1 1 485 486 487 489 2.25514 6.72517 2.36068 4.87715 4.166360703 2.651936953 4.356485549 4.00765804 4.16637 2.65194 4.35649 4.00766

6 2000 36.66611 0.3 100 10 1 20 1 1 485 488 490 497 498 0.70949 4.87715 2.06199 6.4903 2.51531 4.673790928 4.00765998 4.072350116 2.447880813 3.405081818 4.6738 4.00766 4.07235 2.44788 3.40508

5 2000 32.66148 0.3 100 10 1 20 1 1 489 491 492 498 2.06199 3.48565 3.79164 5.81978 4.072350029 3.890335834 2.791606831 1.971557377 4.07235 3.89034 2.79161 1.97156

4 2000 47.90326 0.3 100 10 1 20 1 1 490 492 493 3.48565 5.10641 4.24532 3.890335093 2.992871877 3.862757941 3.89034 2.99287 3.86275

7 2000 34.75922 0.3 100 10 1 20 1 1 490 491 493 495 496 498 3.79164 5.10641 4.50361 3.10206 2.73662 3.07808 2.791607585 2.992870585 3.186652484 3.654141468 3.422481051 2.793309154 2.79161 2.99287 3.18665 3.65414 3.42248 2.79331

5 2000 45.78835 0.3 100 10 1 20 1 1 491 492 494 495 4.24532 4.50361 4.08672 5.47812 3.862753039 3.186650788 4.273895264 3.040128458 3.86276 3.18665 4.2739 3.04013

5 2000 43.12523 0.3 100 10 1 20 1 1 481 482 493 495 6.27685 3.92752 4.08672 3.62488 2.775386961 3.13932735 4.273902893 3.656095687 2.77539 3.13933 4.2739 3.65609
7 2000 39.83352 0.3 100 10 1 20 1 1 482 483 492 493 494 496 4.23328 3.84151 3.10206 5.47812 3.62488 3.44183 3.150661081 3.292266117 3.654143026 3.040131982 3.656094433 3.614259639 3.15066 3.29227 3.65414 3.04013 3.6561 3.61426
7 2000 32.30886 0.3 100 10 1 20 1 1 483 484 492 495 497 498 3.92552 3.54354 2.73662 3.44183 3.36164 4.2999 3.173951495 3.086664518 3.422480004 3.61426303 2.745263413 2.368957616 3.17395 3.08667 3.42248 3.61426 2.74526 2.36896
6 2000 31.63063 0.3 100 10 1 20 1 1 484 485 489 496 498 3.38568 4.97183 6.4903 3.36164 3.76999 3.286488094 3.494611163 2.44787985 2.745264118 2.55799366 3.28649 3.49461 2.44788 2.74526 2.55799
6 2000 24.23337 0.3 100 10 1 20 1 1 489 490 492 496 497 2.51531 5.81978 3.07808 4.2999 3.76999 3.405080699 1.971556626 2.793307837 2.368957967 2.55799218 3.40508 1.97156 2.79331 2.36896 2.55799
10 2000 14.08174 0.3 100 10 1 20 1 1 21 165 166 175 176 185 186 242 500 0.21977 0.43464 0.42911 1.33623 1.27826 2.75653 2.38811 0.78982 6.00681 0.774788146 0.787575741 0.777300827 0.910396403 0.87089801 1.494371865 1.426232748 3.70027812 2.420548129 0.77479 0.78758 0.7773 0.91039 0.8709 1.49437 1.42623 3.70028 2.42055
8 2000 27.55758 0.3 100 10 1 20 1 1 147 186 242 413 480 499 501 3.7607 0.72694 0.51011 5.77116 0.75032 6.00681 3.53334 2.599466566 3.211812154 4.312798651 2.027403872 3.731351523 2.420551311 3.329582253 2.59947 3.2118 4.3128 2.0274 3.73135 2.42055 3.32958
6 2000 35.29607 0.3 100 10 1 20 1 1 186 196 480 500 502 0.55693 7.06716 7.50556 3.53334 5.69624 3.188757477 2.218368488 2.376967609 3.329581995 4.131431217 3.18875 2.21837 2.37697 3.32958 4.13143
7 2000 58.06884 0.3 100 10 1 20 1 1 196 478 480 501 503 506 0.18537 4.63151 0.65103 5.69624 0.95316 8.17539 4.881920582 5.179218776 5.073549726 4.131431039 5.5840691 3.502081358 4.88191 5.17922 5.07355 4.13143 5.58406 3.50208
5 2000 52.09473 0.3 100 10 1 20 1 1 502 504 506 507 0.95316 3.69208 7.37297 7.36853 5.584060184 5.377281362 3.40577655 3.144623166 5.58407 5.37728 3.40578 3.14462
6 2000 55.94909 0.3 100 10 1 20 1 1 503 505 507 508 573 3.69208 3.07997 1.01662 4.6634 7.18065 5.377279728 5.652994334 4.936352685 4.099099974 2.909137994 5.37728 5.65299 4.93636 4.0991 2.90914
6 2000 52.4048 0.3 100 10 1 20 1 1 504 508 567 568 570 3.07997 6.30054 3.08973 6.3348 0.47915 5.652993466 4.243211498 4.145210422 3.17170525 4.76442203 5.65299 4.24321 4.14521 3.1717 4.76442
6 2000 50.83524 0.3 100 10 1 20 1 1 196 198 502 503 507 4.79866 5.48383 8.17539 7.37297 2.3971 3.9175642 3.468200433 3.502082779 3.40577834 4.21794061 3.91756 3.4682 3.50208 3.40578 4.21794
7 2000 45.54637 0.3 100 10 1 20 1 1 198 200 503 504 506 573 3.583 5.71093 7.36853 1.01662 2.3971 6.36712 3.984013666 3.054728772 3.144621087 4.936356037 4.217938714 3.309541154 3.98401 3.05473 3.14462 4.93635 4.21794 3.30954
7 2000 55.11935 0.3 100 10 1 20 1 1 202 204 504 505 570 573 3.6394 2.98358 4.6634 6.30054 5.57083 5.01692 4.103042669 4.091847822 4.09909951 4.243211724 3.576596334 3.452889484 4.10304 4.09185 4.0991 4.24321 3.5766 3.45289
8 2000 45.30446 0.3 100 10 1 20 1 1 197 199 415 416 510 516 518 4.1456 4.80904 2.19266 2.64822 2.98116 4.60278 3.57881 3.537475419 3.36586389 4.039545023 3.955745192 3.875651044 3.36718923 3.736441161 3.53748 3.36587 4.03954 3.95574 3.87565 3.36719 3.73644
7 2000 43.15515 0.3 100 10 1 20 1 1 199 201 509 511 512 518 4.38522 5.34548 2.98116 3.17088 3.23886 5.62814 3.454819068 3.174971401 3.875650618 4.001724827 3.9249915 3.06193481 3.45482 3.17497 3.87565 4.00173 3.92499 3.06193
7 2000 41.95059 0.3 100 10 1 20 1 1 201 203 314 510 512 522 3.83158 2.93461 3.77771 3.17088 5.02272 6.20851 3.767638204 3.27685079 3.843644976 4.001726433 3.253792806 2.624922348 3.76764 3.27685 3.84364 4.00172 3.25379 2.62492
7 2000 37.34128 0.3 100 10 1 20 1 1 314 316 510 511 513 518 5.07343 3.08042 3.23886 5.02272 3.49027 3.05912 2.635309706 3.146405246 3.924991907 3.253791771 3.253793836 3.663882683 2.63531 3.14641 3.92499 3.25379 3.25379 3.66388
7 2000 34.37016 0.3 100 10 1 20 1 1 316 318 512 514 517 518 4.21105 3.24839 3.49027 3.76964 1.96314 5.45855 2.848739632 3.165962952 3.253793811 3.198559004 3.796995326 2.856389558 2.84874 3.16596 3.25379 3.19856 3.79699 2.85639
7 2000 31.57312 0.3 100 10 1 20 1 1 318 320 418 513 515 517 3.94296 2.79133 1.25148 3.76964 3.8497 5.89952 3.00174788 3.193867816 3.596470325 3.19855777 2.924615123 2.471062558 3.00175 3.19387 3.59647 3.19856 2.92461 2.47106
6 2000 24.75672 0.3 100 10 1 20 1 1 320 322 418 419 514 4.25447 2.03101 5.71282 3.63488 3.8497 2.658665939 3.051267695 1.952177503 2.639362132 2.924614876 2.65867 3.05127 1.95218 2.63937 2.92462
6 2000 32.03397 0.3 100 10 1 20 1 1 416 417 509 517 518 4.92096 3.78581 4.60278 4.79207 3.58737 2.829647933 2.633956195 3.367189907 2.463358116 3.587209199 2.82965 2.63396 3.36719 2.46336 3.58721
7 2000 31.86928 0.3 100 10 1 20 1 1 417 418 513 514 516 518 4.02127 2.42155 1.96314 5.89952 4.79207 2.64538 2.74439852 3.681995521 3.796994166 2.471062848 2.463361177 3.761161211 2.7444 3.68199 3.797 2.47106 2.46336 3.76116
7 2000 40.11168 0.3 100 10 1 20 1 1 509 510 512 513 516 517 3.57881 5.62814 3.05912 5.45855 3.58737 2.64538 3.736441788 3.061931974 3.66388266 2.856390411 3.587208513 3.761159338 3.73644 3.06193 3.66388 2.85639 3.58721 3.76116
12 2000 21.26469 0.3 100 10 1 20 1 1 32 173 174 183 184 193 194 203 204 520 571 0.22731 0.42443 0.42837 1.20718 1.25183 3.51267 3.69845 0.37918 0.73866 8.4561 0.10226 1.074055271 1.074756889 1.085111168 1.139631841 1.18178781 1.596650767 1.681097412 2.94671118 3.05112949 2.69195135 5.365336894 1.07406 1.07476 1.08511 1.13963 1.18179 1.59665 1.6811 2.94672 3.05114 2.69195 5.36534
7 2000 46.29413 0.3 100 10 1 20 1 1 203 519 521 526 571 572 0.54356 8.4561 7.03608 5.74118 4.49178 1.0238 4.495672632 2.691951976 3.003174018 3.516300941 4.66565436 4.987113892 4.49567 2.69195 3.00317 3.5163 4.66565 4.98711
5 2000 42.47879 0.3 100 10 1 20 1 1 520 525 526 572 7.03608 2.05346 4.32949 4.04684 3.003174125 5.489227547 4.193081744 4.282782544 3.00317 5.48923 4.19308 4.28278
6 2000 43.10633 0.3 100 10 1 20 1 1 203 314 511 524 526 6.28798 2.25517 6.20851 4.23288 6.85534 2.235237706 4.928176415 2.624921508 5.028392095 3.422479821 2.23524 4.92818 2.62492 5.02839 3.42248
11 2000 21.5274 0.3 100 10 1 20 1 1 47 253 254 273 274 293 294 314 524 528 0.23301 0.42136 0.42531 1.17937 1.2258 2.17875 3.37314 1.14658 6.54581 2.50428 1.296930454 1.295650769 1.308367601 1.343219294 1.396104517 1.735452872 1.849745811 3.160506433 2.648352004 2.944854366 1.29693 1.29565 1.30837 1.34322 1.3961 1.73545 1.84974 3.16052 2.64835 2.94485
8 2000 48.18071 0.3 100 10 1 20 1 1 314 522 523 525 526 527 528 0.69977 4.23288 6.54581 5.16276 2.36576 2.69522 4.78793 4.898379089 5.028390585 2.648350085 3.671656019 4.796722805 3.977905444 2.775388347 4.89838 5.02839 2.64835 3.67166 4.79673 3.97791 2.77539
5 2000 47.26893 0.3 100 10 1 20 1 1 521 524 526 527 2.05346 5.16276 7.9433 4.9124 5.489228028 3.67165615 3.269091372 3.162702105 5.48923 3.67166 3.26909 3.1627
7 2000 52.30085 0.3 100 10 1 20 1 1 203 520 521 522 524 525 1.24569 5.74118 4.32949 6.85534 2.36576 7.9433 4.401233842 3.516300596 4.193080055 3.42247985 4.796725155 3.269091044 4.40124 3.5163 4.19308 3.42248 4.79672 3.26909
5 2000 29.70111 0.3 100 10 1 20 1 1 524 525 528 564 2.69522 4.9124 3.78618 2.9891 3.977905407 3.162702138 3.843641361 3.931645858 3.97791 3.1627 3.84364 3.93165
8 2000 34.1847 0.3 100 10 1 20 1 1 293 313 523 524 527 564 565 0.8226 2.94402 2.50428 4.78793 3.78618 3.22263 3.75813 3.108266765 2.786661881 2.944854363 2.77539 3.843641187 3.617547768 2.856390398 3.10827 2.78666 2.94485 2.77539 3.84364 3.61755 2.85639
7 2000 32.06948 0.3 100 10 1 20 1 1 313 315 530 562 565 566 2.71955 2.89609 3.50074 3.09964 4.58159 4.51358 3.322014888 3.670802644 3.35021184 3.033872333 2.601282442 2.530912105 3.32202 3.6708 3.35021 3.03387 2.60128 2.53091
7 2000 37.15153 0.3 100 10 1 20 1 1 315 317 529 531 556 562 4.09531 3.2266 3.50074 4.39148 2.80531 4.85054 3.289902892 3.408524944 3.350212635 3.089742327 3.654143864 2.94485481 3.2899 3.40852 3.35021 3.08974 3.65414 2.94486
7 2000 33.3374 0.3 100 10 1 20 1 1 317 319 364 530 532 556 3.71564 2.71945 3.42983 4.39148 3.05957 4.33476 3.270368965 3.380955925 2.847229301 3.089740611 2.908321768 3.021315648 3.27037 3.38096 2.84723 3.08974 2.90832 3.02132
8 2000 26.18938 0.3 100 10 1 20 1 1 319 321 354 364 531 533 534 4.20229 3.08824 1.62053 3.6017 3.05957 2.14906 1.41132 2.832594104 3.158989234 2.415030591 2.05623673 2.908319719 2.727028653 3.288657544 2.8326 3.15899 2.41503 2.05624 2.90832 2.72703 3.28866
10 2000 12.2747 0.3 100 10 1 20 1 1 69 333 334 343 344 353 354 532 534 0.22462 0.42827 0.4267 1.25432 1.23688 1.79773 1.58603 2.14906 4.93363 0.980135178 0.988340032 0.98459381 1.081986435 1.066938509 1.593820778 1.56486354 2.727029011 1.946085208 0.98013 0.98834 0.98459 1.08198 1.06694 1.59381 1.56486 2.72703 1.94609
8 2000 27.39142 0.3 100 10 1 20 1 1 321 323 353 363 532 533 535 4.34934 3.97374 1.28154 1.24385 1.41132 4.93363 2.94746 2.618091099 2.764151313 2.860304064 3.522350981 3.288656987 1.946085335 3.434260881 2.61809 2.76415 2.8603 3.52234 3.28866 1.94609 3.43426
7 2000 35.79613 0.3 100 10 1 20 1 1 323 325 363 534 536 539 3.86058 4.21667 5.46978 2.94746 5.73687 0.8028 2.793782466 2.531948393 3.515822525 3.434264447 2.931102377 4.934909107 2.79378 2.53195 3.51582 3.43426 2.93111 4.93491

7 2000 38.63957 0.3 100 10 1 20 1 1 325 327 535 537 539 548 2.97107 3.44517 5.73687 4.28152 2.05335 5.24797 3.088923545 3.053020441 2.931105806 3.005549715 4.778364031 3.446694975 3.08892 3.05302 2.9311 3.00555 4.77836 3.44669

7 2000 39.49491 0.3 100 10 1 20 1 1 327 329 536 538 547 548 3.67748 4.30743 4.28152 2.86984 4.34032 3.98871 2.934883702 2.978272998 3.005545609 3.823807958 3.860909229 3.702587646 2.93489 2.97827 3.00555 3.82381 3.86091 3.70259

7 2000 32.65428 0.3 100 10 1 20 1 1 329 331 537 547 579 580 3.58904 5.46068 2.86984 3.18538 1.30644 5.6595 3.115404431 2.340196588 3.823807347 3.548587281 3.830635545 2.485444528 3.11541 2.3402 3.82381 3.54859 3.83064 2.48544

8 2000 46.21454 0.3 100 10 1 20 1 1 363 365 535 536 540 548 549 6.12238 3.73385 0.8028 2.05335 2.8928 5.64102 4.48729 3.136421766 3.463733323 4.934912003 4.778363131 3.778808039 3.510212672 3.518328198 3.13643 3.46373 4.93491 4.77836 3.77881 3.51021 3.51833

7 2000 39.26835 0.3 100 10 1 20 1 1 365 367 539 541 549 550 4.73877 4.42456 2.8928 2.88937 4.73712 3.81479 3.003138004 3.00187226 3.778805366 3.663881427 3.31599788 3.616888401 3.00314 3.00187 3.77881 3.66388 3.316 3.61689

7 2000 35.72873 0.3 100 10 1 20 1 1 367 369 540 542 550 551 4.27656 4.89324 2.88937 2.30655 3.54296 4.62774 3.012818423 2.75826733 3.66388284 3.656092696 3.445312135 2.992872222 3.01282 2.75827 3.66388 3.65609 3.44531 2.99287

6 2000 32.06642 0.3 100 10 1 20 1 1 369 371 541 546 551 3.79571 4.41301 2.30655 1.27443 3.91663 3.182435272 2.689168849 3.656093989 3.275628447 3.39529669 3.18243 2.68917 3.65609 3.27562 3.3953

5 2000 23.72802 0.3 100 10 1 20 1 1 361 544 545 546 1.14342 2.36727 2.80943 3.72476 2.565656182 2.049548161 2.07375108 2.550551959 2.56566 2.04955 2.07375 2.55055

10 2000 7.06851 0.3 100 10 1 20 1 1 80 341 342 351 352 361 362 543 545 0.21985 0.42856 0.4416 1.26553 1.40006 1.52192 0.01846 2.36727 2.83693 0.729551124 0.726198355 0.748838895 0.807726882 0.893591759 1.363399539 1.507280553 2.049548277 1.447610855 0.72955 0.7262 0.74883 0.80773 0.89359 1.3634 1.5074 2.04955 1.44761

5 2000 11.08544 0.3 100 10 1 20 1 1 362 372 543 544 2.39242 0.68242 2.80943 2.83693 1.804607127 2.590301393 2.07374813 1.447609901 1.80461 2.59031 2.07375 1.44761

5 2000 16.02043 0.3 100 10 1 20 1 1 361 371 542 543 0.73687 5.14041 1.27443 3.72476 2.45414905 1.454162958 3.275624604 2.550550204 2.45414 1.45416 3.27563 2.55055

7 2000 47.661 0.3 100 10 1 20 1 1 537 538 548 552 553 580 4.34032 3.18538 3.48638 4.24316 5.16049 5.6802 3.860910306 3.548585517 4.168074302 3.816344123 3.712198086 3.059605519 3.86091 3.54859 4.16808 3.81634 3.7122 3.05961

7 2000 48.40134 0.3 100 10 1 20 1 1 536 537 539 547 549 552 5.24797 3.98871 5.64102 3.48638 3.10199 4.75419 3.446693545 3.702587848 3.510214159 4.168075036 3.943110691 3.656095041 3.44669 3.70259 3.51021 4.16807 3.94311 3.65609

7 2000 43.47517 0.3 100 10 1 20 1 1 539 540 548 550 552 554 4.48729 4.73712 3.10199 3.77871 5.19228 3.38567 3.518326246 3.315995053 3.943111179 3.561282665 3.30379431 3.724977788 3.51833 3.316 3.94311 3.56128 3.30379 3.72497

6 2000 42.24245 0.3 100 10 1 20 1 1 540 541 549 551 554 3.81479 3.54296 3.77871 6.17125 6.78652 3.616889912 3.445313052 3.56128388 3.021315943 3.05261043 3.61689 3.44531 3.56128 3.02132 3.05261

4 2000 29.76356 0.3 100 10 1 20 1 1 541 542 550 4.62774 3.91663 6.17125 2.992872656 3.395296744 3.021316405 2.99287 3.3953 3.02132

6 2000 48.36103 0.3 100 10 1 20 1 1 547 548 549 553 554 4.24316 4.75419 5.19228 6.82335 5.92244 3.816344416 3.656089559 3.303792543 3.469363797 3.768732155 3.81634 3.6561 3.30379 3.46936 3.76873

6 2000 52.08717 0.3 100 10 1 20 1 1 547 552 554 555 580 5.16049 6.82335 1.70621 5.19195 0.41195 3.712198112 3.469361639 5.516431368 4.351576079 4.840119951 3.7122 3.46936 5.51643 4.35158 4.84012

5 2000 45.00559 0.3 100 10 1 20 1 1 549 550 552 553 3.38567 6.78652 5.92244 1.70621 3.724973733 3.052606573 3.768731916 5.516426077 3.72498 3.05261 3.76873 5.51643

5 2000 42.2965 0.3 100 10 1 20 1 1 553 578 579 580 5.19195 6.19929 0.32358 7.60502 4.351578259 2.976953392 4.338451289 2.583868029 4.35158 2.97695 4.33845 2.58387

8 2000 39.65735 0.3 100 10 1 20 1 1 364 366 530 531 557 559 562 3.13338 3.60645 2.80531 4.33476 2.67865 3.97602 2.72722 3.450052647 3.472992462 3.654140629 3.021316699 3.585221552 3.217075089 3.753571109 3.45005 3.473 3.65414 3.02132 3.58522 3.21707 3.75357

7 2000 33.73838 0.3 100 10 1 20 1 1 556 558 559 561 562 566 2.67865 4.8365 4.79795 3.55607 6.8812 0.13991 3.585221007 3.173952189 2.684881622 2.926239776 2.70339688 4.516539055 3.58522 3.17395 2.68488 2.92624 2.7034 4.51669

5 2000 29.22809 0.3 100 10 1 20 1 1 557 561 563 566 4.8365 4.66956 0.82153 3.89548 3.17395144 2.558922367 5.174177357 4.626792939 3.17395 2.55892 5.17416 4.62679

7 2000 36.41661 0.3 100 10 1 20 1 1 366 368 556 557 560 561 4.23259 3.916 3.97602 4.79795 3.15792 2.54992 3.268039825 3.527788915 3.217073594 2.684882095 3.502084143 3.315279376 3.26804 3.52779 3.21708 2.68488 3.50208 3.31528

5 2000 48.6636 0.3 100 10 1 20 1 1 368 370 559 561 4.00035 7.11323 3.15792 6.73557 3.683571563 3.894301997 3.502083222 2.325428447 3.68357 3.8943 3.50208 2.32543

5 2000 30.37609 0.3 100 10 1 20 1 1 557 558 559 560 3.55607 4.66956 2.54992 6.73557 2.92624239 2.558924783 3.315280877 2.325430934 2.92624 2.55892 3.31528 2.32543

6 2000 34.06173 0.3 100 10 1 20 1 1 529 530 556 557 566 3.09964 4.85054 2.72722 6.8812 5.59185 3.033871538 2.944855703 3.753570747 2.70340006 2.789052922 3.03387 2.94485 3.75357 2.7034 2.78906

5 2000 25.60527 0.3 100 10 1 20 1 1 558 564 565 566 0.82153 2.99142 2.44432 7.92609 5.174164023 3.449446809 3.558613559 1.975167138 5.17418 3.44945 3.55862 1.97517

5 2000 28.1799 0.3 100 10 1 20 1 1 527 528 563 565 2.9891 3.22263 2.99142 4.90215 3.931645794 3.617547476 3.449448703 2.856390893 3.93165 3.61755 3.44945 2.85639

7 2000 30.00937 0.3 100 10 1 20 1 1 313 528 529 563 564 566 3.93388 3.75813 4.58159 2.44432 4.90215 1.21629 2.632016783 2.856388835 2.601281765 3.558615608 2.856390356 3.544562448 2.63202 2.85639 2.60128 3.55861 2.85639 3.54457

7 2000 32.82073 0.3 100 10 1 20 1 1 529 557 558 562 563 565 4.51358 0.13991 3.89548 5.59185 7.92609 1.21629 2.530913174 4.516685171 4.62678749 2.789055131 1.97516742 3.544567041 2.53091 4.51654 4.62679 2.78905 1.97517 3.54456

4 2000 38.1476 0.3 100 10 1 20 1 1 505 568 569 3.08973 4.67647 3.79783 4.145211002 2.876284132 3.071232119 4.14521 2.87628 3.07123

6 2000 35.19212 0.3 100 10 1 20 1 1 505 567 569 570 571 6.3348 4.67647 4.72288 6.02286 1.59045 3.171704975 2.876283942 2.66266689 3.047155463 3.717955645 3.17171 2.87628 2.66267 3.04715 3.71795

5 2000 28.91048 0.3 100 10 1 20 1 1 567 568 571 572 3.79783 4.72288 3.57682 2.5042 3.071231827 2.662666738 3.231077224 3.471418632 3.07123 2.66267 3.23108 3.47142

6 2000 38.35084 0.3 100 10 1 20 1 1 204 505 508 568 571 6.64826 0.47915 5.57083 6.02286 6.10082 2.833448888 4.764416257 3.576596697 3.047154814 2.836356227 2.83345 4.76442 3.5766 3.04716 2.83636

8 2000 40.86328 0.3 100 10 1 20 1 1 204 519 520 568 569 570 572 1.96337 0.10226 4.49178 1.59045 3.57682 6.10082 7.16872 4.443869591 5.365337252 4.665654931 3.717954904 3.231076695 2.836356782 2.332572361 4.44387 5.36534 4.66565 3.71796 3.23108 2.83636 2.33257

5 2000 28.59723 0.3 100 10 1 20 1 1 520 521 569 571 1.0238 4.04684 2.5042 7.16872 4.987113888 4.282782709 3.471417419 2.332571744 4.98711 4.28278 3.47142 2.33257

6 2000 43.83979 0.3 100 10 1 20 1 1 200 202 504 507 508 2.6256 4.77139 7.18065 6.36712 5.01692 4.05945417 3.717247853 2.909138334 3.309540062 3.452890475 4.05945 3.71725 2.90914 3.30954 3.45289

11 2000 19.79687 0.3 100 10 1 20 1 1 68 271 272 291 292 311 312 332 450 575 0.2247 0.44298 0.4273 1.37554 1.20626 2.8245 3.86959 0.65737 0.74179 6.86296 0.85719235 0.880109738 0.848047241 1.024455318 0.898373107 1.615904564 1.387603291 2.793037506 4.856776161 3.028385518 0.85718 0.88011 0.84804 1.02445 0.89838 1.61591 1.3876 2.79306 4.85678 3.02839

8 2000 46.3977 0.3 100 10 1 20 1 1 311 331 450 455 574 576 579 0.90432 0.24912 6.69496 2.53234 6.86296 6.10335 3.33369 3.931962291 4.542337575 3.31026056 4.429502571 3.028386666 3.309541155 4.123368634 3.93197 4.54227 3.31026 4.4295 3.02839 3.30954 4.12337

7 2000 48.58262 0.3 100 10 1 20 1 1 455 456 575 577 578 579 4.16302 3.55759 6.10335 6.07325 1.34758 5.30491 4.417146713 4.359752991 3.30954014 3.177689873 4.274451507 3.394600584 4.41714 4.35976 3.30954 3.17769 4.27445 3.3946

4 2000 33.17026 0.3 100 10 1 20 1 1 456 576 578 4.6756 6.07325 5.07041 3.85351763 3.177694302 3.218551378 3.85352 3.17769 3.21855

5 2000 37.83151 0.3 100 10 1 20 1 1 555 576 577 579 6.19929 1.34758 5.07041 5.505 2.976951291 4.274453788 3.218553826 3.378462862 2.97695 4.27445 3.21855 3.37846

8 2000 44.80544 0.3 100 10 1 20 1 1 331 538 555 575 576 578 580 5.28862 1.30644 0.32358 3.33369 5.30491 5.505 4.36092 3.333219852 3.830635354 4.338453407 4.123374227 3.394600262 3.378459765 3.490528798 3.33322 3.83064 4.33845 4.12337 3.3946 3.37846 3.49053

6 2000 34.15587 0.3 100 10 1 20 1 1 538 547 553 555 579 5.6595 5.6802 0.41195 7.60502 4.36092 2.48544276 3.059606792 4.840115711 2.583872167 3.49052851 2.48544 3.05961 4.84012 2.58387 3.49053

5 2000 0.07845 0.99 1805.578187 180.5578187 1 20 1 1 582 1 2 11 0.01412 0.01412 2.77778 2.77778 2.777779444 2.777779444 7.06E-03 7.06E-03 2.77778 2.77778 0.00706 0.00706

5 2000 0.05932 0.99 1032.541139 103.2541139 1 20 1 1 581 583 3 12 0.01068 0.01068 2.77778 2.77778 2.777779444 2.777779444 5.34E-03 5.34E-03 2.77778 2.77778 0.00534 0.00534

5 2000 0.06445 0.99 1218.519018 121.8519018 1 20 1 1 582 584 4 13 0.0116 0.0116 2.77778 2.77778 2.777779444 2.777779444 5.80E-03 5.80E-03 2.77778 2.77778 0.0058 0.0058

5 2000 0.03223 0.99 304.7414355 30.47414355 1 20 1 1 583 585 5 14 0.0058 0.0058 2.77778 2.77778 2.777779444 2.777779444 2.90E-03 2.90E-03 2.77778 2.77778 0.0029 0.0029

5 2000 0.03361 0.99 331.3217231 33.13217231 1 20 1 1 584 586 6 15 0.00605 0.00605 2.77778 2.77778 2.777779444 2.777779444 3.02E-03 3.02E-03 2.77778 2.77778 0.00302 0.00302

5 2000 0.08614 0.99 2176.811904 217.6811904 1 20 1 1 585 587 7 16 0.0155 0.0155 2.77778 2.77778 2.777779444 2.777779444 7.75E-03 7.75E-03 2.77778 2.77778 0.00775 0.00775

5 2000 0.00161 0.99 0.76337966 7.63E-02 1 20 1 1 586 588 8 17 0.00029 0.00029 2.77778 2.77778 2.777779444 2.777779444 1.45E-04 1.45E-04 2.77778 2.77778 0.00015 0.00015

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5 2000 0.08458 0.99 2098.809029 209.8809029 1 20 1 1 587 589 9 18 0.01522 0.01522 2.77778 2.77778 2.777779444 2.777779444 7.61E-03 7.61E-03 2.77778 2.77778 0.00761 0.00761
5 2000 0.09055 0.99 2405.764031 240.5764031 1 20 1 1 588 20 10 19 0.0163 0.01522 2.77778 2.77778 2.777779444 2.777779444 8.15E-03 8.15E-03 2.77778 2.77778 0.00815 0.00815
5 2000 0.0859 0.99 1823.474282 182.3474282 1 20 1 1 591 21 22 27 0.01419 0.01419 3.02665 3.02665 3.026648533 3.026648533 7.10E-03 7.10E-03 3.02665 3.02665 0.0071 0.0071
5 2000 0.00555 0.99 7.615165618 0.761516562 1 20 1 1 590 592 23 28 0.00092 0.00092 3.02665 3.02665 3.026648533 3.026648533 4.59E-04 4.59E-04 3.02665 3.02665 0.00046 0.00046
5 2000 0.05019 0.99 622.3949087 62.23949087 1 20 1 1 591 593 24 29 0.00829 0.00829 3.02665 3.02665 3.026648533 3.026648533 4.15E-03 4.15E-03 3.02665 3.02665 0.00415 0.00415
5 2000 0.10449 0.99 2698.299435 269.8299435 1 20 1 1 592 594 25 30 0.01726 0.01726 3.02665 3.02665 3.026648533 3.026648533 8.63E-03 8.63E-03 3.02665 3.02665 0.00863 0.00863
5 2000 0.09576 0.99 2266.102085 226.6102085 1 20 1 1 593 12 26 31 0.01582 0.01726 3.02665 3.02665 3.026648533 3.026648533 7.91E-03 7.91E-03 3.02665 3.02665 0.00791 0.00791
5 2000 0.0438 0.99 506.7288693 50.67288693 1 20 1 1 596 33 34 40 0.00748 0.00748 2.92734 2.92734 2.927335242 2.927335242 3.74E-03 3.74E-03 2.92734 2.92734 0.00374 0.00374
5 2000 0.1127 0.99 3355.116883 335.5116883 1 20 1 1 595 597 35 41 0.01925 0.01925 2.92734 2.92734 2.927335242 2.927335242 9.62E-03 9.62E-03 2.92734 2.92734 0.00962 0.00962
5 2000 0.1021 0.99 2753.768709 275.3768709 1 20 1 1 596 598 36 42 0.01744 0.01744 2.92734 2.92734 2.927335242 2.927335242 8.72E-03 8.72E-03 2.92734 2.92734 0.00872 0.00872
5 2000 0.00664 0.99 11.65947747 1.165947747 1 20 1 1 597 599 37 43 0.00113 0.00113 2.92734 2.92734 2.927335242 2.927335242 5.67E-04 5.67E-04 2.92734 2.92734 0.00057 0.00057
5 2000 0.11125 0.99 3269.244857 326.9244857 1 20 1 1 598 600 38 44 0.019 0.019 2.92734 2.92734 2.927335242 2.927335242 9.50E-03 9.50E-03 2.92734 2.92734 0.0095 0.0095
5 2000 0.04268 0.99 481.2691466 48.12691466 1 20 1 1 599 14 39 45 0.00729 0.019 2.92734 2.92734 2.927335242 2.927335242 3.65E-03 3.65E-03 2.92734 2.92734 0.00365 0.00365
5 2000 0.05825 0.99 999.7154129 99.97154129 1 20 1 1 602 47 48 58 0.01051 0.01051 2.77204 2.77204 2.772041717 2.772041717 5.25E-03 5.25E-03 2.77204 2.77204 0.00525 0.00525
5 2000 0.08511 0.99 2134.182581 213.4182581 1 20 1 1 601 603 49 59 0.01535 0.01535 2.77204 2.77204 2.772041717 2.772041717 7.68E-03 7.68E-03 2.77204 2.77204 0.00768 0.00768
5 2000 0.00599 0.99 10.56352278 1.056352278 1 20 1 1 602 604 50 60 0.00108 0.00108 2.77204 2.77204 2.772041717 2.772041717 5.40E-04 5.40E-04 2.77204 2.77204 0.00054 0.00054
5 2000 0.06575 0.99 1273.493331 127.3493331 1 20 1 1 603 605 51 61 0.01186 0.01186 2.77204 2.77204 2.772041717 2.772041717 5.93E-03 5.93E-03 2.77204 2.77204 0.00593 0.00593
5 2000 0.05203 0.99 797.3787511 79.73787511 1 20 1 1 604 606 52 62 0.00938 0.00938 2.77204 2.77204 2.772041717 2.772041717 4.69E-03 4.69E-03 2.77204 2.77204 0.00469 0.00469
5 2000 0.03312 0.99 323.0861864 32.30861864 1 20 1 1 605 607 53 63 0.00597 0.00597 2.77204 2.77204 2.772041717 2.772041717 2.99E-03 2.99E-03 2.77204 2.77204 0.00299 0.00299
5 2000 0.0691 0.99 1406.691077 140.6691077 1 20 1 1 606 608 54 64 0.01246 0.01246 2.77204 2.77204 2.772041717 2.772041717 6.23E-03 6.23E-03 2.77204 2.77204 0.00623 0.00623
5 2000 0.07189 0.99 1522.400354 152.2400354 1 20 1 1 607 609 55 65 0.01297 0.01297 2.77204 2.77204 2.772041717 2.772041717 6.48E-03 6.48E-03 2.77204 2.77204 0.00648 0.00648
5 2000 0.02931 0.99 252.9994307 25.29994307 1 20 1 1 608 610 56 66 0.00529 0.00529 2.77204 2.77204 2.772041717 2.772041717 2.64E-03 2.64E-03 2.77204 2.77204 0.00264 0.00264
5 2000 0.03103 0.99 283.644528 28.3644528 1 20 1 1 609 22 57 67 0.0056 0.00529 2.77204 2.77204 2.772041717 2.772041717 2.80E-03 2.80E-03 2.77204 2.77204 0.0028 0.0028
5 2000 0.09164 0.99 2497.00962 249.700962 1 20 1 1 612 69 70 75 0.01661 0.01661 2.75913 2.75913 2.759131919 2.759131919 8.30E-03 8.30E-03 2.75913 2.75913 0.0083 0.0083
5 2000 0.09106 0.99 2465.83413 246.583413 1 20 1 1 611 613 71 76 0.0165 0.0165 2.75913 2.75913 2.759131919 2.759131919 8.25E-03 8.25E-03 2.75913 2.75913 0.00825 0.00825
5 2000 0.06508 0.99 1259.37831 125.937831 1 20 1 1 612 614 72 77 0.01179 0.01179 2.75913 2.75913 2.759131919 2.759131919 5.90E-03 5.90E-03 2.75913 2.75913 0.0059 0.0059
5 2000 0.10889 0.99 3525.531906 352.5531906 1 20 1 1 613 615 73 78 0.01973 0.01973 2.75913 2.75913 2.759131919 2.759131919 9.87E-03 9.87E-03 2.75913 2.75913 0.00987 0.00987
5 2000 0.10059 0.99 3009.038758 300.9038758 1 20 1 1 614 12 74 79 0.01823 0.01973 2.75913 2.75913 2.759131919 2.759131919 9.11E-03 9.11E-03 2.75913 2.75913 0.00911 0.00911
5 2000 0.02458 0.99 187.2403805 18.72403805 1 20 1 1 617 81 82 87 0.00455 0.00455 2.70222 2.70222 2.702215967 2.702215967 2.27E-03 2.27E-03 2.70222 2.70222 0.00227 0.00227
5 2000 0.07519 0.99 1752.61674 175.261674 1 20 1 1 616 618 83 88 0.01391 0.01391 2.70222 2.70222 2.702215967 2.702215967 6.96E-03 6.96E-03 2.70222 2.70222 0.00696 0.00696
5 2000 0.10598 0.99 3482.142262 348.2142262 1 20 1 1 617 619 84 89 0.01961 0.01961 2.70222 2.70222 2.702215967 2.702215967 9.81E-03 9.81E-03 2.70222 2.70222 0.00981 0.00981
5 2000 0.02642 0.99 216.402498 21.6402498 1 20 1 1 618 620 85 90 0.00489 0.00489 2.70222 2.70222 2.702215967 2.702215967 2.44E-03 2.44E-03 2.70222 2.70222 0.00244 0.00244
5 2000 0.05776 0.99 1034.278725 103.4278725 1 20 1 1 619 12 86 91 0.01069 0.00489 2.70222 2.70222 2.702215967 2.702215967 5.34E-03 5.34E-03 2.70222 2.70222 0.00534 0.00534
END_CV
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Multiple Reservoir Model

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NXNY 274
NZ 1
 100

START_CV 274
3 2000 1024911.90033 0.3 215 21.5 1 100 1 1 2 14 1012.50760 1012.50000 462.5 462.5 462.50000 462.50000
4 2000 784690.43274 0.3 215 21.5 1 100 1 1 1 3 15 1012.50760 1012.49225 775.00000 462.5 312.5 462.49999992945 462.50000 312.50000 462.50000
4 2000 518904.27933 0.3 215 21.5 1 100 1 1 2 4 16 1012.49225 1012.60034 512.50000 312.5 200 462.49999994666 312.50000 200.00000 462.50000
4 2000 329078.80554 0.3 215 21.5 1 100 1 1 3 5 17 1012.60034 1012.49548 325.00000 200 125 462.49999994205 200.00000 125.00000 462.50000
4 2000 208827.65923 0.3 215 21.5 1 100 1 1 4 6 18 1012.49548 1012.25293 206.25000 125 81.25 462.49999997104 125.00000 81.25000 462.50000
4 2000 126547.05811 0.3 215 21.5 1 100 1 1 5 7 19 1012.25293 1012.49962 125.00000 81.25 43.75 462.49999999698 81.25000 43.75000 462.50000
4 2000 88593.73398 0.3 215 21.5 1 100 1 1 6 8 20 1012.49962 1012.49800 87.50000 43.75 43.75 462.49999992253 43.75000 43.75000 462.50000
4 2000 126562.37793 0.3 215 21.5 1 100 1 1 7 9 21 1012.49800 1012.49381 125.00000 43.75 81.25 462.49999999986 43.75000 81.25000 462.50000
4 2000 208827.48299 0.3 215 21.5 1 100 1 1 8 10 22 1012.49381 1012.64478 206.25000 81.25 125 462.49999992393 81.25000 125.00000 462.50000
4 2000 329086.02600 0.3 215 21.5 1 100 1 1 9 11 23 1012.64478 1012.49939 325.00000 125 200 462.49999991855 125.00000 200.00000 462.50000
4 2000 518906.09360 0.3 215 21.5 1 100 1 1 10 12 24 1012.49939 1012.48346 512.50000 200 312.5 462.49999999291 200.00000 312.50000 462.50000
4 2000 784681.11420 0.3 215 21.5 1 100 1 1 11 13 25 1012.48346 1012.53308 775.00000 312.5 462.5 462.49999999546 312.50000 462.50000 462.50000
3 2000 1025048.90671 0.3 215 21.5 1 100 1 1 12 26 1012.53308 1012.50000 462.5 462.49999999586 462.50000 462.50000
4 2000 784681.56738 0.3 215 21.5 1 100 1 1 1 15 27 1012.50000 774.97824 1012.50000 462.5 462.5 312.5 462.50000 462.50000 312.50000
5 2000 600556.41174 0.3 215 21.5 1 100 1 1 2 14 16 28 775.00000 774.97824 774.74780 775.00000 462.50000008626 462.5 312.5 312.49999991374 462.50000 462.50000 312.50000 312.50000
5 2000 397190.37781 0.3 215 21.5 1 100 1 1 3 15 17 29 512.50000 774.74780 775.00272 512.50000 462.50000007905 312.5 200 312.49999992095 462.50000 312.50000 200.00000 312.50000
5 2000 251876.11084 0.3 215 21.5 1 100 1 1 4 16 18 30 325.00000 775.00272 775.00000 325.00000 462.50000003735 200 125 312.49999996265 462.50000 200.00000 125.00000 312.50000
5 2000 159841.66031 0.3 215 21.5 1 100 1 1 5 17 19 31 206.25000 775.00000 774.95605 206.25000 462.5000000962 125 81.25 312.4999999038 462.50000 125.00000 81.25000 312.50000
5 2000 96874.87793 0.3 215 21.5 1 100 1 1 6 18 20 32 125.00000 774.95605 774.99930 125.00000 462.50000008714 81.25 43.75 312.49999991286 462.50000 81.25000 43.75000 312.50000
5 2000 67812.52136 0.3 215 21.5 1 100 1 1 7 19 21 33 87.50000 774.99930 775.00127 87.50000 462.50000000563 43.75 43.75 312.49999999437 462.50000 43.75000 43.75000 312.50000
5 2000 96875.39673 0.3 215 21.5 1 100 1 1 8 20 22 34 125.00000 775.00127 775.01747 125.00000 462.50000009496 43.75 81.25 312.49999990504 462.50000 43.75000 81.25000 312.50000
5 2000 159840.82947 0.3 215 21.5 1 100 1 1 9 21 23 35 206.25000 775.01747 774.95050 206.25000 462.5000000364 81.25 125 312.4999999636 462.50000 81.25000 125.00000 312.50000
5 2000 251879.60205 0.3 215 21.5 1 100 1 1 10 22 24 36 325.00000 774.95050 775.07037 325.00000 462.50000005249 125 200 312.49999994751 462.50000 125.00000 200.00000 312.50000
5 2000 397187.06207 0.3 215 21.5 1 100 1 1 11 23 25 37 512.50000 775.07037 774.99680 512.50000 462.50000007671 200 312.5 312.49999992329 462.50000 200.00000 312.50000 312.50000
5 2000 600637.48779 0.3 215 21.5 1 100 1 1 12 24 26 38 775.00000 774.99680 775.06122 775.00000 462.50000000535 312.5 462.5 312.49999999465 462.50000 312.50000 462.50000 312.50000
4 2000 784703.81470 0.3 215 21.5 1 100 1 1 13 25 39 1012.50000 775.06122 1012.50000 462.50000005924 462.5 312.49999994076 462.50000 462.50000 312.50000
4 2000 518917.37366 0.3 215 21.5 1 100 1 1 14 28 40 1012.50000 512.53275 1012.50000 312.5 462.5 200 312.50000 462.50000 200.00000
5 2000 397181.63452 0.3 215 21.5 1 100 1 1 15 27 29 41 775.00000 512.53275 512.49994 775.00000 312.50000004687 462.5 312.5 199.99999995313 312.50000 462.50000 312.50000 200.00000
5 2000 262649.61853 0.3 215 21.5 1 100 1 1 16 28 30 42 512.50000 512.49994 512.50000 512.50000 312.50000002982 312.5 200 199.99999997018 312.50000 312.50000 200.00000 200.00000
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5 2000 105702.62146 0.3 215 21.5 1 100 1 1 18 30 32 44 206.25000 512.65820 512.49556 206.25000 312.500000006478 125 81.25 199.99999993522 312.50000 125.00000 81.25000 200.00000
5 2000 64060.94360 0.3 215 21.5 1 100 1 1 19 31 33 45 125.00000 512.49556 512.46350 125.00000 312.500000002638 81.25 43.75 199.99999997362 312.50000 81.25000 43.75000 200.00000
5 2000 44843.78204 0.3 215 21.5 1 100 1 1 20 32 34 46 87.50000 512.46350 512.50207 87.50000 312.500000002794 43.75 43.75 199.99999997206 312.50000 43.75000 43.75000 200.00000
5 2000 64134.21631 0.3 215 21.5 1 100 1 1 21 33 35 47 125.00000 512.50207 514.34766 125.00000 312.500000008298 43.75 81.25 199.99999991702 312.50000 43.75000 81.25000 200.00000
5 2000 105704.15726 0.3 215 21.5 1 100 1 1 22 34 36 48 206.25000 514.34766 512.55554 206.25000 312.500000008246 81.25 125 199.99999991754 312.50000 81.25000 125.00000 200.00000
5 2000 166559.68323 0.3 215 21.5 1 100 1 1 23 35 37 49 325.00000 512.55554 512.46564 325.00000 312.500000005892 125 200 199.99999994108 312.50000 125.00000 200.00000 200.00000
5 2000 262565.84930 0.3 215 21.5 1 100 1 1 24 36 38 50 512.50000 512.46564 512.25781 512.50000 312.500000009861 200 312.5 199.99999990139 312.50000 200.00000 312.50000 200.00000
5 2000 397200.93384 0.3 215 21.5 1 100 1 1 25 37 39 51 775.00000 512.25781 512.58392 775.00000 312.50000000911 312.5 462.5 199.99999990891 312.50000 312.50000 462.50000 200.00000
4 2000 518923.80066 0.3 215 21.5 1 100 1 1 26 38 52 1012.50000 512.58392 1012.50000 312.500000002269 462.5 199.99999997731 312.50000 462.50000 200.00000
4 2000 329057.67975 0.3 215 21.5 1 100 1 1 27 41 53 1012.50000 324.98447 1012.50000 200 462.5 125 200.00000 462.50000 125.00000
5 2000 251888.15002 0.3 215 21.5 1 100 1 1 28 40 42 54 775.00000 324.98447 325.07184 775.00000 200.000000006951 462.5 312.5 124.99999993049 200.00000 462.50000 312.50000 125.00000
5 2000 166562.43744 0.3 215 21.5 1 100 1 1 29 41 43 55 512.50000 325.07184 324.99692 512.50000 200.000000098 312.5 200 124.999999902 200.00000 312.50000 200.00000 125.00000
5 2000 105621.90552 0.3 215 21.5 1 100 1 1 30 42 44 56 325.00000 324.99692 324.96863 325.00000 200.000000002439 200 125 124.99999997561 200.00000 200.00000 125.00000 125.00000
5 2000 67030.94788 0.3 215 21.5 1 100 1 1 31 43 45 57 206.25000 324.96863 325.00000 206.25000 200.000000005339 125 81.25 124.99999994661 200.00000 125.00000 81.25000 125.00000
5 2000 40624.96948 0.3 215 21.5 1 100 1 1 32 44 46 58 125.00000 325.00000 324.99936 125.00000 200.000000001064 81.25 43.75 124.99999998936 200.00000 81.25000 43.75000 125.00000
5 2000 28437.64954 0.3 215 21.5 1 100 1 1 33 45 47 59 87.50000 324.99936 324.99825 87.50000 200.000000009994 43.75 43.75 124.99999990006 200.00000 43.75000 43.75000 125.00000
5 2000 40624.38965 0.3 215 21.5 1 100 1 1 34 46 48 60 125.00000 324.99825 325.00000 125.00000 200.000000006762 43.75 81.25 124.99999993238 200.00000 43.75000 81.25000 125.00000
5 2000 67031.27518 0.3 215 21.5 1 100 1 1 35 47 49 61 206.25000 325.00000 325.00203 206.25000 200.000000000157 81.25 125 124.99999999843 200.00000 81.25000 125.00000 125.00000
5 2000 105622.38159 0.3 215 21.5 1 100 1 1 36 48 50 62 325.00000 325.00203 324.96170 325.00000 200.000000005752 125 200 124.99999994248 200.00000 125.00000 200.00000 125.00000
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5 2000 251891.83960 0.3 215 21.5 1 100 1 1 38 50 52 64 775.00000 326.92188 325.07678 775.00000 200.0000000103 312.5 462.5 124.9999999897 200.00000 312.50000 462.50000 125.00000
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5 2000 159839.58740 0.3 215 21.5 1 100 1 1 41 53 55 67 775.00000 206.26196 206.23096 775.00000 125.000000002845 462.5 312.5 81.249999971551 125.00000 462.50000 312.50000 81.25000
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824.327354316982 473.447954355795 483.817299711602 490.332489117051 477.086108066549 475.583470338424 478.096488509671 493.136130324504 814.06174 824.32782 473.44799 483.81765 490.33234
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Connected Fracture Networks

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NZ 1
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START_CV 1593
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4 2000 0.68415 0.3 100 10 1 20 1 1 118 120 533 0.16119 0.16119 4.24427 2.122137807 2.122141382 0.158750888 2.12214 2.12214 0.15875
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4 2000 0.46281 0.3 100 10 1 20 1 1 123 543 660 0.16124 2.84121 0.17143 2.122136476 0.158747892 0.730238852 2.12214 0.15875 0.73025
4 2000 0.52592 0.3 100 10 1 20 1 1 126 545 659 0.16123 3.24805 0.16358 2.122141416 0.158747775 1.136576946 2.12214 0.15875 1.13658
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6 2000 0.69989 0.3 100 10 1 20 1 1 261 263 337 664 734 0.16069 0.00799 0.25794 4.22228 0.03475 2.235951104 2.235946279 1.158205089 0.158747677 1.290391271 2.23595 2.23595 1.15822 0.15875 1.29034
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5 2000 0.38395 0.3 100 10 1 20 1 1 339 348 350 737 2.29595 0.16086 0.23139 2.46184 2.57E-03 2.296020386 1.80E-03 0.158714165 0.00256 2.29602 0.00179 0.15872
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7 2000 0.14322 0.3 100 10 1 20 1 1 352 356 739 740 940 1381 0.2282 0.22857 0.36503 0.35515 0.32827 0.00483 1.77E-03 1.77E-03 0.159998836 0.160004712 0.519087929 2.11703457 0.00177 0.00177
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4 2000 0.22172 0.3 100 10 1 20 1 1 351 450 739 0.2282 0.19292 1.50598 1.77E-03 1.04126059 0.158742093 0.00177 1.04125 0.15875
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7 2000 0.18847 0.3 100 10 1 20 1 1 362 368 747 748 830 1385 0.2282 0.22805 0.5213 0.47423 0.33358 0.00755 1.77E-03 1.77E-03 0.160006482 0.160006197 0.650074013 2.072329718 0.00177 0.00177 0.16
0.16 0.65007 2.07233
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5 2000 0.78298 0.3 100 10 1 20 1 1 364 514 516 754 0.16006 0.1802 0.01611 4.84377 2.486796756 1.98448844 2.26837327 0.158750732 2.4868 1.98442 2.2677 0.15875
5 2000 0.7265 0.3 100 10 1 20 1 1 514 516 712 756 0.20664 0.08579 0.16457 4.42779 1.485750434 0.961629712 2.122744699 0.158748396 1.48573 0.9616 2.12274 0.15875
5 2000 0.13221 0.3 100 10 1 20 1 1 373 374 712 758 0.66916 0.22809 0.21233 0.968 2.50E-03 1.77E-03 0.511783426 0.158749444 0.0025 0.00177 0.51179 0.15875
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5 2000 0.10986 0.3 100 10 1 20 1 1 367 374 712 757 0.66916 0.22831 0.21029 0.69518 2.50E-03 1.77E-03 0.510179163 0.158749624 0.0025 0.00176 0.51017 0.15875
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1.66002 0.00177 0.00177 1.63304 0.16001 0.16 2.07233
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0.16 0.41029 1.94834
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5 2000 0.68602 0.3 100 10 1 20 1 1 393 395 773 977 0.09552 0.1601 4.22657 0.08854 2.143173689 2.143173542 0.159033793 1.645650786 2.14318 2.14318 0.15903 1.64564
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0.16001 0.76656 1.94834
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0.16 0.16 0.73159 1.94553
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5 2000 0.63723 0.3 100 10 1 20 1 1 400 403 404 783 0.15954 3.89104 0.22895 4.05351 3.89105876 2.52E-03 1.78E-03 0.158744638 3.89105 0.00251 0.00177 0.15874
4 2000 0.63723 0.3 100 10 1 20 1 1 399 403 782 0.22895 0.15954 4.05351 1.78E-03 3.89105876 0.158744638 0.00177 3.89105 0.15874
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1.945528153 0.00178 0.00177 1.00151 0.16 0.16 1.11579 1.94553
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0.780981099 0.16001 0.15875 2.121 0.90213 2.10609 1.98267 0.78098
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2.121 2.121 2.48393 1.42306 2.34546
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7 2000 8.78079 0.3 100 10 1 20 1 1 26 52 452 855 946 947 2.28208 0.75844 2.1693 1.03281 0.03128 3.17043 0.158747354 0.160001472 2.120998831 0.637434875 2.921893497 2.375561238 0.15876 0.16001 2.121 0.63745 2.92189 2.37557
6 2000 4.30036 0.3 100 10 1 20 1 1 53 54 457 829 887 0.45156 2.31805 1.27751 1.73326 3.03565 0.160005638 0.158750028 2.156748693 0.628172208 1.421856992 0.16001 0.15875 2.15675 0.62817 1.42186
7 2000 4.33169 0.3 100 10 1 20 1 1 53 78 458 829 1166 1167 0.49175 2.31788 1.2319 1.6728 3.39969 0.02758 0.160003371 0.158750147 2.15674855 0.665460775 1.288681116 2.376434728 0.16 0.15875 2.15675 0.66546 1.28868 2.37637
7 2000 7.92508 0.3 100 10 1 20 1 1 55 455 459 887 888 889 4.31349 1.27751 1.71303 0.8698 3.78127 0.04729 0.158751218 2.156748584 2.156746841 2.403606227 1.71883168 2.651032076 0.15875 2.15675 2.15675 2.40361 1.71883 2.65104
6 2000 6.68957 0.3 100 10 1 20 1 1 79 456 460 1167 1168 4.31349 1.2319 1.20214 3.90935 0.81166 0.158752597 2.156748727 2.156747691 1.412280929 2.369856238 0.15875 2.15675 2.15675 1.41228 2.36986
6 2000 8.08482 0.3 100 10 1 20 1 1 56 457 461 889 890 4.31349 1.71303 1.96884 4.28283 0.07703 0.158750749 2.156747648 2.15674885 1.711094921 2.798143949 0.15875 2.15675 2.15675 1.71109 2.79813
6 2000 6.56379 0.3 100 10 1 20 1 1 80 458 462 1168 1169 4.31349 1.20214 1.71973 4.28839 0.13369 0.1587489 2.156746797 2.156747526 1.349146594 2.657537067 0.15875 2.15675 2.15675 1.34915 2.65754
5 2000 7.44912 0.3 100 10 1 20 1 1 57 459 463 890 4.31349 1.96884 1.48495 4.34055 0.158750749 2.156747517 2.156749754 1.558407554 0.15875 2.15675 2.15675 1.55841
6 2000 6.84809 0.3 100 10 1 20 1 1 81 460 464 1169 1170 4.31349 1.71973 1.3231 4.21503 0.17734 0.158749135 2.156748841 2.15674936 1.427905484 2.424637629 0.15875 2.15675 2.15675 1.4279 2.42464
6 2000 7.78019 0.3 100 10 1 20 1 1 58 461 465 890 891 4.31349 1.48495 1.66478 0.60009 3.95501 0.158751218 2.156748462 2.15674763 2.516110647 1.661778386 0.15875 2.15675 2.15675 2.51611 1.66178
5 2000 7.0827 0.3 100 10 1 20 1 1 82 462 466 1170 4.31349 1.3231 1.96081 4.36038 0.158752597 2.156748857 2.156747726 1.467286146 0.15875 2.15675 2.15675 1.46729
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6 2000 5.54171 0.3 100 10 1 20 1 1 83 464 694 1170 1171 2.94706 1.96081 2.90981 0.21114 1.59126 0.158747919 2.156748611 0.633779075 2.780310811 2.485635298 0.15875 2.15675 0.63378 2.78031 2.48564
6 2000 5.48575 0.3 100 10 1 20 1 1 60 469 693 695 825 3.60904 1.2385 1.33494 0.48084 3.82758 0.158750588 2.156745025 1.392686525 2.169386788 1.260596225 0.15875 2.15675 1.39268 2.16939 1.2606
7 2000 7.05566 0.3 100 10 1 20 1 1 84 470 693 827 828 1114 3.50715 0.88499 2.26411 0.60223 1.06595 2.28811 0.158749408 2.156746227 1.296910239 2.275059444 2.366495287 2.10516265 0.15875 2.15675 1.29691 2.27506 2.3665 2.10516
7 2000 5.35332 0.3 100 10 1 20 1 1 61 467 471 620 825 826 4.31349 1.2385 1.07894 0.0523 0.13685 4.22627 0.1587489 2.156747676 2.156747877 2.343908212 2.403071832 1.081845278 0.15875 2.15675 2.15675 2.34391 2.40307 1.08184
5 2000 3.58977 0.3 100 10 1 20 1 1 85 468 472 827 4.31349 0.88499 0.77939 4.31479 0.158751218 2.156746474 2.15674825 0.673265834 0.15875 2.15675 2.15675 0.67327
8 2000 4.35847 0.3 100 10 1 20 1 1 62 214 238 469 473 619 620 4.31349 0.16295 0.16419 1.07894 0.60259 1.76663 2.29533 0.1587489 0.99519915 0.995616962 2.15674846 2.156748217 1.034335921 0.981334787 0.15875 0.9952 0.99561 2.15675 2.15675 1.03433 0.98133
7 2000 3.08696 0.3 100 10 1 20 1 1 86 470 617 762 764 827 4.29218 0.77939 1.18352 3.16275 0.19922 0.17554 0.158750677 2.156748087 0.903379926 0.608426301 2.128587902 2.243616478 0.15875 2.15675 0.90338 0.60843 2.12859 2.24361
6 2000 5.19193 0.3 100 10 1 20 1 1 63 471 619 766 806 4.22329 0.60259 0.89727 1.14603 3.7332 0.158747369 2.15674812 2.11249497 2.051184844 1.116360966 0.15875 2.15675 2.1125 2.05119 1.11636
9 2000 0.77458 0.3 100 10 1 20 1 1 87 378 379 389 390 763 764 765 2.72523 0.78289 0.07985 0.78985 0.16227 0.2503 1.01402 0.03136 0.158750078 0.228657328 2.107982613 0.230549134 2.10829192 0.387590853 8.00E-02 2.131115875 0.15875 0.22866 2.10799 0.23055 2.1083 0.38761 0.08 2.1311
9 2000 2.23296 0.3 100 10 1 20 1 1 64 379 380 390 391 766 767 768 2.16989 0.16154 0.16153 0.14756 0.16135 2.26498 0.52622 0.93294 0.15875373 0.07255753 2.070662863 7.25E-02 2.070661527 0.176593743 2.076752257 2.076911554 0.15875 0.07256 2.07066 0.07252 2.07066 0.17659 2.07675 2.07691
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5 2000 3.50963 0.3 100 10 1 20 1 1 68 422 976 977 3.4564 1.08282 3.04995 1.25462 0.158756278 1.656850732 0.921524584 1.487186727 0.15875 1.65684 0.92153 1.48719
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6 2000 9.06697 0.3 100 10 1 20 1 1 71 487 491 992 993 4.31349 1.84785 1.99217 3.91618 0.5531 0.158746582 2.156747072 2.156744914 1.947652301 2.783979493 0.15875 2.15675 2.15675 1.94765 2.78398
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6 2000 10.17102 0.3 100 10 1 20 1 1 97 492 496 1025 1026 4.31349 1.9711 1.9922 3.38188 1.26466 0.158755855 2.156746083 2.156750537 2.255138163 2.753727396 0.15875 2.15675 2.15675 2.25514 2.75372
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6 2000 10.72448 0.3 100 10 1 20 1 1 100 498 502 1028 1029 4.31349 2.31449 2.40044 4.0476 0.37668 0.158746582 2.156750203 2.156747048 2.328296365 3.109033317 0.15875 2.15675 2.15675 2.3283 3.10903
7 2000 5.60641 0.3 100 10 1 20 1 1 77 102 499 997 998 999 2.31834 0.51599 1.71341 0.02537 2.91758 2.18533 0.158746871 0.160006467 2.156746962 2.63565866 1.888508323 0.681856574 0.15875 0.16 2.15675 2.63563 1.88851 0.68186
6 2000 8.49409 0.3 100 10 1 20 1 1 101 102 500 999 1029 2.31812 0.58426 2.40044 2.76425 4.01762 0.158745492 0.160003448 2.15674835 0.74458621 2.312615938 0.15875 0.16001 2.15675 0.74459 2.31262
5 2000 6.90783 0.3 100 10 1 20 1 1 103 104 505 872 1.82258 2.28273 1.47531 4.42655 0.16000598 0.158754874 2.122139012 1.462217178 0.16 0.15875 2.12214 1.46222
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6 2000 8.01363 0.3 100 10 1 20 1 1 105 503 507 872 873 4.24428 1.47531 1.55834 0.92908 3.7605 0.158748223 2.122140176 2.122137973 2.491214534 1.755376581 0.15875 2.12214 2.12214 2.49121 1.75537
7 2000 7.45411 0.3 100 10 1 20 1 1 129 504 508 900 901 902 4.24428 1.4509 1.82855 0.21621 4.09896 0.07116 0.158743972 2.122139708 2.122138443 2.484420886 1.597113459 2.688857396 0.15875 2.12214 2.12214 2.48442 1.59711 2.68887
6 2000 8.53189 0.3 100 10 1 20 1 1 106 505 509 873 874 4.24428 1.55834 1.77889 0.99382 3.59276 0.158751816 2.122139336 2.122140844 2.501419933 1.898809495 0.15875 2.12214 2.12214 2.50142 1.89881
5 2000 6.92839 0.3 100 10 1 20 1 1 130 506 510 902 4.24428 1.82855 1.43624 4.26237 0.158748223 2.122138867 2.122139589 1.467405672 0.15875 2.12214 2.12214 1.46741
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6 2000 9.55868 0.3 100 10 1 20 1 1 132 510 514 878 903 4.24428 1.45041 1.37179 3.64437 1.9627 0.158744301 2.122139026 2.122139922 2.07961621 2.484107502 0.15875 2.12214 2.12214 2.07962 2.48411
6 2000 7.01752 0.3 100 10 1 20 1 1 109 511 756 876 877 3.45017 1.81826 2.35245 0.57798 2.45218 0.158745327 2.122139488 1.247682969 2.666002284 2.101284929 0.15875 2.12214 1.24768 2.666 2.10129
9 2000 7.53797 0.3 100 10 1 20 1 1 133 365 366 512 516 754 756 878 3.57504 0.1802 0.20664 1.37179 0.09279 2.64002 1.27344 1.86327 0.158745451 1.98441517 1.485731189 2.122140582 2.122147431 1.893836129 1.362469422 2.147282558 0.15874 1.98449 1.48575 2.12214 2.12213 1.89384 1.36247 2.14728
4 2000 0.59056 0.3 100 10 1 20 1 1 110 710 755 1.16974 1.27578 1.08242 0.158750528 0.232581603 0.645503464 0.15876 0.23258 0.6455
16 2000 5.478 0.3 100 10 1 20 1 1 134 300 322 323 365 366 371 372 514 707 708 709 753 755 892 1.73688 0.1658 0.16487 0.15986 0.01611 0.08579 0.17683 0.39551 0.09279 1.06894 1.22182 1.57381 0.31119 1.27592 1.20781 0.15875033 1.682908663 1.68346487 0.584596651 2.267703906 0.961595716 2.26707586 0.959332139 2.122129317 1.7255884 1.655222115 0.696680596 2.210774095 0.81725826 1.854491698 0.15875 1.6829 1.68345 0.58459 2.26837 0.96163 2.26707 0.95933 2.12215 1.72558 1.65522 0.69668 2.21078 0.81725 1.85448

5 2000 5.04594 0.3 100 10 1 20 1 1 111 519 709 831 3.77274 1.58667 1.14157 3.68705 0.158750871 2.122139379 1.626684353 1.157786046 0.15875 2.12214 1.62669 1.15778

6 2000 6.64317 0.3 100 10 1 20 1 1 135 520 709 807 808 3.8368 1.39836 1.24113 3.84587 0.79634 0.158752122 2.122137387 1.688744557 1.471858403 2.452729352 0.15875 2.12214 1.68875 1.47186 2.45273

6 2000 6.14307 0.3 100 10 1 20 1 1 112 517 521 831 832 4.24428 1.58667 1.29427 0.01497 4.24852 0.158743972 2.122137369 2.122138522 2.538609176 1.285302468 0.15875 2.12214 2.12214 2.53866 1.2853

6 2000 6.46162 0.3 100 10 1 20 1 1 136 518 522 808 809 4.24428 1.39836 1.33024 3.98551 0.41701 0.158748388 2.12213936 2.122140989 1.371529048 2.380539027 0.15874 2.12214 2.12214 1.37153 2.38053

6 2000 5.73122 0.3 100 10 1 20 1 1 113 519 634 832 833 3.6291 1.29427 1.35327 0.45272 3.82996 0.158753086 2.122141982 1.481176245 2.400603682 1.318150807 0.15875 2.12214 1.48118 2.40061 1.31815

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5 2000 4.32862 0.3 100 10 1 20 1 1 138 526 633 785 2.64076 1.35078 2.59159 1.99844 0.158752642 2.122141073 0.424672914 2.137111595 0.15875 2.12214 0.42467 2.13711

6 2000 7.01811 0.3 100 10 1 20 1 1 115 523 527 834 835 4.24428 1.03904 1.57183 1.09375 3.49847 0.158748059 2.122140334 2.122137457 2.142737878 1.565876757 0.15875 2.12214 2.12214 2.14274 1.56588

6 2000 8.96434 0.3 100 10 1 20 1 1 139 524 528 785 786 4.24428 1.35078 1.77935 2.80548 2.00195 0.158752145 2.122138115 2.122140651 2.062348401 2.410855699 0.15875 2.12214 2.12214 2.06235 2.41086

7 2000 7.12862 0.3 100 10 1 20 1 1 116 525 529 835 836 837 4.24428 1.57183 1.01978 0.17794 1.31133 3.10002 0.158751816 2.122140607 2.122141931 2.542610143 1.979932139 1.62412503 0.15875 2.12214 2.12214 2.54261 1.97994 1.62413

6 2000 9.71409 0.3 100 10 1 20 1 1 140 526 530 786 787 4.24428 1.77935 1.75701 2.39543 2.33227 0.158748388 2.122137413 2.122143649 2.375484466 2.383708975 0.15875 2.12214 2.12214 2.37548 2.38371

7 2000 6.0137 0.3 100 10 1 20 1 1 117 527 531 586 719 836 4.24427 1.01978 0.35832 1.50498 2.39635 1.1733 0.158756232 2.122141015 2.122142896 1.877450275 1.451617215 1.810950491 0.15875 2.12214 2.12214 1.87745 1.45162 1.81095

5 2000 8.91791 0.3 100 10 1 20 1 1 141 528 584 787 4.17604 1.75701 3.42172 3.06943 0.158750031 2.122139297 1.802168171 2.371026448 0.15875 2.12214 1.80217 2.37103

8 2000 5.07418 0.3 100 10 1 20 1 1 118 171 195 529 533 585 586 4.24427 0.16985 0.17086 0.35832 1.74731 2.78792 1.37089 0.158748059 1.119629148 1.118821252 2.122136292 2.122142078 1.07828996 1.180591524 0.15875 1.11962 1.11882 2.12214 2.12214 1.07829 1.1806

8 2000 3.51163 0.3 100 10 1 20 1 1 142 170 194 534 583 584 955 4.01266 0.17932 0.17818 1.16918 2.5717 1.24704 0.24037 0.158750804 0.8108895 0.809819605 2.122138696 0.755233375 0.891157891 2.337105555 0.15875 0.81089 0.80981 2.12214 0.75523 0.89117 2.3371

6 2000 5.87344 0.3 100 10 1 20 1 1 119 531 535 585 951 4.24427 1.74731 0.96662 0.05432 4.30305 0.158748059 2.12213711 2.122142334 2.584819974 1.202216724 0.15875 2.12214 2.12214 2.58485 1.20222

6 2000 5.919 0.3 100 10 1 20 1 1 143 532 536 955 956 4.24428 1.16918 1.48794 4.17611 0.1552 0.158751816 2.122140492 2.12213886 1.230280321 2.497280708 0.15875 2.12214 2.12214 1.23029 2.49728

6 2000 7.41962 0.3 100 10 1 20 1 1 120 533 537 951 952 4.24427 0.96662 1.25631 1.56774 3.56925 0.158748059 2.122136855 2.122135623 2.228051623 1.668439226 0.15875 2.12214 2.12213 2.22806 1.66843

6 2000 6.48857 0.3 100 10 1 20 1 1 144 534 538 956 957 4.24427 1.48794 0.62072 3.42248 1.3936 0.158751158 2.122140329 2.122133589 1.481532575 1.979005321 0.15875 2.12214 2.12214 1.48154 1.97901

8 2000 4.55817 0.3 100 10 1 20 1 1 121 438 440 535 539 952 953 4.10766 0.1877 0.85712 1.25631 0.02685 0.27086 3.59196 0.158751273 1.477079789 1.6939518 2.122133802 2.122143021 2.285402753 0.944609741 0.15875 1.47703 1.69396 2.12214 2.12214 2.28541 0.94461

5 2000 4.1264 0.3 100 10 1 20 1 1 145 438 536 957 3.81624 2.18847 0.62072 2.75261 0.158749502 1.263343956 2.122135836 1.295106085 0.15875 1.26334 2.12213 1.2951

10 2000 3.72847 0.3 100 10 1 20 1 1 19 44 122 438 439 440 537 541 1086 0.21435 0.21188 4.11951 0.17928 0.68131 0.5913 0.02685 0.98884 2.79239 1.166162497 1.164534223 0.15875121 1.544757119 1.06760791 1.275752664 2.12213611 2.122140727 0.85666539 1.16618 1.16454 0.15875 1.54481 1.0676 1.27573 2.12214 2.12214 0.85666

8 2000 3.54164 0.3 100 10 1 20 1 1 18 43 146 437 542 1068 1069 0.13011 0.21593 3.84452 1.01481 0.80104 2.72893 0.38435 1.231608442 1.229932291 0.158749208 1.131380768 2.122137776 0.865409743 2.178966289 1.23155 1.22992 0.15875 1.13138 2.12214 0.86541 2.17897

6 2000 5.00074 0.3 100 10 1 20 1 1 123 539 543 1086 1087 4.24428 0.98884 1.12062 0.26993 4.14449 0.158751816 2.122138461 2.122139782 2.278532655 1.02208733 0.15875 2.12214 2.12214 2.27854 1.02209

6 2000 4.99298 0.3 100 10 1 20 1 1 147 540 544 1069 1070 4.24427 0.80104 1.11156 3.89322 0.58535 0.158748058 2.122141412 2.12213718 1.023738841 2.16554086 0.15875 2.12214 2.12214 1.02374 2.16554

6 2000 6.32524 0.3 100 10 1 20 1 1 124 541 660 1087 1088 2.84121 1.12062 2.49523 1.67409 1.79165 0.158749738 2.122139407 0.692615409 2.329007619 2.34090452 0.15875 2.12214 0.69262 2.329 2.34091

12 2000 5.7008 0.3 100 10 1 20 1 1 148 259 260 273 274 542 657 658 659 660 1070 2.95824 0.17598 0.28486 0.17717 0.28407 1.11156 0.23693 1.00508 0.42247 0.86856 2.38093 0.158751862 1.872958719 0.92514536 1.873992244 0.927201897 2.122142008 1.944137367 1.814179009 1.061883211 0.799521756 1.662084817 0.15875 1.87295 0.92516 1.87396 0.92722 2.12214 1.94415 1.81418 1.06187 0.79953 1.66209

6 2000 6.31485 0.3 100 10 1 20 1 1 125 547 659 661 1107 3.24805 1.61153 2.28298 0.05511 3.20448 0.158749856 2.122141158 1.120872795 2.346566468 1.874230601 0.15875 2.12214 1.12087 2.34655 1.87423

6 2000 8.21302 0.3 100 10 1 20 1 1 149 548 657 659 1008 3.30339 2.15688 0.94542 1.90242 3.1541 0.158756286 2.122141454 2.391691112 1.174485274 2.165085725 0.15875 2.12214 2.39169 1.17448 2.16508

6 2000 7.62086 0.3 100 10 1 20 1 1 126 545 549 1107 1110 4.24428 1.61153 1.80888 0.26224 4.05322 0.158751158 2.12213803 2.122141931 2.511910682 1.640816556 0.15875 2.12214 2.12214 2.5119 1.64081

7 2000 9.60176 0.3 100 10 1 20 1 1 150 546 550 1008 1009 1010 4.24428 2.15688 2.11698 0.07339 3.94252 0.32506 0.158756232 2.122137734 2.122141198 2.905029778 2.109208652 2.86411937 0.15875 2.12214 2.12214 2.90504 2.10921 2.86412

7 2000 5.9151 0.3 100 10 1 20 1 1 127 152 547 943 1110 1111 2.28458 0.52654 1.80888 1.88562 0.20253 3.37256 0.1587419 0.160008023 2.12213989 0.698431061 2.688185225 1.685123319 0.15874 0.16 2.12214 0.69844 2.68818 1.68513

6 2000 6.6672 0.3 100 10 1 20 1 1 151 152 548 943 1010 2.28413 0.48055 2.11698 2.51561 3.0528 0.158745039 0.160008067 2.122140623 0.655211808 2.212429497 0.15874 0.16 2.12214 0.65521 2.21243

7 2000 2.66989 0.3 100 10 1 20 1 1 153 178 406 553 985 986 0.5233 2.27103 2.57066 0.611 0.85291 0.64747 0.160003548 0.158748834 0.902127435 2.11019128 0.699000184 1.066264778 0.16001 0.15875 0.90213 2.11019 0.699 1.06626

7 2000 5.40742 0.3 100 10 1 20 1 1 153 154 554 985 1159 1160 0.49857 2.27098 1.82619 1.74093 0.18857 2.95202 0.160002858 0.158749095 2.110191692 0.675773616 2.688343832 1.638718144 0.16001 0.15875 2.11019 0.67577 2.68834 1.63872

6 2000 3.40505 0.3 100 10 1 20 1 1 179 406 551 555 984 4.22036 0.40792 0.611 0.63264 4.06487 0.158750427 2.106091788 2.110191985 2.110189834 0.653422879 0.15875 2.10609 2.11019 2.11019 0.65342

6 2000 7.43581 0.3 100 10 1 20 1 1 155 552 556 1158 1159 4.22036 1.82619 1.58973 0.13694 4.14346 0.158750753 2.110191573 2.110189965 2.54932773 1.603434563 0.15875 2.11019 2.11019 2.54933 1.60344

6 2000 3.98115 0.3 100 10 1 20 1 1 180 553 557 983 984 4.22036 0.63264 0.99202 4.13613 0.28215 0.158750819 2.110189652 2.110191501 0.787076269 2.154792091 0.15875 2.11019 2.11019 0.78708 2.15479

5 2000 6.86238 0.3 100 10 1 20 1 1 156 554 558 1158 4.22036 1.58973 1.66203 4.221 0.158748538 2.110189521 2.110192149 1.467050313 0.15875 2.11019 2.11019 1.46705

6 2000 5.63278 0.3 100 10 1 20 1 1 181 555 559 982 983 4.22036 0.99202 0.9571 4.02589 0.76526 0.158750558 2.110191764 2.110190793 1.178918401 2.268260521 0.15875 2.11019 2.11019 1.17892 2.26826

6 2000 6.99981 0.3 100 10 1 20 1 1 157 556 560 1157 1158 4.22036 1.66203 1.53609 4.14753 0.14118 0.158748538 2.110191116 2.110191968 1.49841167 2.590600405 0.15875 2.11019 2.11019 1.49841 2.5906

6 2000 5.80671 0.3 100 10 1 20 1 1 182 557 561 981 982 4.22036 0.9571 1.27915 3.89528 0.63391 0.158750558 2.110191949 2.110191244 1.237115753 2.216435693 0.15875 2.11019 2.11019 1.23712 2.21643

6 2000 7.29532 0.3 100 10 1 20 1 1 158 558 562 1156 1157 4.22036 1.53609 1.66211 4.02711 0.32905 0.158750558 2.110190774 2.110191862 1.57520097 2.515689763 0.15875 2.11019 2.11019 1.5752 2.51569

7 2000 6.98054 0.3 100 10 1 20 1 1 183 559 563 979 980 981 4.22036 1.27915 1.56135 0.10543 3.91224 0.47424 0.158750296 2.110192021 2.110190902 2.530569707 1.507686499 2.385491897 0.15875 2.11019 2.11019 2.53057 1.50769 2.38549

6 2000 7.12905 0.3 100 10 1 20 1 1 159 560 564 1155 1156 4.22036 1.66211 1.54242 4.10051 0.21401 0.158750949 2.110191403 2.110187806 1.529380909 2.58948726 0.15875 2.11019 2.11019 1.52938 2.58949

5 2000 7.04646 0.3 100 10 1 20 1 1 184 561 565 979 4.22036 1.56135 1.77762 4.22592 0.158750819 2.110188584 2.110191678 1.508899856 0.15875 2.11019 2.11019 1.5089

6 2000 7.53359 0.3 100 10 1 20 1 1 160 562 566 1154 1155 4.22036 1.54242 1.53428 3.87763 0.61907 0.158750558 2.11019168 2.110192356 1.636554092 2.517145616 0.15875 2.11019 2.11019 1.63656 2.51714

6 2000 9.64112 0.3 100 10 1 20 1 1 185 563 567 978 979 4.22036 1.77762 2.01235 3.70747 0.98315 0.158752447 2.11019211 2.110188233 2.158525456 2.656234173 0.15875 2.11019 2.11019 2.15853 2.65624

6 2000 7.49081 0.3 100 10 1 20 1 1 161 564 568 1146 1154 4.22036 1.53428 1.63615 3.9 0.50921 0.158748929 2.110191432 2.110188693 1.627918523 2.497934292 0.15875 2.11019 2.11019 1.62792 2.49793

6 2000 4.19204 0.3 100 10 1 20 1 1 91 186 482 565 978 0.0873 3.19432 3.56008 2.01235 0.53143 0.711508444 0.158754213 0.588132343 2.110191254 2.774795133 0.71149 0.15875 0.58813 2.11019 2.77479

10 2000 6.99806 0.3 100 10 1 20 1 1 66 90 162 479 480 481 566 570 1146 0.17575 0.17574 3.55656 0.7246 2.90827 0.87678 1.63615 0.10089 1.05976 1.562177412 1.561182053 0.158748189 1.631936903 1.505210718 1.065067899 2.110190793 2.110187079 2.569147274 1.56217 1.56118 0.15875 1.63193 1.50521 1.06507 2.11019 2.1102 2.56915

7 2000 1.19194 0.3 100 10 1 20 1 1 187 382 393 481 771 772 2.44645 0.17174 0.17141 0.68674 1.58524 0.49512 0.158749382 0.399372714 0.398710387 1.495663717 0.375032398 0.478562484 0.15875 0.39938 0.39871 1.49567 0.37503 0.47857

12 2000 5.81281 0.3 100 10 1 20 1 1 163 381 392 479 481 568 572 769 770 772 803 3.0484 0.16174 0.16185 1.0956 0.65962 0.10089 0.79664 1.13063 1.47886 0.95854 0.58655 0.158747038 1.455030781 1.454843865 1.779601934 1.628071507 2.110196186 2.110188646 1.453381396 1.473964282 0.736363909 2.087516578 0.15875 1.45503 1.45485 1.7796 1.62807 2.11019 2.11019 1.45338 1.47397 0.73636 2.08752

5 2000 5.01014 0.3 100 10 1 20 1 1 188 573 772 973 3.96433 1.20326 1.42794 3.70754 0.158750521 2.110190662 1.793494033 1.157172032 0.15875 2.11019 1.7935 1.15717

7 2000 6.58658 0.3 100 10 1 20 1 1 164 570 574 772 802 803 4.05382 0.79664 1.35217 0.48189 3.21476 1.18179 0.158746472 2.110194619 2.110191616 1.878757403 1.483254664 1.964447434 0.15875 2.11019 2.11019 1.87876 1.48326 1.96445

6 2000 4.06836 0.3 100 10 1 20 1 1 189 571 575 970 973 4.22036 1.20326 0.62045 4.22096 0.11076 0.158748407 2.110191558 2.110190988 0.795409062 2.351166989 0.15875 2.11019 2.11019 0.79541 2.35117

7 2000 8.16589 0.3 100 10 1 20 1 1 165 572 576 796 799 802 4.22036 1.35217 1.94709 0.29512 3.74323 0.5028 0.158748929 2.110190604 2.110188509 2.765992518 1.783607202 2.399399424 0.15875 2.11019 2.11019 2.76599 1.78361 2.3994

6 2000 4.91386 0.3 100 10 1 20 1 1 190 573 577 967 970 4.22036 0.62045 1.3235 4.06784 0.44267 0.158748929 2.110188498 2.110194232 1.010688075 2.131984323 0.15875 2.11019 2.11019 1.01068 2.13198

5 2000 8.31305 0.3 100 10 1 20 1 1 166 574 578 796 4.22036 1.94709 1.99211 4.22062 0.158748146 2.110190977 2.110195313 1.810892613 0.15875 2.11019 2.11019 1.81089

7 2000 5.95821 0.3 100 10 1 20 1 1 191 575 579 961 965 967 4.22036 1.3235 1.02773 0.41822 3.9889 0.12416 0.158748407 2.110191766 2.110190752 2.278956276 1.261690816 2.404171471 0.15875 2.11019 2.11019 2.27896 1.26169 2.40417

6 2000 10.60202 0.3 100 10 1 20 1 1 167 576 580 793 796 4.22037 1.99211 2.63767 3.83991 0.59479 0.158752708 2.110190686 2.110190748 2.370171196 2.795309497 0.15875 2.1102 2.11019 2.37017 2.79531

5 2000 4.81076 0.3 100 10 1 20 1 1 192 577 581 961 4.22036 1.02773 1.25177 4.22632 0.158748407 2.110192513 2.11019014 0.979762351 0.15875 2.11019 2.11019 0.97976

6 2000 12.0331 0.3 100 10 1 20 1 1 168 578 582 790 793 4.22036 2.63767 2.74 3.87351 0.48589 0.15875323 2.110192517 2.110190669 2.70247299 3.251437648 0.15875 2.11019 2.11019 2.70248 3.25143

6 2000 6.54209 0.3 100 10 1 20 1 1 193 579 583 960 961 4.22036 1.25177 1.68455 4.15095 0.18837 0.158748929 2.110185567 2.110191174 1.390148936 2.373193261 0.15875 2.11019 2.11019 1.39015 2.37318

6 2000 12.73854 0.3 100 10 1 20 1 1 169 580 584 787 790 4.22036 2.74 2.504 3.34651 1.25591 0.158752186 2.110185038 2.110191959 2.856978157 3.328180628 0.15875 2.11019 2.11019 2.85698 3.32818

6 2000 5.7893 0.3 100 10 1 20 1 1 194 532 581 955 960 2.93161 2.5717 1.68455 2.20603 0.28622 0.158749708 0.755231779 2.110192091 2.208661751 2.598950501 0.15875 0.75523 2.11019 2.20866 2.59896

8 2000 8.04461 0.3 100 10 1 20 1 1 141 142 170 530 532 582 787 0.14085 0.26236 3.08588 3.42172 1.24704 2.504 0.82917 1.873699685 1.028184848 0.158753431 1.802167911 0.891165643 2.110191306 3.019095724 1.87373 1.02818 0.15875 1.80217 0.89116 2.11019 3.0191

6 2000 3.89742 0.3 100 10 1 20 1 1 195 531 533 721 951 2.26375 2.78792 0.05432 2.99688 0.51791 0.158750864 1.078291465 2.584849289 0.982397938 2.596470252 0.15875 1.07829 2.58482 0.9824 2.59648

12 2000 5.57227 0.3 100 10 1 20 1 1 171 330 331 340 341 529 531 719 720 721 722 2.56854 0.19164 0.23424 0.19099 0.23475 1.50498 1.37089 2.10485 0.298 0.51484 0.38106 0.158753502 1.698701912 1.258295638 1.697360698 1.256525636 1.877449274 1.18060197 1.617605236 1.78917567 1.146490425 1.377960029 0.15875 1.69874 1.25831 1.69732 1.25645 1.87745 1.18059 1.6176 1.78919 1.14652 1.37799

5 2000 1.85147 0.3 100 10 1 20 1 1 196 589 722 924 3.1789 0.63329 0.60971 2.97088 0.158749328 2.110185594 0.949900328 0.431620943 0.15875 2.11019 0.9499 0.43162

6 2000 5.31817 0.3 100 10 1 20 1 1 172 590 720 722 840 3.35413 0.9886 0.94534 1.42016 3.54033 0.158751444 2.110185531 2.086561259 1.101232795 1.265777621 0.15875 2.11019 2.08656 1.10124 1.26578

6 2000 4.71381 0.3 100 10 1 20 1 1 197 587 591 924 928 4.22037 0.63329 0.88501 0.73902 4.10021 0.158748929 2.110190114 2.110191842 2.162455667 0.96465361 0.15875 2.11019 2.11019 2.16246 0.96465

6 2000 7.33233 0.3 100 10 1 20 1 1 173 588 592 840 843 4.22036 0.9886 1.80208 0.9469 3.69191 0.158752186 2.110190176 2.110191992 2.214131987 1.62751694 0.15875 2.11019 2.11019 2.21413 1.62752

6 2000 5.75839 0.3 100 10 1 20 1 1 198 589 593 928 932 4.22037 0.88501 1.17661 0.76501 3.91004 0.158748929 2.110191423 2.110190753 2.216837314 1.227613384 0.15875 2.11019 2.11019 2.21684 1.22761

6 2000 7.67876 0.3 100 10 1 20 1 1 174 590 594 843 846 4.22036 1.80208 1.69329 0.177 4.12023 0.158752186 2.110191273 2.110192128 2.674604851 1.659530257 0.15875 2.11019 2.11019 2.67461 1.65953

6 2000 6.32495 0.3 100 10 1 20 1 1 199 591 595 932 937 4.22036 1.17661 1.12948 0.8057 3.86838 0.158748407 2.110192512 2.110191654 2.330733146 1.353324604 0.15875 2.11019 2.11019 2.33073 1.35332

6 2000 5.88111 0.3 100 10 1 20 1 1 175 592 596 846 849 4.22036 1.69329 1.02239 0.0814 4.23269 0.158752186 2.110191137 2.110192475 2.60446167 1.216494704 0.15875 2.11019 2.11019 2.60447 1.2165

6 2000 7.32929 0.3 100 10 1 20 1 1 200 593 597 937 938 4.22036 1.12948 1.69595 0.88161 3.70977 0.158748407 2.110191611 2.110190929 2.280696232 1.621438389 0.15875 2.11019 2.11019 2.2807 1.62143

7 2000 10.64583 0.3 100 10 1 20 1 1 176 594 598 849 851 852 4.22036 1.02239 0.8202 3.18277 0.79404 3.23458 0.158748407 2.11019079 2.110192544 2.245615263 3.382047922 2.133239877 0.15875 2.11019 2.11019 2.24562 3.38204 2.13324

7 2000 5.53112 0.3 100 10 1 20 1 1 201 202 595 854 938 939 2.27135 0.34121 1.69595 1.87809 0.35138 3.08785 0.158747462 0.160001651 2.110192336 0.524687266 2.608673187 1.673086005 0.15875 0.16001 2.11019 0.52468 2.60867 1.67308

6 2000 3.3731 0.3 100 10 1 20 1 1 177 202 596 852 854 2.27151 0.31986 0.8202 3.13463 1.7001 0.158751977 0.160009198 2.110190721 1.194507111 0.50509859 0.15874 0.16 2.11019 1.19451 0.5051

7 2000 5.26032 0.3 100 10 1 20 1 1 203 228 601 987 1135 1136 0.51798 2.29972 1.42594 2.00866 0.12546 3.28179 0.160006962 0.158752617 2.138799618 0.695869309 2.466942962 1.619544019 0.16 0.15875 2.1388 0.69587 2.46694 1.61954

6 2000 6.71548 0.3 100 10 1 20 1 1 203 204 602 987 1126 0.50917 2.29963 2.22297 2.23854 3.2712 0.160003626 0.158749636 2.138800016 0.687512815 2.045394759 0.16001 0.15875 2.1388 0.68751 2.04539

6 2000 7.23638 0.3 100 10 1 20 1 1 229 599 603 1134 1135 4.27758 1.42594 1.82635 0.14988 4.22416 0.1587509 2.138800151 2.138797319 2.708565646 1.522475142 0.15875 2.1388 2.1388 2.70856 1.52248

6 2000 13.5293 0.3 100 10 1 20 1 1 205 600 604 1124 1126 4.27758 2.22297 2.62877 2.99856 2.23162 0.158751202 2.138799753 2.138798831 3.124404038 2.972434168 0.15875 2.1388 2.1388 3.1244 2.97243

6 2000 7.33923 0.3 100 10 1 20 1 1 230 601 605 1133 1134 4.27758 1.82635 1.5288 0.1024 4.21985 0.158751303 2.138798722 2.138799127 2.528101039 1.555496867 0.15875 2.1388 2.1388 2.52811 1.5555

7 2000 11.21978 0.3 100 10 1 20 1 1 206 602 606 1123 1124 1125 4.27758 2.62877 1.68681 0.40006 1.56604 2.77042 0.1587509 2.138797209 2.138800149 2.627808341 2.987902791 2.454258758 0.15875 2.1388 2.1388 2.62781 2.9879 2.45426

6 2000 7.42149 0.3 100 10 1 20 1 1 231 603 607 1132 1133 4.27758 1.5288 1.79036 0.18618 4.1783 0.1587509 2.138800643 2.138799617 2.687881818 1.57094646 0.15875 2.1388 2.1388 2.68788 1.57094

5 2000 6.98246 0.3 100 10 1 20 1 1 207 604 608 1123 4.27758 1.68681 1.57758 4.27899 0.1587509 2.13879962 2.138800607 1.473104077 0.15875 2.1388 2.1388 1.4731

5 2000 8.038 0.3 100 10 1 20 1 1 232 605 609 1132 4.27758 1.79036 1.96754 4.28127 0.1587509 2.138800153 2.138799656 1.718871211 0.15875 2.1388 2.1388 1.71887

7 2000 7.68091 0.3 100 10 1 20 1 1 208 606 610 1118 1122 1123 4.27758 1.57758 1.69373 0.15843 4.05508 0.23924 0.158751101 2.138799162 2.138800561 2.629118923 1.641181756 2.565857921 0.15875 2.1388 2.1388 2.62912 1.64118 2.56586

6 2000 8.57117 0.3 100 10 1 20 1 1 233 607 611 1131 1132 4.27758 1.96754 1.76249 4.09726 0.3384 0.1587509 2.138800113 2.138798104 1.839713006 2.798796626 0.15875 2.1388 2.1388 1.83971 2.79879

5 2000 6.76898 0.3 100 10 1 20 1 1 209 608 612 1118 4.27758 1.69373 1.47087 4.2834 0.158751303 2.138799208 2.138799516 1.421749649 0.15875 2.1388 2.1388 1.42175

6 2000 8.44706 0.3 100 10 1 20 1 1 234 609 613 1130 1131 4.27758 1.76249 1.92742 4.02374 0.37086 0.158750698 2.138801665 2.138798499 1.823586028 2.655557096 0.15875 2.1388 2.1388 1.82358 2.65556

7 2000 11.20211 0.3 100 10 1 20 1 1 210 610 614 1116 1118 1119 4.27758 1.47087 1.62174 1.70076 1.58063 2.46494 0.158751505 2.138800253 2.138799174 2.590838558 2.505874319 2.735533074 0.15875 2.1388 2.1388 2.59084 2.50587 2.73553

6 2000 8.33293 0.3 100 10 1 20 1 1 235 611 615 1129 1130 4.27758 1.92742 1.92765 4.24227 0.05406 0.158749237 2.138797542 2.138796813 1.789383787 2.774528044 0.15875 2.1388 2.1388 1.78938 2.77453

5 2000 6.75478 0.3 100 10 1 20 1 1 211 612 616 1116 4.27758 1.62174 1.53623 4.27845 0.158749237 2.138796866 2.138797462 1.420078493 0.15875 2.1388 2.1388 1.42008

7 2000 8.62091 0.3 100 10 1 20 1 1 236 613 617 761 1128 1129 4.20446 1.92765 1.00347 0.63014 3.96453 0.59846 0.158750403 2.138799228 2.138800958 2.070144081 1.851363855 2.775461464 0.15875 2.1388 2.1388 2.07014 1.85136 2.77546

7 2000 10.66633 0.3 100 10 1 20 1 1 212 614 759 761 1116 1127 4.19189 1.53623 2.02363 1.75887 1.22669 2.04304 0.158750291 2.138798579 2.571126984 2.05772014 2.543563209 2.661962456 0.15875 2.1388 2.57113 2.05772 2.54356 2.66196

11 2000 6.31403 0.3 100 10 1 20 1 1 237 378 389 472 615 761 762 763 764 1128 0.75074 0.16144 0.16126 1.18352 1.00347 1.92375 0.85452 1.92675 0.80095 1.05515 0.158752227 1.895374001 1.895241962 0.90338017 2.138798811 0.254082603 0.384882939 1.891033076 1.913001123 2.547899952 0.15875 1.89538 1.89524 0.90338 2.1388 0.25408 0.38488 1.89103 1.91301 2.5479

10 2000 2.65541 0.3 100 10 1 20 1 1 213 376 377 387 388 759 760 761 762 0.00803 0.16095 0.23333 0.16113 0.22366 1.34646 0.50424 2.55654 1.91648 0.158751912 2.083890661 0.08732371 2.083834074 8.59E-02 2.08522585 2.094757998 0.114826271 0.230267891 0.15875 2.08389 0.08732 2.08384 0.08593 2.08523 2.09476 0.11482 0.23027

7 2000 7.17585 0.3 100 10 1 20 1 1 238 471 473 621 800 806 3.17613 1.76663 0.89727 1.99455 0.0665 2.91729 0.158749825 1.034334272 2.112496586 2.138798025 2.817044084 1.943883183 0.15875 1.03434 2.11249 2.1388 2.81704 1.94388

7 2000 6.64929 0.3 100 10 1 20 1 1 214 469 471 622 824 826 3.12127 0.0523 2.29533 1.26164 0.9328 2.64641 0.158751167 2.343908045 0.981331706 2.138801704 2.406376131 2.072602107 0.15875 2.34391 0.98133 2.1388 2.40638 2.0726

6 2000 8.21383 0.3 100 10 1 20 1 1 239 619 623 797 800 4.27758 1.99455 1.75217 0.12151 4.20758 0.158750698 2.138801744 2.138798084 2.667192256 1.76120886 0.15875 2.1388 2.1388 2.66719 1.76121

5 2000 5.31163 0.3 100 10 1 20 1 1 215 620 624 824 4.27758 1.26164 1.22156 4.27779 0.158751101 2.138798065 2.138799615 1.08293539 0.15875 2.1388 2.1388 1.08294

5 2000 7.48792 0.3 100 10 1 20 1 1 240 621 625 797 4.27758 1.75217 1.74852 4.2776 0.158750294 2.138801685 2.138803059 1.591749288 0.15875 2.1388 2.1388 1.59175

6 2000 5.45672 0.3 100 10 1 20 1 1 216 622 626 821 824 4.27758 1.22156 1.31375 4.27018 0.01788 0.158751505 2.138800154 2.138799469 1.116738659 2.388261275 0.15875 2.1388 2.1388 1.11674 2.38826

7 2000 8.54578 0.3 100 10 1 20 1 1 241 623 627 791 794 797 4.27757 1.74852 2.03619 0.01186 4.11251 0.26485 0.158751101 2.13879671 2.138803125 2.845942218 1.842543236 2.665024394 0.15875 2.1388 2.1388 2.84595 1.84254 2.66502

7 2000 6.89694 0.3 100 10 1 20 1 1 217 624 628 815 818 821 4.27758 1.31375 1.22256 0.30458 3.93259 0.4918 0.158751101 2.1388003 2.138799286 2.387652533 1.46650013 2.430406882 0.15875 2.1388 2.1388 2.38766 1.4665 2.43041

6 2000 8.62657 0.3 100 10 1 20 1 1 242 625 629 788 791 4.27757 2.03619 1.82078 0.24403 4.11758 0.158751101 2.138796644 2.138802897 2.704645772 1.861310313 0.15875 2.1388 2.1388 2.70465 1.86131

5 2000 4.94533 0.3 100 10 1 20 1 1 218 626 630 815 4.27758 1.22256 1.0894 4.27967 0.158751101 2.138800484 2.138798921 0.996868929 0.15875 2.1388 2.1388 0.99687

5 2000 8.2941 0.3 100 10 1 20 1 1 243 627 631 788 4.27757 1.82078 2.05686 4.2841 0.158751101 2.138796872 2.138793101 1.777513327 0.15875 2.1388 2.1388 1.77751

6 2000 5.42792 0.3 100 10 1 20 1 1 219 628 632 810 815 4.27758 1.0894 1.16998 4.14973 0.3105 0.158751101 2.138800848 2.138798586 1.113325029 2.331426401 0.15875 2.1388 2.13879 1.11332 2.33142

6 2000 8.18294 0.3 100 10 1 20 1 1 244 629 633 785 788 4.27758 2.05686 1.20883 4.11514 0.61774 0.158751101 2.138799211 2.138800276 1.685925611 2.855329987 0.15875 2.13879 2.1388 1.68593 2.85533

6 2000 8.22924 0.3 100 10 1 20 1 1 220 630 634 809 810 4.27758 1.16998 1.19256 3.77955 1.68753 0.158751101 2.138793727 2.138799794 1.782770897 2.36310638 0.15875 2.1388 2.1388 1.78277 2.3631

8 2000 2.63587 0.3 100 10 1 20 1 1 114 138 245 523 524 631 785 0.20658 0.20593 3.03927 0.17878 2.59159 1.20883 0.34782 0.506386029 0.504823637 0.158750128 0.618150921 0.424674511 2.138799493 2.254471291 0.50638 0.50482 0.15875 0.61816 0.42467 2.1388 2.25446

11 2000 6.03033 0.3 100 10 1 20 1 1 113 137 221 521 522 523 632 636 809 833 0.16495 0.16492 3.3916 1.35327 1.98553 1.08402 1.19256 0.34106 0.72678 0.20149 1.439529598 1.43899953 0.158751666 1.481180775 1.414314502 0.851573476 2.138799975 2.138795774 2.189509123 2.182924184 1.43953 1.43901 0.15875 1.48118 1.41432 0.85157 2.1388 2.1388 2.18951 2.18294

6 2000 4.2329 0.3 100 10 1 20 1 1 246 523 637 834 838 3.90889 0.83103 1.31608 3.70253 0.12007 0.15875135 1.690485143 2.138799909 0.900949169 2.409466826 0.15875 1.69048 2.1388 0.90095 2.40945

7 2000 6.69788 0.3 100 10 1 20 1 1 222 523 634 638 833 860 4.01373 0.67827 0.34106 1.53524 3.94259 0.78977 0.158750841 1.789054505 2.138796539 2.138796875 1.405532303 2.52053712 0.15875 1.78905 2.1388 2.1388 1.40553 2.52054

6 2000 6.85198 0.3 100 10 1 20 1 1 247 635 639 838 841 4.27758 1.31608 1.61999 4.10325 0.32967 0.158751101 2.13879986 2.138800651 1.436675 2.5774384 0.15875 2.1388 2.1388 1.43667 2.57744

6 2000 7.55266 0.3 100 10 1 20 1 1 223 636 640 860 863 4.27757 1.53524 1.31442 3.67494 0.9562 0.158751101 2.138802894 2.138796852 1.651287248 2.365950239 0.15875 2.1388 2.1388 1.65129 2.36595

6 2000 7.77353 0.3 100 10 1 20 1 1 248 637 641 841 844 4.27758 1.61999 1.58456 3.97689 0.53827 0.158751101 2.138799118 2.138800344 1.667554793 2.567347419 0.15875 2.1388 2.1388 1.66756 2.56735

6 2000 7.54289 0.3 100 10 1 20 1 1 224 638 642 863 866 4.27757 1.31442 1.54739 3.75428 0.88712 0.158751101 2.138802917 2.138796695 1.616802603 2.497145762 0.15875 2.1388 2.1388 1.6168 2.49715

6 2000 7.23278 0.3 100 10 1 20 1 1 249 639 643 844 847 4.27758 1.58456 1.6943 4.22492 0.11655 0.158751101 2.138799425 2.13880021 1.530897642 2.619217283 0.15875 2.1388 2.1388 1.5309 2.61923

6 2000 8.26762 0.3 100 10 1 20 1 1 225 640 644 866 869 4.27757 1.54739 1.74036 3.63979 0.89797 0.158751101 2.138803074 2.13879699 1.793746198 2.555500616 0.15875 2.1388 2.1388 1.79374 2.5555

5 2000 6.30811 0.3 100 10 1 20 1 1 250 641 645 847 4.27758 1.6943 1.25483 4.30012 0.158751101 2.138799559 2.138800172 1.309045804 0.15875 2.1388 2.1388 1.30904

6 2000 10.08705 0.3 100 10 1 20 1 1 226 642 646 869 871 4.27758 1.74036 2.90696 4.35306 0.10481 0.158751101 2.138802779 2.138799377 2.113583877 3.379446744 0.15875 2.1388 2.1388 2.11358 3.37943

7 2000 4.30525 0.3 100 10 1 20 1 1 251 252 643 847 850 853 2.29968 0.49507 1.25483 0.29239 2.75533 1.53422 0.158750371 0.160004295 2.138799597 2.390774907 1.365182318 0.666018801 0.15875 0.16001 2.1388 2.39077 1.36518 0.66602

6 2000 11.1095 0.3 100 10 1 20 1 1 227 252 644 853 871 2.29936 0.54934 2.90696 2.12439 3.36536 0.158752506 0.160005832 2.138800392 0.716075193 3.183459177 0.15875 0.16 2.1388 0.71608 3.18346

7 2000 9.48311 0.3 100 10 1 20 1 1 253 268 649 990 1000 1004 0.62002 2.39725 1.36196 2.97795 2.66161 2.26542 0.16000074 0.158745863 2.235948235 0.782849601 2.814250683 2.480546439 0.16001 0.15875 2.23595 0.78285 2.81425 2.48055

6 2000 2.59737 0.3 100 10 1 20 1 1 253 254 650 990 1084 0.56054 2.39758 0.72554 1.01718 3.01515 0.160001851 0.158746158 2.235948006 0.727997344 0.783016195 0.16001 0.15875 2.23595 0.728 0.78301

6 2000 8.03607 0.3 100 10 1 20 1 1 269 647 651 1004 1005 4.47187 1.36196 1.50224 3.98478 0.91731 0.158749943 2.235948143 2.235947356 1.653435586 2.582265674 0.15875 2.23595 2.23595 1.65344 2.58227

7 2000 5.41375 0.3 100 10 1 20 1 1 255 648 652 1078 1081 1084 4.47187 0.72554 1.01437 0.189 4.23211 0.55467 0.158746363 2.235948372 2.23594784 2.384892768 1.063875134 2.295644043 0.15875 2.23595 2.23595 2.3849 1.06388 2.29564

6 2000 7.98066 0.3 100 10 1 20 1 1 270 649 653 1005 1006 4.47187 1.50224 1.50065 3.98321 0.77483 0.158753523 2.235949022 2.235947586 1.647037619 2.550095869 0.15875 2.23595 2.23595 1.64703 2.55009

5 2000 3.65617 0.3 100 10 1 20 1 1 256 650 654 1078 4.47187 1.01437 0.62046 4.48921 0.158746363 2.235948538 2.235948749 0.65630173 0.15875 2.23595 2.23595 0.6563

6 2000 8.71834 0.3 100 10 1 20 1 1 271 651 655 1006 1007 4.47187 1.50065 1.86222 4.11885 0.66886 0.158753523 2.235948792 2.235947951 1.780110071 2.803076019 0.15875 2.23595 2.23595 1.78011 2.80308

6 2000 3.76136 0.3 100 10 1 20 1 1 257 652 656 1075 1078 4.47187 0.62046 0.55694 4.35803 0.52447 0.158746363 2.235947629 2.235950436 0.685315647 2.274349578 0.15875 2.23595 2.23594 0.68532 2.27435

6 2000 9.04396 0.3 100 10 1 20 1 1 272 653 657 1007 1008 4.47187 1.86222 1.8779 4.24959 0.38344 0.158746363 2.235946741 2.235951585 1.866782943 2.820551524 0.15875 2.23595 2.23594 1.86678 2.82055

6 2000 4.79976 0.3 100 10 1 20 1 1 258 654 658 1073 1075 4.47187 0.55694 0.8203 4.25579 0.822 0.158753523 2.235944256 2.235946601 0.930115435 2.251925998 0.15875 2.23595 2.23595 0.93011 2.25193

7 2000 8.21511 0.3 100 10 1 20 1 1 273 544 546 655 659 1008 4.35938 0.23693 0.94542 1.8779 0.85124 4.0113 0.158749613 1.94414757 2.391689644 2.235944792 2.235946167 1.72349466 0.15875 1.94414 2.39169 2.23595 2.23595 1.72349

6 2000 4.44661 0.3 100 10 1 20 1 1 259 544 656 1070 1073 4.21552 1.00508 0.8203 3.70052 0.48836 0.158752963 1.814181901 2.235949776 0.928579732 2.314310529 0.15875 1.81418 2.23595 0.92858 2.31431

9 2000 5.151 0.3 100 10 1 20 1 1 125 149 274 544 545 546 657 661 0.16358 0.16361 4.10466 0.42247 2.28298 1.90242 0.85124 0.95406 1.136575617 1.136994848 0.158747534 1.061865488 1.120870452 1.174480775 2.235950211 2.235950782 1.13658 1.137 0.15875 1.06188 1.12087 1.17449 2.23595 2.23595

8 2000 3.39447 0.3 100 10 1 20 1 1 124 148 260 543 544 662 1088 0.17143 0.17166 3.63594 2.49523 0.86856 0.76196 0.79865 0.730249142 0.731087312 0.158749151 0.69262076 0.799529601 2.235945657 2.296273994 0.73024 0.7311 0.15875 0.69262 0.79952 2.23595 2.29628

7 2000 6.11063 0.3 100 10 1 20 1 1 275 545 659 663 1107 1108 4.47187 0.05511 0.95406 1.52185 4.39113 0.22959 0.15875126 2.346551087 2.235945596 2.235950712 1.194294246 2.617719867 0.15875 2.34657 2.23595 2.23595 1.19429 2.61772

6 2000 4.71715 0.3 100 10 1 20 1 1 261 660 664 1088 1089 4.47187 0.76196 1.18616 4.48355 0.1609 0.15874768 2.235950721 2.235944861 0.888968728 2.374259839 0.15875 2.23595 2.23595 0.88897 2.37425

7 2000 5.77737 0.3 100 10 1 20 1 1 276 338 348 661 735 1108 4.44651 0.10828 0.19547 1.52185 1.46336 3.40497 0.158753421 1.78030323 1.779022213 2.235945666 1.694788374 1.29949847 0.15875 1.78048 1.77895 2.23595 1.69478 1.29949

6 2000 2.57926 0.3 100 10 1 20 1 1 262 337 347 662 1089 4.22228 0.02058 0.08058 1.18616 4.29077 0.158749312 1.025281863 1.02318289 2.235951516 0.403769306 0.15875 1.02543 1.02326 2.23594 0.40377

4 2000 6.43206 0.3 100 10 1 20 1 1 277 667 736 4.42035 2.91021 5.29109 0.158752916 2.235944586 1.068619263 0.15875 2.23595 1.06862

5 2000 5.53753 0.3 100 10 1 20 1 1 263 668 734 1097 4.36375 1.33943 1.71328 3.48284 0.158749085 2.235947046 1.742659614 1.263916062 0.15875 2.23594 1.74266 1.26392

8 2000 17.78036 0.3 100 10 1 20 1 1 278 665 669 736 738 746 941 4.47187 2.91021 2.86287 0.06159 3.77399 0.28306 2.20742 0.15874768 2.235946526 2.23595157 2.96118971 3.562011628 3.11293655 3.368323802 0.15875 2.23594 2.23594 2.96142 3.56201 3.11291 3.36834

6 2000 6.30044 0.3 100 10 1 20 1 1 264 666 670 1094 1095 4.47187 1.33943 0.74155 1.03324 3.85031 0.158753523 2.235944066 2.235946775 2.12984066 1.308119813 0.15875 2.23595 2.23595 2.12984 1.30812

8 2000 7.49584 0.3 100 10 1 20 1 1 279 355 359 667 671 745 746 4.47187 0.17967 0.18113 2.86287 0.29372 0.89583 3.91601 0.15874768 1.431991654 1.430871595 2.235944807 2.235948549 1.509959126 1.367201845 0.15875 1.432 1.43087 2.23595 2.23595 1.50994 1.3672

9 2000 5.29114 0.3 100 10 1 20 1 1 265 354 358 668 672 743 744 1094 4.47187 0.17989 0.1797 0.74155 0.70626 1.07924 1.23565 2.11739 0.15875484 1.366840124 1.365753938 2.235949603 2.235946964 1.444198098 1.303481639 1.404481134 0.15875 1.36688 1.36575 2.23595 2.23595 1.4442 1.30349 1.40449

5 2000 10.16238 0.3 100 10 1 20 1 1 280 669 673 745 4.47187 0.29372 2.70963 4.11566 0.15874768 2.235947828 2.235951395 1.742708473 0.15875 2.23595 2.23594 1.74271

7 2000 7.83365 0.3 100 10 1 20 1 1 266 670 674 743 784 1102 4.47187 0.70626 1.38402 1.03599 0.89898 3.56132 0.15875126 2.235949414 2.235945191 2.084786487 2.530250374 1.642207496 0.15875 2.23595 2.23595 2.08479 2.53024 1.64221

5 2000 6.54351 0.3 100 10 1 20 1 1 281 282 671 856 2.39772 0.35273 2.70963 1.59169 0.158747929 0.160005443 2.235944983 0.536299495 0.15875 0.16 2.23595 0.53631

7 2000 3.44773 0.3 100 10 1 20 1 1 267 282 404 672 784 856 2.39756 0.33234 0.16467 1.38402 2.84638 1.01741 0.15874489 0.160000218 1.001505455 2.235951187 0.940095822 0.517271226 0.15875 0.16001 1.00151 2.23595 0.9401 0.51727

7 2000 8.74082 0.3 100 10 1 20 1 1 283 306 677 988 1124 1126 0.73914 2.25273 1.0481 1.81863 3.0779 2.89679 0.160005781 0.158751007 2.091796965 0.904692747 2.263634325 2.140570513 0.16 0.15875 2.0918 0.90469 2.26363 2.14057

6 2000 5.7861 0.3 100 10 1 20 1 1 283 284 678 988 1179 0.69668 2.25264 1.71971 2.13167 3.10043 0.160004816 0.158750268 2.091798629 0.864936499 1.826211059 0.16 0.15875 2.0918 0.86494 1.82621

5 2000 5.18221 0.3 100 10 1 20 1 1 307 675 679 1124 4.18359 1.0481 1.42928 4.20093 0.158749339 2.091798443 2.091798882 1.075494341 0.15875 2.0918 2.0918 1.07549

6 2000 7.70966 0.3 100 10 1 20 1 1 285 676 680 1178 1179 4.18359 1.71971 1.71569 3.94695 0.34992 0.158751127 2.091796778 2.091799095 1.688350414 2.58667184 0.15875 2.0918 2.0918 1.68835 2.58667

7 2000 8.32915 0.3 100 10 1 20 1 1 308 677 681 1121 1124 1125 4.18359 1.42928 1.30345 1.34 0.22785 3.44953 0.158749125 2.091798421 2.091797117 2.378248145 2.437332268 1.89462881 0.15875 2.0918 2.0918 2.37825 2.43733 1.89463

6 2000 8.01289 0.3 100 10 1 20 1 1 286 678 682 1177 1178 4.18359 1.71569 1.58426 3.8002 0.67818 0.158750287 2.091798208 2.091797265 1.761471308 2.60222766 0.15875 2.0918 2.0918 1.76147 2.60223

6 2000 6.08315 0.3 100 10 1 20 1 1 309 679 683 1120 1121 4.18359 1.30345 1.45594 0.16885 4.10885 0.158749339 2.091798291 2.091798867 2.460683702 1.29343433 0.15875 2.0918 2.0918 2.46068 1.29344

7 2000 7.3256 0.3 100 10 1 20 1 1 287 680 684 1175 1176 1177 4.18359 1.58426 1.39141 0.32916 3.70728 0.40728 0.158750287 2.091798142 2.091797095 2.410738899 1.605793952 2.494252308 0.15875 2.0918 2.0918 2.41074 1.60579 2.49425

5 2000 5.88398 0.3 100 10 1 20 1 1 310 681 685 1120 4.18359 1.45594 1.35692 4.18477 0.158751127 2.09179697 2.091798682 1.247340701 0.15875 2.0918 2.0918 1.24734

6 2000 6.86842 0.3 100 10 1 20 1 1 288 682 686 1174 1175 4.18359 1.39141 1.8252 0.07381 4.17455 0.158749339 2.091798742 2.091797039 2.654926804 1.47277961 0.15875 2.0918 2.0918 2.65491 1.47278

7 2000 9.5015 0.3 100 10 1 20 1 1 311 683 687 1117 1119 1120 4.18359 1.35692 1.59486 0.39064 3.21788 1.68769 0.158750287 2.091796725 2.091798387 2.536908315 2.208275333 2.409977926 0.15875 2.0918 2.0918 2.53691 2.20828 2.40998

5 2000 6.57231 0.3 100 10 1 20 1 1 289 684 688 1174 4.18359 1.8252 1.31673 4.21438 0.158750287 2.091798369 2.091796761 1.401906701 0.15875 2.0918 2.0918 1.40191

5 2000 6.51252 0.3 100 10 1 20 1 1 312 685 689 1117 4.18359 1.59486 1.51848 4.18429 0.158750287 2.09179702 2.091798504 1.397698146 0.15875 2.0918 2.0918 1.3977

6 2000 6.32534 0.3 100 10 1 20 1 1 290 686 690 1173 1174 4.18359 1.31673 1.27631 3.90212 0.52814 0.158750287 2.091798647 2.09179707 1.360506167 2.373465475 0.15875 2.0918 2.0918 1.3605 2.37346

7 2000 6.0919 0.3 100 10 1 20 1 1 313 687 691 1114 1115 1117 4.18359 1.51848 1.28561 0.05946 4.13095 0.06444 0.158750287 2.091796903 2.091798682 2.36497898 1.295737318 2.494482626 0.15875 2.0918 2.0918 2.36498 1.29574 2.49448

6 2000 6.41519 0.3 100 10 1 20 1 1 291 688 692 1172 1173 4.18359 1.27631 1.32609 3.87825 0.57175 0.158750287 2.091798338 2.091797019 1.386275075 2.354483054 0.15875 2.0918 2.0918 1.38627 2.35448

5 2000 4.53199 0.3 100 10 1 20 1 1 314 689 693 1114 4.18359 1.28561 0.88092 4.20312 0.158750287 2.091796725 2.091798637 0.920231207 0.15875 2.0918 2.0918 0.92023

6 2000 7.10418 0.3 100 10 1 20 1 1 292 690 694 1171 1172 4.18359 1.32609 1.47731 3.77963 0.746 0.158750287 2.091798389 2.091796835 1.56190663 2.381486977 0.15875 2.0918 2.0918 1.5619 2.38149

10 2000 5.55594 0.3 100 10 1 20 1 1 60 84 315 465 467 468 691 695 1114 0.16892 0.16931 3.52298 0.86614 1.33494 2.26411 0.88092 0.44659 0.73628 1.336479797 1.335727852 0.158749392 1.046678173 1.392682381 1.29690948 2.09179677 2.091799875 2.202670457 1.33648 1.33572 0.15875 1.04667 1.39269 1.29691 2.0918 2.0918 2.20267

8 2000 3.82876 0.3 100 10 1 20 1 1 59 83 293 465 466 692 1171 0.2055 0.20512 3.21887 0.12496 2.90981 1.47731 0.73854 0.721020808 0.719460688 0.15875081 0.828856886 0.633779246 2.091798573 2.454548136 0.721 0.71947 0.15875 0.82886 0.63378 2.0918 2.45455

8 2000 7.44093 0.3 100 10 1 20 1 1 316 465 467 693 697 822 825 3.86752 0.6432 0.48084 0.44659 1.25267 1.27914 3.33402 0.158750568 1.624551532 2.16939101 2.091795962 2.091798651 2.351535463 1.684870375 0.15875 1.62455 2.16939 2.0918 2.0918 2.35153 1.68487

5 2000 7.9362 0.3 100 10 1 20 1 1 294 465 698 891 3.72203 2.84778 2.07509 2.87818 0.158749018 1.493535853 2.091796452 2.323529612 0.15875 1.49354 2.0918 2.32353

6 2000 5.99172 0.3 100 10 1 20 1 1 317 695 699 819 822 4.1836 1.25267 1.3833 0.26548 4.05653 0.158750287 2.091796756 2.091798759 2.422186361 1.27258257 0.15875 2.0918 2.0918 2.42219 1.27258

6 2000 9.72476 0.3 100 10 1 20 1 1 295 696 700 891 896 4.1836 2.07509 1.97436 1.0102 3.42447 0.158750072 2.091798955 2.091800438 2.769720925 2.195000878 0.15875 2.0918 2.0918 2.76972 2.195

6 2000 6.06524 0.3 100 10 1 20 1 1 318 697 701 816 819 4.1836 1.3833 1.15513 0.45372 3.93093 0.158750072 2.091800439 2.091798374 2.28978167 1.301846177 0.15875 2.0918 2.0918 2.28978 1.30185

6 2000 8.27745 0.3 100 10 1 20 1 1 296 698 702 895 896 4.1836 1.97436 1.53387 3.76444 0.64735 0.158750072 2.09179876 2.091797075 1.805014165 2.714642626 0.15875 2.0918 2.0918 1.80501 2.71464

6 2000 5.96336 0.3 100 10 1 20 1 1 319 699 703 813 816 4.18359 1.15513 0.90465 0.95853 3.73216 0.158750072 2.091797034 2.091798524 2.176352107 1.304276953 0.15875 2.0918 2.0918 2.17635 1.30428

6 2000 8.34674 0.3 100 10 1 20 1 1 297 700 704 894 895 4.18359 1.53387 0.7597 3.48323 2.05325 0.158750072 2.091798332 2.091797746 1.785643287 2.440912041 0.15875 2.0918 2.0918 1.78564 2.44091

6 2000 5.56085 0.3 100 10 1 20 1 1 320 701 705 812 813 4.18359 0.90465 1.67569 0.08316 4.22275 0.158750072 2.091796883 2.091798511 2.580689028 1.147440978 0.15875 2.0918 2.0918 2.5807 1.14744

6 2000 7.05167 0.3 100 10 1 20 1 1 298 702 706 893 894 4.18359 0.7597 0.51254 2.59627 3.38423 0.158750072 2.091797662 2.091797597 1.949734693 1.688965772 0.15875 2.0918 2.0918 1.94973 1.68897

5 2000 6.57108 0.3 100 10 1 20 1 1 321 703 707 812 4.18359 1.67569 1.46564 4.18887 0.158750072 2.091796896 2.091798653 1.410150245 0.15875 2.0918 2.0918 1.41015

6 2000 5.36275 0.3 100 10 1 20 1 1 299 704 708 892 893 4.18359 0.51254 0.45886 1.70128 3.92212 0.158750072 2.09179781 2.091796684 2.069058444 1.149703916 0.15875 2.0918 2.0918 2.06906 1.14971

7 2000 5.41807 0.3 100 10 1 20 1 1 322 516 705 709 807 812 3.85422 1.06894 1.46564 0.13519 4.16475 0.06073 0.158749792 1.725583598 2.091796754 2.09182612 1.172090814 2.463395735 0.15875 1.72559 2.0918 2.09177 1.17209 2.46339

5 2000 3.12268 0.3 100 10 1 20 1 1 300 516 706 892 3.7812 1.22182 0.45886 3.70229 0.158750136 1.655215294 2.091798723 0.719246609 0.15875 1.65522 2.0918 0.71924

11 2000 5.87087 0.3 100 10 1 20 1 1 111 135 323 516 517 518 707 711 807 831 0.1644 0.16441 2.98247 1.57381 1.14157 1.24113 0.13519 0.99442 0.06098 1.78557 1.650026584 1.6505071 0.158747566 0.696679182 1.626685548 1.688749332 2.091769286 2.091798523 2.306850285 1.776848737 1.65002 1.65052 0.15875 0.69668 1.62668 1.68874 2.09183 2.0918 2.30688 1.77685

6 2000 1.60217 0.3 100 10 1 20 1 1 110 301 515 712 755 0.1675 2.63287 1.27578 0.59256 1.5049 0.352739226 0.15875089 0.232578802 2.091796076 0.791415424 0.35276 0.15875 0.23258 2.0918 0.79142

6 2000 5.71717 0.3 100 10 1 20 1 1 324 709 757 831 858 2.69648 0.99442 2.02446 1.61319 2.79072 0.158747713 2.091796884 0.560388702 1.944883296 1.667714349 0.15875 2.0918 0.56039 1.94488 1.66772

12 2000 4.21857 0.3 100 10 1 20 1 1 302 366 367 372 373 710 755 756 757 758 877 2.53794 0.16457 0.21233 0.16184 0.21029 0.59256 0.70103 0.99723 0.56687 1.75103 0.41402 0.158752019 2.122739404 0.511794267 2.122359349 0.510168849 2.091799332 2.103679715 2.153173626 0.425470261 0.626397752 2.236458098 0.15875 2.12274 0.51178 2.12235 0.51018 2.0918 2.10367 2.15317 0.42547 0.6264 2.23645

6 2000 6.5961 0.3 100 10 1 20 1 1 325 715 757 858 861 3.80689 1.51173 1.57875 0.34067 3.92826 0.158750075 2.091798372 1.709070041 2.451585483 1.499965098 0.15875 2.0918 1.70907 2.45159 1.49997

7 2000 9.51737 0.3 100 10 1 20 1 1 303 374 716 758 913 918 3.75689 0.24689 1.89508 2.63218 2.47727 1.17949 0.158748892 1.633036262 2.091797048 1.613985033 2.675477652 2.708627428 0.15875 1.63304 2.0918 1.61399 2.67548 2.70862

7 2000 6.54986 0.3 100 10 1 20 1 1 326 713 717 861 864 867 4.18359 1.51173 1.45313 0.10149 4.06277 0.10631 0.158750072 2.091797035 2.091798899 2.484769809 1.40795979 2.45726802 0.15875 2.0918 2.0918 2.48478 1.40796 2.45727

5 2000 7.17854 0.3 100 10 1 20 1 1 304 714 718 918 4.18359 1.89508 1.53665 4.19892 0.158750072 2.091798359 2.091797083 1.55144337 0.15875 2.0918 2.0918 1.55144

6 2000 4.5488 0.3 100 10 1 20 1 1 327 328 715 857 867 2.25275 0.64027 1.45313 1.60251 3.08981 0.158750518 0.160005359 2.091796509 0.813895817 1.389588307 0.15875 0.16 2.0918 0.8139 1.38959
7 2000 6.32862 0.3 100 10 1 20 1 1 305 328 716 857 918 919 2.25287 0.6656 1.53665 1.75939 0.97719 2.84325 0.158750934 0.160005862 2.091798324 0.837812443 2.495702235 1.78173197 0.15875 0.16 2.0918 0.83781 2.4957 1.78173

6 2000 4.31055 0.3 100 10 1 20 1 1 329 340 529 586 836 0.75436 2.07689 2.39635 2.10485 1.40528 0.159999954 0.158713709 1.451618879 1.617602479 0.916089555 0.16001 0.15872 1.45162 1.61761 0.9161
8 2000 5.01881 0.3 100 10 1 20 1 1 329 330 586 588 722 836 840 0.69341 2.2831 0.298 0.94534 0.06757 2.34311 2.97304 0.160009807 0.158718304 1.789186827 2.08656225 2.296010473 0.859983291 1.644251952 0.16 0.15871 1.78918 2.08656 2.29602 0.85999 1.64425
8 2000 5.28955 0.3 100 10 1 20 1 1 171 195 341 585 586 723 951 0.18918 0.18763 3.95473 2.99688 0.51484 0.97275 1.59442 1.05618764 1.054905918 0.158753567 0.982398906 1.146518888 2.296020895 2.375012836 1.05621 1.0549 0.15875 0.9824 1.14649 2.29602 2.37501
10 2000 3.44717 0.3 100 10 1 20 1 1 172 196 331 586 587 588 720 724 924 0.18303 0.184 4.29527 0.38106 0.60971 1.42016 0.06757 0.3559 2.4705 1.016416559 1.01524219 0.158750243 1.377988162 0.949904766 1.101239598 2.296023143 2.296023363 0.890165804 1.01644 1.01523 0.15875 1.37796 0.9499 1.10123 2.29601 2.29602 0.89016
6 2000 6.72341 0.3 100 10 1 20 1 1 342 721 725 951 952 4.59199 0.97275 1.2916 4.28004 0.76033 0.15875018 2.296024295 2.296018234 1.3051311 2.540158659 0.15875 2.29602 2.29601 1.30513 2.54016
6 2000 5.55266 0.3 100 10 1 20 1 1 332 722 726 924 925 4.592 0.3559 1.26277 0.94439 4.22738 0.158757389 2.296021826 2.29601885 2.194110964 1.084876704 0.15875 2.29602 2.29601 2.1941 1.08487
6 2000 7.00431 0.3 100 10 1 20 1 1 343 723 727 952 954 4.592 1.2916 0.49255 4.24493 1.38554 0.158719092 2.296014981 2.296014414 1.412551857 2.299429202 0.15871 2.29602 2.29602 1.41255 2.29943
6 2000 6.41521 0.3 100 10 1 20 1 1 333 724 728 925 926 4.592 1.26277 1.43221 0.11086 4.54535 0.158715283 2.296014366 2.296015732 2.547677543 1.238687504 0.15871 2.29602 2.29602 2.54768 1.23869
5 2000 2.66793 0.3 100 10 1 20 1 1 344 442 725 954 3.91287 1.10252 0.49255 3.37193 0.158753703 1.300689989 2.296019209 0.637538151 0.15875 1.30069 2.29601 0.63754
7 2000 5.54001 0.3 100 10 1 20 1 1 334 442 444 726 926 927 4.15463 0.60153 0.37144 1.43221 0.32187 4.33803 0.158753025 1.491814552 2.146989386 2.296017891 2.625382139 1.058254774 0.15875 1.4918 2.147 2.29602 2.62538 1.05826
8 2000 3.65418 0.3 100 10 1 20 1 1 20 45 345 441 442 731 1091 0.19272 0.18925 3.9532 0.73467 0.09168 1.1102 3.20131 1.269963454 1.268652237 0.158751138 1.191255211 1.361772995 2.296018606 0.827145587 1.27001 1.26864 0.15875 1.19125 1.36178 2.29602 0.82715
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7 2000 7.42609 0.3 100 10 1 20 1 1 346 729 733 1089 1090 1091 4.592 1.1102 1.78648 0.20447 4.56472 0.1498 0.158715282 2.296015018 2.296014062 2.553802312 1.440918281 2.481880582 0.15871 2.29602 2.29602 2.5538 1.44091 2.4819
6 2000 5.66666 0.3 100 10 1 20 1 1 336 443 730 734 1100 4.592 0.1172 1.24271 1.11329 4.559 0.158719091 2.526753132 2.296014909 2.296015354 1.0742993 0.15871 2.52674 2.29602 2.29602 1.07429
4 2000 3.44491 0.3 100 10 1 20 1 1 347 731 1089 3.85662 1.78648 4.25049 0.158757123 2.296019154 0.511878734 0.15875 2.29601 0.51188
8 2000 7.03871 0.3 100 10 1 20 1 1 262 263 337 666 732 1097 1100 0.03475 0.1874 4.49795 1.71328 1.11329 3.00769 1.07674 1.290339005 1.829408412 0.158750728 1.742657187 2.296017861 1.583127929 2.48321879 1.29039 1.82946 0.15875 1.74266 2.29602 1.58313 2.48322
6 2000 6.17415 0.3 100 10 1 20 1 1 348 663 737 1108 1109 4.33959 1.46336 1.30638 3.16106 0.77405 0.158751498 1.694784132 2.296018126 1.347006836 2.481015652 0.15875 1.69479 2.29602 1.347 2.48102
5 2000 6.60873 0.3 100 10 1 20 1 1 338 665 667 738 4.47922 5.29109 0.06159 2.90496 0.158754101 1.068615686 2.961415112 2.296018891 0.15875 1.06862 2.96119 2.29601
6 2000 4.64738 0.3 100 10 1 20 1 1 349 350 735 942 1109 2.46184 0.49441 1.30638 2.0247 2.68746 0.158718684 0.160008789 2.296015497 0.622315081 1.698790295 0.15871 0.16 2.29602 0.62231 1.69879
7 2000 17.49368 0.3 100 10 1 20 1 1 339 350 667 736 941 942 2.46144 0.64143 3.77399 2.90496 1.38272 2.12408 0.15871388 0.159999258 3.562014229 2.296014732 4.936054209 0.748534933 0.15872 0.16001 3.56201 2.29602 4.93605 0.74853
7 2000 4.70548 0.3 100 10 1 20 1 1 351 352 450 452 940 946 0.36503 1.50598 1.0551 2.5183 1.79874 1.31743 0.160008074 0.15874859 1.135528965 1.761565134 0.548718765 1.891720049 0.16 0.15874 1.13553 1.76157 0.54871 1.89172
7 2000 3.88055 0.3 100 10 1 20 1 1 351 356 448 450 934 940 0.35515 1.29758 0.07569 3.19943 1.00773 2.72716 0.160007937 0.158747704 2.600102015 0.96299388 2.726683125 0.54001239 0.16 0.15874 2.60011 0.96299 2.72668 0.54001
7 2000 6.67355 0.3 100 10 1 20 1 1 353 449 451 743 1101 1103 4.73199 0.73722 0.89915 0.99751 3.76524 0.84041 0.158754089 1.798460541 1.957092733 2.822711436 1.242016123 2.401361653 0.15875 1.79846 1.9571 2.82272 1.24202 2.40136
6 2000 4.60848 0.3 100 10 1 20 1 1 357 449 744 1093 1094 4.61382 0.58317 0.58378 4.28592 0.93843 0.158748172 1.688752207 2.822714829 0.746537038 2.823002198 0.15875 1.68876 2.82271 0.74654 2.823
7 2000 6.72346 0.3 100 10 1 20 1 1 354 670 672 741 1102 1103 4.42564 1.07924 1.03599 0.99751 3.97701 0.39187 0.15874677 1.444199799 2.084788133 2.822716276 1.332230847 2.318389625 0.15875 1.4442 2.08479 2.82271 1.33223 2.31837
5 2000 3.6009 0.3 100 10 1 20 1 1 358 670 742 1094 4.26665 1.23565 0.58378 3.88895 0.158754878 1.303485667 2.822712883 0.839802442 0.15875 1.30348 2.82271 0.83981
6 2000 6.75049 0.3 100 10 1 20 1 1 355 360 669 671 941 1.8444 0.55976 0.89583 4.11566 1.58187 0.158747268 0.160009216 1.509943581 1.742705281 0.679504287 0.15874 0.16 1.50996 1.74271 0.67951
6 2000 4.35933 0.3 100 10 1 20 1 1 359 360 667 669 941 1.68213 0.42332 0.28306 3.91601 3.83233 0.158748537 0.160007432 3.112914345 1.367198002 0.560703544 0.15874 0.16 3.11294 1.3672 0.5607
7 2000 8.07948 0.3 100 10 1 20 1 1 361 368 749 830 894 895 0.5213 2.64799 2.1408 2.31502 0.21126 3.90747 0.160002838 0.158748947 2.486799294 0.692120085 3.148051276 2.06376952 0.16001 0.15875 2.48679 0.69212 3.14805 2.06377
7 2000 10.26186 0.3 100 10 1 20 1 1 361 362 750 830 884 885 0.47423 2.6482 2.18737 3.12134 1.98879 2.02431 0.160003975 0.158749542 2.48679469 0.648521541 3.174740946 3.084955499 0.16001 0.15875 2.4868 0.64852 3.17474 3.08496
5 2000 8.86695 0.3 100 10 1 20 1 1 369 747 751 894 4.97346 2.1408 1.42282 5.02515 0.158749408 2.486794467 2.486792177 1.607422898 0.15875 2.4868 2.48679 1.60742
6 2000 11.84814 0.3 100 10 1 20 1 1 363 748 752 883 884 4.97346 2.18737 1.15568 1.90597 4.02282 0.158751588 2.486799071 2.486793922 2.642040945 2.374609584 0.15875 2.48679 2.48679 2.64205 2.37461
6 2000 6.79008 0.3 100 10 1 20 1 1 370 749 753 893 894 4.97346 1.42282 0.67464 4.75787 0.69796 0.158751588 2.486794592 2.486799341 1.185893214 2.761465759 0.15875 2.48679 2.48679 1.18589 2.76146
6 2000 7.67221 0.3 100 10 1 20 1 1 364 750 754 878 883 4.97346 1.15568 1.30885 0.78432 4.53578 0.158749408 2.486792847 2.48679813 2.648267331 1.398667203 0.15875 2.48679 2.4868 2.64827 1.39867
6 2000 4.67872 0.3 100 10 1 20 1 1 371 516 751 892 893 4.87714 0.31119 0.67464 4.47882 1.06531 0.158748633 2.210778767 2.486794421 0.80660911 2.440454226 0.15875 2.21077 2.4868 0.80661 2.44045
5 2000 7.60408 0.3 100 10 1 20 1 1 365 514 752 878 4.84377 2.64002 1.30885 3.53093 0.158748255 1.893837122 2.486795632 1.751553053 0.15875 1.89384 2.4868 1.75155
8 2000 2.66766 0.3 100 10 1 20 1 1 110 134 372 515 516 710 712 0.19232 0.19265 4.10329 1.08242 1.27592 1.5049 0.70103 0.718133155 0.719494909 0.158747925 0.645503532 0.817254564 0.791415265 2.10367386 0.71813 0.7195 0.15875 0.6455 0.81726 0.79142 2.10368
8 2000 5.92622 0.3 100 10 1 20 1 1 109 133 366 513 514 712 877 0.17278 0.17305 4.42779 2.35245 1.27344 0.99723 1.77164 1.296052497 1.296950492 0.158750591 1.247682804 1.362468962 2.153172179 2.192217623 1.29605 1.29696 0.15875 1.24768 1.36247 2.15317 2.19222
11 2000 2.68397 0.3 100 10 1 20 1 1 302 303 324 325 373 374 711 712 713 858 0.17958 0.06058 0.17978 0.16298 0.69518 1.52042 2.02446 0.56687 1.57875 0.19576 0.470551816 1.681753552 0.471641506 1.682057032 0.158749363 0.160005642 0.560394176 0.425474619 1.709073341 2.018343536 0.47054 1.68176 0.47166 1.68207 0.15875 0.16 0.56039 0.42547 1.70907 2.01837
7 2000 7.25574 0.3 100 10 1 20 1 1 367 374 712 714 877 913 0.968 1.46917 1.75103 2.63218 3.32045 0.82868 0.158749544 0.160004962 0.626399781 1.613987262 1.950983967 2.774849176 0.15875 0.16 0.6264 1.61399 1.95098 2.77486
8 2000 7.52638 0.3 100 10 1 20 1 1 375 387 616 618 761 828 1127 0.2959 2.20521 2.02363 1.34646 0.38352 2.22656 2.12049 0.160003969 0.159032219 2.571126379 2.085225821 2.143174282 0.448580537 2.274615173 0.16001 0.15903 2.57113 2.08523 2.14318 0.44858 2.27461
7 2000 1.66567 0.3 100 10 1 20 1 1 375 376 618 762 827 828 0.28045 2.21471 0.50424 0.12018 2.76769 0.67726 0.160004952 0.159033854 2.094755928 2.143179611 0.479178575 0.434406805 0.16 0.15903 2.09476 2.14317 0.47918 0.4344
10 2000 3.622 0.3 100 10 1 20 1 1 212 213 236 237 615 616 617 618 759 0.16101 0.22315 0.16176 0.22647 0.63014 1.75887 1.92375 2.55654 0.38352 2.057681339 0.114333251 2.057779373 0.116076942 2.070143751 2.057719386 0.254079227 0.114824115 2.143180124 2.05768 0.11433 2.05778 0.11607 2.07014 2.05772 0.25408 0.11483 2.14317
8 2000 2.09771 0.3 100 10 1 20 1 1 237 377 472 617 618 760 827 0.09282 0.64839 3.16275 0.85452 1.91648 0.12018 0.50845 0.274502906 0.159032936 0.608426581 0.38488275 0.230267923 2.143174796 2.19245815 0.2745 0.15903 0.60843 0.38488 0.23027 2.14318 2.19246

8 2000 9.10145 0.3 100 10 1 20 1 1 389 474 476 617 765 1128 1165 3.78348 0.2503 1.45877 1.92675 0.18104 3.30899 1.26016 0.159033104 0.387612841 2.141567395 1.89103259 2.143175753 2.16125442 2.53699163 0.15903 0.38759 2.14157 1.89103 2.14318 2.16126 2.53699
9 2000 1.59048 0.3 100 10 1 20 1 1 62 63 86 87 378 472 474 617 0.03306 0.26508 0.16228 1.28578 2.26628 0.19922 1.01402 0.80095 2.140287686 0.237466472 2.140021428 0.234985911 0.159034219 2.128586023 8.00E-02 1.913006052 2.1403 0.23747 2.14002 0.23498 0.15904 2.12859 0.08 1.913
7 2000 0.5684 0.3 100 10 1 20 1 1 64 88 390 474 476 763 0.14351 0.17082 2.14659 0.03136 2.19133 0.18104 3.35E-02 3.26E-02 0.158552179 2.131097457 0.151160948 2.143176809 0.03352 0.03262 0.15855 2.13112 0.15116 2.14318
10 2000 5.32905 0.3 100 10 1 20 1 1 63 87 379 473 475 768 804 805 806 0.16289 0.07885 2.17469 1.14603 2.26498 0.41454 0.34635 3.79708 0.06488 2.067938954 2.068309682 0.158548922 2.051185257 0.17659008 2.143180026 2.449182038 1.365061599 2.199686048 2.06794 2.06829 0.15855 2.05118 0.17659 2.14317 2.44918 1.36506 2.1997
7 2000 2.25887 0.3 100 10 1 20 1 1 64 65 391 475 477 769 0.08196 0.37868 4.21387 0.52622 3.88071 0.42972 2.110077335 0.530471469 0.158551141 2.076754795 0.376738115 2.143177939 2.11006 0.53046 0.15855 2.07675 0.37674 2.14318
7 2000 5.85729 0.3 100 10 1 20 1 1 380 475 766 770 803 804 4.21403 0.93294 0.41454 1.13644 0.31529 4.13279 0.158551617 2.076908126 2.143174388 2.143176412 2.347702359 1.220623231 0.15855 2.07691 2.14318 2.14318 2.3477 1.22062
6 2000 3.80014 0.3 100 10 1 20 1 1 392 477 479 570 767 3.59086 0.57136 3.5451 1.13063 0.42972 0.158551158 2.157627271 0.912215851 1.453381861 2.143176475 0.15855 2.15763 0.91222 1.45338 2.14318
5 2000 4.82792 0.3 100 10 1 20 1 1 381 570 768 803 3.6118 1.47886 1.13644 3.88004 0.158553606 1.473966702 2.143178002 1.151467939 0.15855 1.47396 2.14318 1.15147
5 2000 2.66187 0.3 100 10 1 20 1 1 393 481 569 977 2.43142 0.85072 1.58524 2.34059 0.159032639 1.449059315 0.375027884 1.328642392 0.15903 1.44906 0.37503 1.32864
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6 2000 4.50796 0.3 100 10 1 20 1 1 394 424 775 976 977 4.22657 0.53088 0.58506 3.01318 1.71079 0.15903181 2.166571617 2.143175597 1.095241732 1.542871059 0.15903 2.16657 2.14318 1.09524 1.54287
7 2000 6.65609 0.3 100 10 1 20 1 1 383 772 776 973 974 975 4.28621 1.1739 0.92504 1.04826 0.78045 2.92039 0.159034242 2.143179465 2.143178151 2.003688427 2.154930979 1.4874092 0.15904 2.14317 2.14317 2.00369 2.15494 1.48741
8 2000 3.09906 0.3 100 10 1 20 1 1 11 36 395 423 424 773 777 0.17633 0.17622 4.28635 1.62987 2.37834 0.58506 0.45444 0.751971016 0.752969664 0.158068018 0.830118365 0.703233694 2.143175337 2.143177717 0.75196 0.75298 0.15807 0.83011 0.70323 2.14318 2.14318
8 2000 4.39184 0.3 100 10 1 20 1 1 12 37 384 425 426 774 974 0.17118 0.17182 4.05444 0.98034 1.30245 0.92504 2.11436 1.202172875 1.203019409 0.158067664 1.266079528 1.157891977 2.143172784 1.418155711 1.20217 1.20303 0.15807 1.26608 1.15789 2.14318 1.41815
7 2000 7.15784 0.3 100 10 1 20 1 1 396 423 775 779 991 992 4.28635 1.33155 0.45444 1.7343 3.71169 0.10624 0.158067513 2.092861426 2.14317669 2.143177797 1.583668723 2.658461304 0.15807 2.09286 2.14318 2.14318 1.58367 2.65846
5 2000 2.80324 0.3 100 10 1 20 1 1 385 425 780 1085 4.11483 0.95641 0.67508 3.56086 0.15806512 1.513223318 2.143176405 0.579078192 0.15807 1.51322 2.14318 0.57908
6 2000 5.50262 0.3 100 10 1 20 1 1 397 398 777 989 992 2.39145 0.51579 1.7343 1.88226 3.23565 0.158067465 0.160003066 2.143176617 0.779179585 1.656909473 0.15807 0.16001 2.14318 0.77918 1.65691
8 2000 8.30617 0.3 100 10 1 20 1 1 386 398 778 989 1083 1084 1085 2.39155 0.52654 0.67508 1.3852 1.43044 2.7062 2.24116 0.158067759 0.16000602 2.143178009 0.789394013 3.092220595 1.569602227 2.203727286 0.15807 0.16 2.14318 0.78939 3.09222 1.56961 2.20372
5 2000 9.44751 0.3 100 10 1 20 1 1 399 400 783 855 0.55591 4.05293 2.37942 1.65559 0.160001144 0.158740906 3.891052473 0.72757736 0.16001 0.15874 3.89106 0.72757
7 2000 8.36133 0.3 100 10 1 20 1 1 399 402 453 855 1101 1103 0.60295 4.05351 1.90469 0.6241 1.7993 3.90835 0.160003283 0.158739096 0.997608747 0.771960587 2.352301052 2.395819379 0.16001 0.15874 0.99761 0.77196 2.3523 2.39582
6 2000 12.85712 0.3 100 10 1 20 1 1 401 404 781 856 1104 4.05351 0.95497 2.37942 1.21519 2.25831 0.158739096 0.160003567 3.891058091 1.127628668 1.659984124 0.15874 0.16001 3.89105 1.12764 1.65999
7 2000 9.17427 0.3 100 10 1 20 1 1 403 404 672 674 1102 1103 4.05293 0.88096 0.89898 2.84638 1.61711 2.73891 0.158740906 0.160002361 2.53024328 0.940096197 2.762014361 2.97232965 0.15874 0.16 2.53025 0.9401 2.76201 2.97233
7 2000 16.65263 0.3 100 10 1 20 1 1 524 526 631 633 786 788 1.99844 2.80548 4.11514 0.34782 3.88273 2.62398 2.137106865 2.062346867 1.685926931 2.254458875 2.114594176 2.788196219 2.13711 2.06235 1.68593 2.25447 2.1146 2.7882
7 2000 19.69948 0.3 100 10 1 20 1 1 526 528 785 787 788 789 2.00195 2.39543 3.88273 4.15126 0.52291 4.18901 2.410855758 2.375484053 2.114595485 2.096541348 3.177692927 2.460464695 2.41086 2.37548 2.11459 2.09654 3.17769 2.46046
8 2000 23.10594 0.3 100 10 1 20 1 1 528 530 582 584 786 789 790 2.33227 3.06943 3.34651 0.82917 4.15126 0.48661 3.96189 2.383713054 2.37102635 2.856983567 3.01909731 2.09654217 3.283596295 2.778808402 2.38371 2.37103 2.85698 3.0191 2.09654 3.28359 2.77881
8 2000 17.73136 0.3 100 10 1 20 1 1 627 629 631 785 786 789 791 0.24403 4.2841 0.61774 2.62398 0.52291 4.51846 3.73995 2.704645451 1.777510074 2.85532607 2.788200971 3.177687855 1.960679964 2.028576993 2.70465 1.77751 2.85533 2.7882 3.17769 1.96068 2.02858
7 2000 20.21608 0.3 100 10 1 20 1 1 786 787 788 790 791 792 4.18901 0.48661 4.51846 4.18292 0.65178 3.58397 2.460459487 3.283592448 1.960679523 2.311084322 2.812803935 2.278989126 2.46046 3.2836 1.96068 2.31108 2.81281 2.279
7 2000 24.96063 0.3 100 10 1 20 1 1 580 582 787 789 792 793 3.87351 1.25591 3.96189 4.18292 1.69822 4.05837 2.702475071 3.328184043 2.778810174 2.311083025 2.829645599 2.41268158 2.70247 3.32818 2.77881 2.31108 2.82965 2.41269
7 2000 17.17828 0.3 100 10 1 20 1 1 625 627 788 789 792 794 0.01186 4.11758 3.73995 0.65178 3.89405 3.91352 2.84594795 1.861314071 2.028582449 2.812808775 2.225185755 2.190748841 2.84594 1.86131 2.02858 2.8128 2.22519 2.19075
7 2000 20.77882 0.3 100 10 1 20 1 1 789 790 791 793 794 795 3.58397 1.69822 3.89405 3.02683 1.14415 4.04186 2.278995581 2.829651197 2.225186623 2.485443409 3.026814526 2.210182944 2.27899 2.82965 2.22519 2.48545 3.02682 2.21019
7 2000 20.91888 0.3 100 10 1 20 1 1 578 580 790 792 795 796 3.83991 0.48589 4.05837 3.02683 2.2156 3.87222 2.370167487 3.251425967 2.412689209 2.485445149 2.601281798 2.086314244 2.37017 3.25144 2.41268 2.48544 2.60128 2.08632
6 2000 20.13828 0.3 100 10 1 20 1 1 625 791 792 795 797 4.11251 3.91352 1.14415 3.78737 4.68074 1.84254249 2.190751576 3.026816743 2.842212385 2.114595765 1.84254 2.19075 3.02681 2.84222 2.11459
7 2000 24.02448 0.3 100 10 1 20 1 1 792 793 794 796 797 798 4.04186 2.2156 3.78737 3.2923 0.42445 5.14661 2.210187544 2.601281398 2.842215401 2.575580708 3.687156812 2.437179211 2.21018 2.60128 2.84221 2.57558 3.68715 2.43718
8 2000 19.11871 0.3 100 10 1 20 1 1 574 576 578 793 795 798 799 0.29512 4.22062 0.59479 3.87222 3.2923 0.73603 3.98028 2.765991987 1.810892712 2.795308043 2.086316948 2.575582303 3.310260923 2.291467954 2.76599 1.81089 2.79531 2.08631 2.57558 3.31026 2.29147
8 2000 19.79534 0.3 100 10 1 20 1 1 621 623 625 794 795 798 800 0.12151 4.2776 0.26485 4.68074 0.42445 3.25445 4.58919 2.66718835 1.591748641 2.665024502 2.114593897 3.687153033 3.292266712 2.086316136 2.66719 1.59175 2.66502 2.1146 3.68716 3.29227 2.08631
7 2000 23.91909 0.3 100 10 1 20 1 1 795 796 797 799 800 801 5.14661 0.73603 3.25445 3.61403 0.93351 5.62465 2.437181369 3.310261414 3.292267146 2.609490272 3.512918458 1.677231119 2.43718 3.31026 3.29227 2.60949 3.51292 1.67723
6 2000 17.71377 0.3 100 10 1 20 1 1 574 796 798 801 802 3.74323 3.98028 3.61403 0.92324 4.28976 1.783609539 2.291465792 2.609489063 3.033870926 1.7247247 1.78361 2.29147 2.60949 3.03387 1.72472
8 2000 19.73443 0.3 100 10 1 20 1 1 619 621 797 798 801 805 806 0.0665 4.20758 4.58919 0.93351 2.04325 2.16797 3.23145 2.817038815 1.761205562 2.086314551 3.512920021 3.177693297 2.565411055 2.154664526 2.81704 1.76121 2.08632 3.51292 3.17769 2.56541 2.15467
7 2000 18.61733 0.3 100 10 1 20 1 1 798 799 800 802 804 805 5.62465 0.92324 2.04325 1.46805 4.23898 2.95227 1.677232183 3.033871429 3.177691623 2.96094619 1.705328614 2.347801503 1.67723 3.03387 3.17769 2.96095 1.70533 2.3478
7 2000 11.86404 0.3 100 10 1 20 1 1 572 574 799 801 803 804 3.21476 0.5028 4.28976 1.46805 4.16083 0.41164 1.48325943 2.399402904 1.724724943 2.960945506 1.177940005 2.688414174 1.48325 2.3994 1.72472 2.96095 1.17794 2.68842
7 2000 9.99046 0.3 100 10 1 20 1 1 570 572 768 770 802 804 0.58655 1.18179 0.31529 3.88004 4.16083 3.05717 2.087521722 1.964450871 2.347698557 1.151470303 1.17794036 2.069160928 2.08752 1.96445 2.3477 1.15147 1.17794 2.06916

7 2000 12.69334 0.3 100 10 1 20 1 1 766 768 801 802 803 805 0.34635 4.13279 4.23898 0.41164 3.05717 2.18648 2.449184548 1.220622647 1.705327688 2.688421869 2.069164496 2.210187024 2.44918 1.22062 1.70533 2.68841 2.06916 2.21019

6 2000 14.08591 0.3 100 10 1 20 1 1 766 800 801 804 806 3.79708 2.16797 2.95227 2.18648 3.56839 1.365062268 2.565414985 2.347802845 2.210187271 1.586976433 1.36506 2.56541 2.3478 2.21019 1.58697

6 2000 11.30342 0.3 100 10 1 20 1 1 473 619 766 800 805 3.7332 2.91729 0.06488 3.23145 3.56839 1.116362914 1.943883049 2.199697348 2.154666557 1.586974904 1.11636 1.94388 2.19969 2.15466 1.58698

6 2000 12.08978 0.3 100 10 1 20 1 1 518 707 709 808 812 3.84587 4.16475 0.06098 2.714 3.30726 1.471861729 1.172092621 2.306875991 2.368959383 2.136947632 1.47186 1.17209 2.30685 2.36896 2.13695

7 2000 17.3364 0.3 100 10 1 20 1 1 518 520 807 809 811 812 0.79634 3.98551 2.714 4.29242 3.07797 1.27729 2.452731525 1.371528963 2.3689562 1.922749244 2.859715925 2.950494324 2.45273 1.37153 2.36896 1.92275 2.85972 2.9505

8 2000 15.8595 0.3 100 10 1 20 1 1 520 522 632 634 808 810 811 0.41701 3.42109 3.77955 0.72678 4.29242 2.37651 0.61104 2.380532982 1.550703272 1.782768741 2.189505548 1.922745614 2.827126646 3.469366137 2.38054 1.5507 1.78277 2.18951 1.92275 2.82713 3.46937

7 2000 17.48696 0.3 100 10 1 20 1 1 630 632 809 811 814 815 4.14973 1.68753 2.37651 4.00232 0.90542 2.99566 1.113323446 2.363100557 2.827127126 2.609487908 3.00317344 2.164568856 1.11333 2.36311 2.82713 2.60949 3.00317 2.16457

7 2000 21.06206 0.3 100 10 1 20 1 1 808 809 810 812 813 814 3.07797 0.61104 4.00232 4.37038 1.73302 3.85549 2.859718252 3.469367174 2.609486893 1.856103018 2.543088117 2.136947632 2.85972 3.46937 2.60949 1.8561 2.54309 2.13695

8 2000 15.1606 0.3 100 10 1 20 1 1 703 705 707 807 808 811 813 0.08316 4.18887 0.06073 3.30726 1.27729 4.37038 2.11903 2.580696292 1.410152921 2.463394549 2.136947632 2.950497298 1.856099829 2.407752689 2.58069 1.41015 2.4634 2.13695 2.95049 1.8561 2.40776

7 2000 14.18378 0.3 100 10 1 20 1 1 701 703 811 812 814 816 0.95853 4.22275 1.73302 2.11903 2.91351 2.57127 2.176349729 1.147443321 2.543086905 2.407757706 2.26749381 2.069162187 2.17635 1.14744 2.54309 2.40775 2.2675 2.06917

7 2000 18.68983 0.3 100 10 1 20 1 1 810 811 813 815 816 817 0.90542 3.85549 2.91351 3.54175 1.69702 3.5824 3.003174418 2.136947632 2.2674959 2.273773335 2.565412401 2.068016052 3.00317 2.13695 2.26749 2.27377 2.56541 2.06802

8 2000 13.54659 0.3 100 10 1 20 1 1 626 628 630 810 814 817 818 0.30458 4.27967 0.3105 2.99566 3.54175 0.32254 2.80771 2.387656359 0.996871023 2.331420643 2.164568298 2.273771485 2.676903984 2.128034167 2.38765 0.99687 2.33143 2.16457 2.27377 2.67691 2.12803

7 2000 14.1819 0.3 100 10 1 20 1 1 699 701 813 814 817 819 0.45372 3.73216 2.57127 1.69702 2.84376 3.16808 2.289783136 1.304276881 2.069167058 2.565413639 2.332573629 1.941197689 2.28978 1.30428 2.06916 2.56541 2.33257 1.94119

7 2000 14.74744 0.3 100 10 1 20 1 1 814 815 816 818 819 820 3.5824 0.32254 2.84376 4.29395 0.90447 3.12148 2.068016052 2.676908365 2.33257353 1.373495658 2.682224844 2.007381218 2.06802 2.6769 2.33257 1.3735 2.68223 2.00738

6 2000 12.43121 0.3 100 10 1 20 1 1 626 815 817 820 821 3.93259 2.80771 4.29395 0.95343 2.16482 1.466501222 2.128034218 1.373495249 2.400836358 2.278990757 1.4665 2.12803 1.3735 2.40084 2.27899

7 2000 13.51526 0.3 100 10 1 20 1 1 697 699 816 817 820 822 0.26548 3.93093 3.16808 0.90447 3.49743 2.62928 2.42218639 1.301846123 1.941194303 2.68222578 2.009750253 2.154662465 2.42219 1.30185 1.9412 2.68222 2.00975 2.15466

7 2000 16.32796 0.3 100 10 1 20 1 1 817 818 819 821 822 823 3.12148 0.95343 3.49743 3.53892 1.72091 2.56943 2.007381381 2.400836692 2.009747313 1.882787858 2.543087376 2.347799972 2.00738 2.40084 2.00975 1.88279 2.54309 2.3478

7 2000 12.78987 0.3 100 10 1 20 1 1 624 626 818 820 823 824 4.27018 0.4918 2.16482 3.53892 1.21407 2.3949 1.116737977 2.430407567 2.27899014 1.882789915 2.444965694 2.10897159 1.11674 2.43041 2.27899 1.88279 2.44497 2.10897

7 2000 15.13721 0.3 100 10 1 20 1 1 695 697 819 820 823 825 1.27914 4.05653 2.62928 1.72091 3.27094 1.93411 2.351534805 1.272583197 2.15466483 2.543091784 2.219841023 2.482574552 2.35154 1.27258 2.15466 2.54309 2.21984 2.48257

7 2000 16.14457 0.3 100 10 1 20 1 1 820 821 822 824 825 826 2.56943 1.21407 3.27094 3.72444 2.20343 2.23631 2.347803031 2.44496532 2.219838544 1.525914971 2.454663311 2.206958322 2.3478 2.44497 2.21984 1.52592 2.45466 2.20696

7 2000 11.21804 0.3 100 10 1 20 1 1 620 622 624 821 823 826 0.9328 4.27779 0.01788 2.3949 3.72444 2.16687 2.406378408 1.08293582 2.38825513 2.108969946 1.525917478 2.20695831 2.40638 1.08294 2.38826 2.10897 1.52591 2.20696

7 2000 13.3464 0.3 100 10 1 20 1 1 467 469 695 822 823 826 3.82758 0.13685 3.33402 1.93411 2.20343 2.70088 1.260595902 2.403070891 1.684867374 2.482573841 2.454664481 2.114594812 1.2606 2.40307 1.68487 2.48257 2.45466 2.11459

6 2000 12.74302 0.3 100 10 1 20 1 1 469 620 823 824 825 4.22627 2.64641 2.23631 2.16687 2.70088 1.081844421 2.072602437 2.206961365 2.206959947 2.11459485 1.08185 2.0726 2.20696 2.20696 2.11459

7 2000 4.29559 0.3 100 10 1 20 1 1 468 470 472 760 762 828 0.60223 4.31479 0.17554 2.76769 0.50845 1.98661 2.275059447 0.673266034 2.243613045 0.479177738 2.192455434 0.745634287 2.27506 0.67327 2.24362 0.47918 2.19246 0.74563

8 2000 7.73298 0.3 100 10 1 20 1 1 375 468 759 760 827 1114 1127 0.32681 1.06595 2.22656 0.67726 1.98661 3.0169 1.55269 0.410293745 2.366496032 0.448581863 0.434404184 0.745633507 2.14693396 2.291466607 0.41029 2.3665 0.44858 0.43441 0.74563 2.14693 2.29146

6 2000 5.15718 0.3 100 10 1 20 1 1 53 455 456 887 1166 0.33229 1.73326 1.6728 2.15462 0.29705 0.625750283 0.628171985 0.665458608 1.706721355 1.689930094 0.62575 0.62817 0.66546 1.70672 1.68994

8 2000 13.10945 0.3 100 10 1 20 1 1 361 747 748 885 895 896 897 0.33358 2.31502 3.12134 2.00271 0.99232 1.16343 5.25656 0.650073129 0.692118913 0.648521051 3.086666309 2.379965117 2.964957927 1.975171559 0.65007 0.69212 0.64852 3.08667 2.37996 2.96495 1.97517

7 2000 10.68803 0.3 100 10 1 20 1 1 517 519 709 711 832 858 3.68705 0.01497 1.78557 1.61319 2.30064 3.61676 1.157782004 2.538656079 1.77684671 1.944884534 2.359913893 1.473635838 1.15779 2.53861 1.77685 1.94488 2.35991 1.47363

7 2000 13.25201 0.3 100 10 1 20 1 1 519 521 831 833 858 859 4.24852 0.45272 2.30064 2.99973 0.21705 4.49915 1.285301581 2.40060581 2.359913762 2.16456511 2.691951175 1.65584576 1.2853 2.4006 2.35991 2.16457 2.69195 1.65585

7 2000 12.57502 0.3 100 10 1 20 1 1 521 634 636 832 859 860 3.82996 0.20149 3.94259 2.99973 0.35716 2.80505 1.318152767 2.182939101 1.405532056 2.16456512 2.876278551 2.352856332 1.31815 2.18292 1.40553 2.16457 2.87629 2.35286

6 2000 9.49706 0.3 100 10 1 20 1 1 523 525 635 835 838 2.30976 1.09375 3.70253 3.0717 2.09849 1.586668819 2.142735261 0.900947856 1.667285258 2.157973196 1.58666 2.14274 0.90095 1.66729 2.15797

7 2000 13.87062 0.3 100 10 1 20 1 1 525 527 834 837 838 839 3.49847 0.17794 3.0717 3.4428 2.47599 1.70707 1.565876813 2.542605147 1.667286645 1.949743325 2.245381596 2.58754292 1.56588 2.54261 1.66729 1.94974 2.24538 2.58754

9 2000 8.94837 0.3 100 10 1 20 1 1 329 527 529 719 720 837 839 840 0.33932 1.31133 1.1733 1.40528 2.34311 4.26473 0.42476 1.3675 0.872730956 1.979936865 1.810948255 0.916098117 0.85998835 1.271075307 2.872969944 2.146933169 0.87273 1.97993 1.81095 0.91609 0.85998 1.27107 2.87298 2.14693

5 2000 12.48819 0.3 100 10 1 20 1 1 527 835 836 839 3.10002 3.4428 4.26473 3.52426 1.62412573 1.949743521 1.27107353 2.215557074 1.62413 1.94974 1.27108 2.21555

7 2000 15.5062 0.3 100 10 1 20 1 1 635 637 834 835 839 841 0.12007 4.10325 2.09849 2.47599 3.07768 3.34302 2.409447494 1.436673994 2.157969644 2.245379142 2.421530753 2.179875921 2.40947 1.43667 2.15797 2.24538 2.42153 2.17988

9 2000 21.20408 0.3 100 10 1 20 1 1 835 836 837 838 840 841 842 843 1.70707 0.42476 3.52426 3.07768 1.76177 0.68705 4.26633 1.91696 2.587542799 2.87298323 2.215554364 2.421529779 3.030734931 2.853893758 2.018007146 2.921363232 2.58754 2.87297 2.21556 2.42153 3.03074 2.85389 2.01801 2.92137

7 2000 13.41629 0.3 100 10 1 20 1 1 588 590 720 836 839 843 3.54033 0.9469 2.97304 1.3675 1.76177 3.79942 1.265778402 2.21413351 1.644251426 2.146930642 3.030742624 1.866314922 1.26578 2.21413 1.64425 2.14693 3.03073 1.86631

7 2000 16.31308 0.3 100 10 1 20 1 1 637 639 838 839 842 844 0.32967 3.97689 3.34302 0.68705 4.21482 3.31045 2.577435699 1.667556216 2.179877483 2.85388998 2.018007203 2.232648899 2.57744 1.66755 2.17988 2.85389 2.01801 2.23265

7 2000 19.65512 0.3 100 10 1 20 1 1 839 841 843 844 845 846 4.26633 4.21482 2.93989 0.10697 4.11752 1.59527 2.01800759 2.018007012 2.6884367 2.982532415 2.232646007 2.996046101 2.01801 2.01801 2.68842 2.98253 2.23265 2.99604

7 2000 17.62174 0.3 100 10 1 20 1 1 590 592 839 840 842 846 3.69191 0.177 1.91696 3.79942 2.93989 3.67367 1.627515897 2.674607508 2.921365694 1.866310792 2.688417361 2.223048527 1.62752 2.6746 2.92136 1.86631 2.68842 2.22305

7 2000 16.27197 0.3 100 10 1 20 1 1 639 641 841 842 845 847 0.53827 4.22492 3.31045 0.10697 4.59748 3.26545 2.567348604 1.530901265 2.232647006 2.982532415 2.018006203 2.359916993 2.56735 1.5309 2.23265 2.98253 2.01801 2.35991

7 2000 20.30275 0.3 100 10 1 20 1 1 842 844 846 847 848 849 4.11752 4.59748 3.73839 0.42328 4.88989 0.12374 2.232649898 2.018008013 2.624923005 3.135544687 2.163467066 3.357297715 2.23265 2.01801 2.62492 3.13554 2.16347 3.35729

7 2000 19.17725 0.3 100 10 1 20 1 1 592 594 842 843 845 849 4.12023 0.0814 1.59527 3.67367 3.73839 3.76875 1.659528634 2.604470051 2.996043898 2.223050498 2.6249205 2.267492816 1.65953 2.60446 2.99605 2.22305 2.62492 2.26749

8 2000 16.68044 0.3 100 10 1 20 1 1 641 643 645 844 845 848 850 0.11655 4.30012 0.29239 3.26545 0.42328 3.75542 3.93882 2.619229432 1.309043967 2.390771252 2.359910662 3.135538166 2.624920623 1.989550351 2.61922 1.30905 2.39077 2.35992 3.13554 2.62492 1.98955

6 2000 21.86299 0.3 100 10 1 20 1 1 845 847 849 850 851 4.88989 3.75542 4.49136 0.34573 5.19989 2.163466962 2.624920478 2.509230573 3.283592226 2.093136481 2.16347 2.62492 2.50923 3.2836 2.09314

7 2000 17.93438 0.3 100 10 1 20 1 1 594 596 845 846 848 851 4.23269 3.18277 0.12374 3.76875 4.49136 0.99176 1.216496325 2.245621377 3.35729042 2.267490745 2.509228492 3.369303402 1.21649 2.24562 3.3573 2.26749 2.50923 3.36931

7 2000 16.86316 0.3 100 10 1 20 1 1 645 847 848 851 853 1105 2.75533 3.93882 0.34573 2.29487 1.93069 2.91898 1.365183568 1.989554373 3.283596517 2.74439841 1.571933523 2.534666353 1.36518 1.98955 3.28359 2.7444 1.57193 2.53466

7 2000 19.63932 0.3 100 10 1 20 1 1 596 848 849 850 852 1105 0.79404 5.19989 0.99176 2.29487 3.74124 4.56427 3.382043692 2.093140363 3.369307578 2.744397307 2.397866094 1.55521854 3.38205 2.09314 3.3693 2.7444 2.39787 1.55522

6 2000 15.9911 0.3 100 10 1 20 1 1 596 598 851 854 1105 3.23458 3.13463 3.74124 0.84504 1.75687 2.133238227 1.194507998 2.397865787 1.511830885 2.727026183 2.13324 1.19451 2.39787 1.51184 2.72703

5 2000 4.50309 0.3 100 10 1 20 1 1 252 645 646 850 0.33505 1.53422 2.12439 1.93069 0.671501653 0.666021598 0.716079906 1.571933917 0.6715 0.66602 0.71608 1.57193

6 2000 4.7444 0.3 100 10 1 20 1 1 202 597 598 852 939 0.32836 1.87809 1.7001 0.84504 1.067 0.488247776 0.524681195 0.50509537 1.511843388 1.896622508 0.48825 0.52469 0.5051 1.51183 1.89661

7 2000 3.12326 0.3 100 10 1 20 1 1 52 399 453 454 781 782 0.48096 0.33498 1.41336 1.03281 1.65559 0.6241 0.511239732 0.731593996 0.411543543 0.637449802 0.727572868 0.771961881 0.51124 0.7316 0.41154 0.63743 0.72758 0.77196

7 2000 4.14237 0.3 100 10 1 20 1 1 282 404 673 674 783 1104 0.32849 0.19056 1.59169 1.01741 1.21519 2.47011 0.500748081 1.115793772 0.536306925 0.517273508 1.127637084 1.221509021 0.50074 1.1158 0.5363 0.51727 1.12763 1.22151

8 2000 10.65579 0.3 100 10 1 20 1 1 328 717 718 867 870 907 919 0.33369 1.60251 1.75939 1.29164 1.94068 3.58374 2.36392 0.809049339 0.813902789 0.837808176 1.723345947 2.104455101 2.009747355 2.009749063 0.80905 0.8139 0.83781 1.72334 2.10446 2.00975 2.00975

8 2000 13.22132 0.3 100 10 1 20 1 1 711 713 757 831 832 859 861 2.79072 0.34067 0.19576 3.61676 0.21705 3.55984 3.64144 1.667717492 2.451587596 2.01836516 1.473634679 2.691951175 2.138060034 1.931379589 1.66771 2.45159 2.01834 1.47364 2.69195 2.13806 1.93138

7 2000 16.50126 0.3 100 10 1 20 1 1 832 833 858 860 861 862 4.49915 0.35716 3.55984 3.53935 0.19879 3.96253 1.655847842 2.876288173 2.138061992 2.300780192 2.876283051 2.069160788 1.65585 2.87628 2.13806 2.30078 2.87628 2.06916

7 2000 16.93614 0.3 100 10 1 20 1 1 636 638 833 859 862 863 0.78977 3.67494 2.80505 3.53935 1.45315 3.51956 2.520536549 1.651285919 2.352855637 2.300779163 2.799257967 1.989549256 2.52054 1.65129 2.35286 2.30078 2.79925 1.98955

7 2000 14.28619 0.3 100 10 1 20 1 1 713 715 858 859 862 864 3.92826 0.10149 3.64144 0.19879 3.73044 3.41708 1.499965737 2.484775308 1.931379815 2.876283673 2.13805993 2.003830178 1.49997 2.48477 1.93138 2.87628 2.13806 2.00383

7 2000 19.39682 0.3 100 10 1 20 1 1 859 860 861 863 864 865 3.96253 1.45315 3.73044 2.75845 0.82522 4.22755 2.069160823 2.799252785 2.138058284 2.696361581 2.77881275 2.086315817 2.06916 2.79926 2.13806 2.69636 2.77881 2.08632

7 2000 17.32487 0.3 100 10 1 20 1 1 638 640 860 862 865 866 0.9562 3.75428 3.51956 2.75845 1.3625 3.58554 2.365949959 1.616804345 1.989547142 2.696361581 3.047154558 2.154663096 2.36595 1.6168 1.98955 2.69636 3.04716 2.15466

6 2000 14.64577 0.3 100 10 1 20 1 1 715 861 862 865 867 4.06277 3.41708 0.82522 3.34095 3.39196 1.407962362 2.003827881 2.778812261 2.278989356 2.009747453 1.40796 2.00383 2.77881 2.27899 2.00975

7 2000 20.26054 0.3 100 10 1 20 1 1 862 863 864 866 867 868 4.22755 1.3625 3.34095 2.75191 1.38672 4.16637 2.086319156 3.047156883 2.278991544 2.702521734 2.782230535 2.073753211 2.08632 3.04715 2.27899 2.70252 2.78223 2.07375

7 2000 17.59237 0.3 100 10 1 20 1 1 640 642 863 865 868 869 0.88712 3.63979 3.58554 2.75191 1.5177 3.67503 2.497146741 1.793744177 2.154663715 2.702519436 2.745264793 1.935066492 2.49715 1.79375 2.15466 2.70252 2.74526 1.93507

8 2000 15.82091 0.3 100 10 1 20 1 1 715 717 857 864 865 868 870 0.10631 3.08981 1.29164 3.39196 1.38672 2.90207 3.02005 2.457271206 1.389590385 1.723344421 2.009749982 2.782230542 2.623112192 2.176603841 2.45727 1.38959 1.72335 2.00975 2.78223 2.62311 2.17661

7 2000 23.56578 0.3 100 10 1 20 1 1 865 866 867 869 870 871 4.16637 1.5177 2.90207 3.4105 3.26681 3.20591 2.073748408 2.745261253 2.623110619 2.284196663 2.976950865 2.868841295 2.07375 2.74526 2.62311 2.2842 2.97695 2.86884

6 2000 18.25237 0.3 100 10 1 20 1 1 642 644 866 868 871 0.89797 4.35306 3.67503 3.4105 4.54242 2.555501601 2.113582416 1.935066991 2.284197973 2.225185775 2.5555 2.11358 1.93507 2.2842 2.22518

6 2000 24.70693 0.3 100 10 1 20 1 1 857 867 868 871 907 1.94068 3.02005 3.26681 2.87752 3.51509 2.104457938 2.176607608 2.976953199 3.875651198 1.82121092 2.10446 2.1766 2.97695 3.87565 1.82121

6 2000 28.13751 0.3 100 10 1 20 1 1 644 646 868 869 870 0.10481 3.36536 3.20591 4.54242 2.87752 3.379434129 3.183458329 2.86883798 2.225184003 3.875650464 3.37945 3.18346 2.86884 2.22519 3.87565

6 2000 23.82816 0.3 100 10 1 20 1 1 503 505 873 909 910 4.42655 0.92908 3.48106 4.55683 1.14667 1.462215442 2.49121304 2.347800938 3.320288654 3.288655058 1.46222 2.49121 2.3478 3.32029 3.28866

6 2000 16.49378 0.3 100 10 1 20 1 1 505 507 872 874 910 3.7605 0.99382 3.48106 3.24709 4.5488 1.755374921 2.501418645 2.347800889 2.078329462 1.97396024 1.75538 2.50142 2.3478 2.07833 1.97396

7 2000 17.93438 0.3 100 10 1 20 1 1 507 509 873 875 910 911 3.59276 0.83016 3.24709 3.16084 1.9674 3.34932 1.8988068 2.644086341 2.078329614 2.164565963 2.702519331 2.37196655 1.89881 2.64408 2.07833 2.16457 2.70252 2.37197

7 2000 17.44938 0.3 100 10 1 20 1 1 509 511 874 876 911 912 3.70035 0.82694 3.16084 3.36171 2.50643 2.29428 1.934036237 2.635707849 2.16456615 2.096540505 2.397868825 2.46817677 1.93403 2.6357 2.16457 2.09654 2.39787 2.46818

7 2000 16.38509 0.3 100 10 1 20 1 1 511 513 875 877 912 913 3.68336 0.57798 3.36171 3.76866 2.53784 1.63388 1.947343091 2.66600468 2.09653925 1.797575104 2.424474364 2.497843598 1.94734 2.666 2.09654 1.79757 2.42447 2.49784

7 2000 15.03651 0.3 100 10 1 20 1 1 513 712 756 758 876 913 2.45218 0.41402 1.77164 3.32045 3.76866 3.29972 2.101290503 2.236452514 2.192224525 1.950983739 1.797574745 2.078329678 2.10128 2.23646 2.19222 1.95098 1.79758 2.07833

8 2000 17.80254 0.3 100 10 1 20 1 1 512 514 752 754 879 883 903 3.64437 1.86327 0.78432 3.53093 2.4829 2.67665 1.01019 2.079617443 2.147281927 2.648271528 1.751552559 2.6012818 2.291468081 3.139328756 2.07962 2.14728 2.64827 1.75155 2.60128 2.29147 3.13933

7 2000 20.82642 0.3 100 10 1 20 1 1 878 880 883 884 903 904 2.4829 1.22846 4.33582 2.74804 2.89172 3.8543 2.6012818 3.175448343 1.788297721 2.84722273 2.529036353 2.179878995 2.60128 3.17545 1.7883 2.84723 2.52904 2.17988

7 2000 25.98542 0.3 100 10 1 20 1 1 879 881 884 885 899 904 1.22846 4.03379 4.39916 2.00244 4.37513 3.39369 3.175446398 2.992873746 2.838866798 3.731349121 1.906615315 2.267494186 3.17545 2.99287 2.83887 3.73135 1.90661 2.26749

7 2000 26.48378 0.3 100 10 1 20 1 1 880 882 885 898 899 906 4.03379 4.88446 0.8515 5.41794 0.56954 4.79276 2.992870209 2.444966338 3.582566261 2.471063824 3.228872974 2.227321575 2.99287 2.44497 3.58257 2.47106 3.22887 2.22732

6 2000 27.78749 0.3 100 10 1 20 1 1 881 886 887 898 906 4.88446 0.48949 3.32718 1.1566 3.92869 2.44496642 3.94852413 4.082837004 3.962944397 2.73138063 2.44497 3.94853 4.08284 3.96295 2.73138

6 2000 15.7214 0.3 100 10 1 20 1 1 750 752 878 879 884 1.90597 4.53578 2.67665 4.33582 2.22249 2.642048098 1.398670037 2.291466061 1.788297946 2.778810887 2.64204 1.39867 2.29147 1.7883 2.77881

7 2000 27.62471 0.3 100 10 1 20 1 1 748 750 879 880 883 885 1.98879 4.02282 2.74804 4.39916 2.22249 4.51807 3.174737847 2.374609715 2.847227654 2.838870107 2.778811478 2.8538911 3.17474 2.37461 2.84722 2.83887 2.77881 2.85389

9 2000 32.76518 0.3 100 10 1 20 1 1 748 830 880 881 884 886 897 906 2.02431 2.00271 2.00244 0.8515 4.51807 2.4024 2.70524 5.33498 3.084956271 3.086666718 3.731352492 3.582571577 2.85389379 3.327441729 3.500050689 2.2914668 3.08496 3.08667 3.73135 3.58257 2.85389 3.32744 3.50005 2.29147
8 2000 23.55791 0.3 100 10 1 20 1 1 882 885 887 888 889 897 906 0.48949 2.4024 3.83488 4.34983 2.16647 0.68123 5.79661 3.948534523 3.327439957 2.352856858 1.449249863 2.729637081 4.019496419 2.278989591 3.94852 3.32744 2.35286 1.44925 2.72964 4.0195 2.27899
7 2000 23.48171 0.3 100 10 1 20 1 1 455 457 829 882 886 888 3.03565 0.8698 2.15462 3.32718 3.83488 2.46946 1.421857118 2.403607591 1.70672073 4.08283845 2.352857038 2.07832882 1.42186 2.40361 1.70672 4.08284 2.35286 2.07833
5 2000 12.76183 0.3 100 10 1 20 1 1 457 886 887 889 3.78127 4.34983 2.46946 3.9464 1.718832859 1.449252514 2.078328927 1.922745738 1.71883 1.44925 2.07833 1.92275
7 2000 19.45663 0.3 100 10 1 20 1 1 457 459 886 888 890 897 0.04729 4.28283 2.16647 3.9464 2.76835 4.34338 2.651044462 1.71109441 2.729642183 1.922747274 2.463359593 2.564485347 2.65103 1.71109 2.72964 1.92275 2.46336 2.56449
8 2000 17.24018 0.3 100 10 1 20 1 1 459 461 463 889 891 896 897 0.07703 4.34055 0.60009 2.76835 3.38163 1.20215 3.73943 2.798132862 1.558407943 2.516113225 2.4633597 2.10897008 2.887003591 2.291463666 2.79814 1.55841 2.51611 2.46336 2.10897 2.887 2.29147
7 2000 16.26289 0.3 100 10 1 20 1 1 463 465 696 698 890 896 3.95501 0.47919 2.87818 1.0102 3.38163 3.98264 1.661778639 2.623323114 2.323529775 2.769719527 2.108969582 2.028575554 1.66178 2.62332 2.32353 2.76972 2.10897 2.02858
6 2000 6.40069 0.3 100 10 1 20 1 1 516 706 708 753 893 1.20781 1.70128 3.70229 4.47882 0.31593 1.854484017 2.06906118 0.7192449 0.806608206 2.424472148 1.85449 2.06906 0.71925 0.80661 2.42447
7 2000 10.35824 0.3 100 10 1 20 1 1 704 706 751 753 892 894 2.59627 3.92212 4.75787 1.06531 0.31593 0.81415 1.949730971 1.149705872 1.185893307 2.440451607 2.424471783 2.624919853 1.94973 1.1497 1.18589 2.44045 2.42447 2.62493
8 2000 15.01371 0.3 100 10 1 20 1 1 702 704 747 749 751 893 895 3.48323 3.38423 0.21126 5.02515 0.69796 0.81415 1.85937 1.785642301 1.6889689 3.148051695 1.607423194 2.761463304 2.624925857 2.84221652 1.78564 1.68897 3.14805 1.60742 2.76147 2.62492 2.84222
7 2000 17.8033 0.3 100 10 1 20 1 1 700 702 747 830 894 896 3.76444 2.05325 3.90747 0.99232 1.85937 3.86472 1.805013101 2.440911972 2.063769466 2.37996469 2.84221543 2.093138368 1.80501 2.44091 2.06377 2.37997 2.84222 2.09313
8 2000 19.90654 0.3 100 10 1 20 1 1 698 700 830 890 891 895 897 3.42447 0.64735 1.16343 1.20215 3.98264 3.86472 2.68448 2.19500108 2.714639909 2.96495344 2.887002352 2.028576369 2.093133136 2.775388246 2.195 2.71464 2.96496 2.887 2.02858 2.09314 2.77539
7 2000 24.87351 0.3 100 10 1 20 1 1 830 885 886 889 890 896 5.25656 2.70524 0.68123 4.34338 3.73943 2.68448 1.975165596 3.500047516 4.019499236 2.564486247 2.291466063 2.775389627 1.97517 3.50005 4.0195 2.56449 2.29146 2.77539
5 2000 27.24599 0.3 100 10 1 20 1 1 881 882 899 905 5.41794 1.1566 4.29514 4.38686 2.471060624 3.962947003 2.036758297 2.352853738 2.47106 3.96294 2.03676 2.35286
8 2000 20.73925 0.3 100 10 1 20 1 1 880 881 898 901 902 904 905 4.37513 0.56954 4.29514 1.36562 1.13504 3.07059 2.81302 1.90661332 3.22886531 2.036758023 3.210423277 3.207461957 2.380964333 2.564484974 1.90662 3.22887 2.03676 3.21042 3.20747 2.38096 2.56449
5 2000 12.4154 0.3 100 10 1 20 1 1 504 506 901 905 3.78479 0.21621 2.84678 3.08565 1.316118213 2.484421289 2.027404748 2.311086063 1.31612 2.48442 2.0274 2.31108
6 2000 16.83605 0.3 100 10 1 20 1 1 506 899 900 902 905 4.09896 1.36562 2.84678 3.84534 3.92151 1.59711234 3.210424824 2.027403925 2.359914048 2.013295341 1.59711 3.21042 2.0274 2.35991 2.01329
8 2000 16.25993 0.3 100 10 1 20 1 1 506 508 510 899 901 903 904 0.07116 4.26237 0.08737 1.13504 3.84534 2.74744 3.7186 2.688867677 1.467407952 2.466480267 3.207465214 2.359913607 2.009748886 2.049551635 2.68886 1.46741 2.46648 3.20746 2.35991 2.00975 2.04955
7 2000 16.02336 0.3 100 10 1 20 1 1 510 512 878 879 902 904 4.1929 1.9627 1.01019 2.89172 2.74744 2.60108 1.320008628 2.484107484 3.1393281 2.52903739 2.009748942 2.164566629 1.32 2.48411 3.13933 2.52904 2.00975 2.16457

6 2000 18.32986 0.3 100 10 1 20 1 1 879 880 899 902 903 3.8543 3.39369 3.07059 3.7186 2.60108 2.179879838 2.267490012 2.380961539 2.049551671 2.164567428 2.17988 2.26749 2.38096 2.04955 2.16457
5 2000 22.13667 0.3 100 10 1 20 1 1 898 899 900 901 4.38686 2.81302 3.08565 3.92151 2.352858063 2.564488108 2.311081 2.013292733 2.35285 2.56448 2.31109 2.0133
5 2000 23.42052 0.3 100 10 1 20 1 1 881 882 885 886 4.79276 3.92869 5.33498 5.79661 2.227321118 2.731380524 2.291465511 2.278987616 2.22732 2.73138 2.29147 2.27899
5 2000 14.03461 0.3 100 10 1 20 1 1 857 870 919 923 3.58374 3.51509 0.41994 2.41559 2.009750088 1.821210658 3.119585508 3.129473183 2.00975 1.82121 3.11959 3.12947
4 2000 37.54318 0.3 100 10 1 20 1 1 909 914 922 4.68289 2.10375 4.96984 3.173951181 3.171705492 2.623110371 3.17395 3.1717 2.62311
5 2000 34.83517 0.3 100 10 1 20 1 1 872 908 910 914 4.55683 4.68289 3.03096 4.22279 3.320294742 3.173951568 2.908322808 2.420548203 3.32029 3.17395 2.90832 2.42055
8 2000 24.18502 0.3 100 10 1 20 1 1 872 873 874 909 911 914 915 1.14667 4.5488 1.9674 3.03096 2.20991 3.6982 2.0737 3.288655474 1.973964804 2.702524661 2.908319496 3.040130544 2.352852919 2.926240227 3.28866 1.97396 2.70252 2.90832 3.04013 2.35286 2.92624
7 2000 22.4908 0.3 100 10 1 20 1 1 874 875 910 912 915 916 3.34932 2.50643 2.20991 3.47912 3.93625 2.32726 2.371966047 2.397869088 3.040130176 2.223049355 2.561706746 2.78905344 2.37197 2.39787 3.04013 2.22305 2.5617 2.78905
7 2000 20.26919 0.3 100 10 1 20 1 1 875 876 911 913 916 917 2.29428 2.53784 3.47912 3.7142 3.04399 1.86322 2.468177311 2.424470048 2.223048724 2.244321319 2.447882154 2.791608479 2.46818 2.42447 2.22305 2.24432 2.44788 2.79161
8 2000 20.99836 0.3 100 10 1 20 1 1 714 758 876 877 912 917 918 2.47727 0.82868 1.63388 3.29972 3.7142 1.98678 3.2038 2.675478414 2.774855041 2.497840701 2.078331296 2.24432277 2.84221493 2.54309003 2.67548 2.77485 2.49784 2.07833 2.24432 2.84221 2.54309
6 2000 22.68671 0.3 100 10 1 20 1 1 908 909 910 915 922 2.10375 4.22279 3.6982 4.30691 4.04886 3.17170409 2.420549687 2.352858881 2.215555357 2.528096035 3.17171 2.42055 2.35285 2.21555 2.5281
7 2000 24.60145 0.3 100 10 1 20 1 1 910 911 914 916 921 922 2.0737 3.93625 4.30691 2.8595 4.21314 1.48514 2.926241285 2.561704875 2.21555347 2.833842589 2.530914828 3.193353411 2.92624 2.56171 2.21556 2.83384 2.53091 3.19336
7 2000 22.1686 0.3 100 10 1 20 1 1 911 912 915 917 920 921 2.32726 3.04399 2.8595 4.17729 2.9205 2.34668 2.789050205 2.447878507 2.833843694 1.931377804 2.550551249 2.887002964 2.78905 2.44788 2.83384 1.93138 2.55055 2.887
7 2000 21.49561 0.3 100 10 1 20 1 1 912 913 916 918 919 920 1.86322 1.98678 4.17729 3.87145 2.81521 2.94138 2.791605937 2.842209618 1.931377788 2.159072056 2.745263984 2.715680246 2.79161 2.84221 1.93138 2.15907 2.74526 2.71568
7 2000 17.55406 0.3 100 10 1 20 1 1 714 716 718 913 917 919 1.17949 4.19892 0.97719 3.2038 3.87145 2.75249 2.708623084 1.551441398 2.49570295 2.543085927 2.159069531 2.344762523 2.70863 1.55144 2.4957 2.54309 2.15907 2.34476
8 2000 19.15484 0.3 100 10 1 20 1 1 718 857 907 917 918 920 923 2.84325 2.36392 0.41994 2.81521 2.75249 0.72637 5.28164 1.781729888 2.009748765 3.119591186 2.745263546 2.344764484 3.327442231 2.003825486 1.78173 2.00975 3.11959 2.74526 2.34476 3.32744 2.00383
7 2000 22.71493 0.3 100 10 1 20 1 1 916 917 919 921 923 1106 2.9205 2.94138 0.72637 2.42683 4.8725 4.71512 2.550554518 2.715681174 3.327440917 2.412683487 2.561703331 1.959464462 2.55055 2.71568 3.32744 2.41268 2.56171 1.95946
6 2000 25.4142 0.3 100 10 1 20 1 1 915 916 920 922 1106 4.21314 2.34668 2.42683 4.99925 5.3713 2.530914093 2.887004577 2.412683487 3.003173893 1.916555779 2.53091 2.887 2.41268 3.00317 1.91656
5 2000 30.5611 0.3 100 10 1 20 1 1 908 914 915 921 4.96984 4.04886 1.48514 4.99925 2.623111889 2.528101728 3.193356499 3.003173308 2.62311 2.5281 3.19335 3.00317
5 2000 21.47302 0.3 100 10 1 20 1 1 907 919 920 1106 2.41559 5.28164 4.8725 0.30117 3.129471967 2.003830604 2.561706956 3.616894581 3.12947 2.00383 2.5617 3.61689
7 2000 7.29504 0.3 100 10 1 20 1 1 587 589 722 724 925 928 2.97088 0.73902 2.4705 0.94439 2.32528 1.18765 0.431620389 2.162463504 0.890159583 2.194103708 2.028573012 2.291467426 0.43162 2.16246 0.89017 2.19411 2.02858 2.29146
7 2000 12.36608 0.3 100 10 1 20 1 1 724 726 924 926 928 929 4.22738 0.11086 2.32528 1.88514 2.47931 2.74543 1.084872965 2.547679755 2.028578912 2.291466905 2.141393874 2.009748367 1.08488 2.54768 2.02857 2.29147 2.14139 2.00975
7 2000 12.9008 0.3 100 10 1 20 1 1 726 728 925 927 929 930 4.54535 0.32187 1.88514 1.39504 2.81325 3.27749 1.238688887 2.62538458 2.291470168 2.551480572 1.906613993 1.856100733 1.23869 2.62538 2.29147 2.55148 1.90662 1.8561
6 2000 12.24366 0.3 100 10 1 20 1 1 444 728 926 930 931 3.01185 4.33803 1.39504 2.58871 2.48794 1.688603947 1.058260133 2.551479358 2.291468509 2.138059061 1.68861 1.05825 2.55148 2.29147 2.13806
7 2000 12.59146 0.3 100 10 1 20 1 1 589 591 924 925 929 932 4.10021 0.76501 1.18765 2.47931 2.75221 2.5357 0.964650479 2.216840093 2.291463677 2.14138675 2.206957837 2.14028395 0.96465 2.21684 2.29147 2.14139 2.20696 2.14028

7 2000 18.06785 0.3 100 10 1 20 1 1 925 926 928 930 932 933 2.74543 2.81325 2.75221 2.42444 2.44157 2.71557 2.009745791 1.906616707 2.206961969 2.210190253 2.702525259 2.6599904 2.00975 1.90661 2.20696 2.21018 2.70252 2.65999

6 2000 18.64656 0.3 100 10 1 20 1 1 926 927 929 931 933 3.27749 2.58871 2.42444 4.01506 4.542 1.8561014 2.291466495 2.210184518 2.368955991 2.291464489 1.8561 2.29147 2.21019 2.36896 2.29147

8 2000 19.04353 0.3 100 10 1 20 1 1 444 446 927 930 933 934 935 1.67129 3.63154 2.48794 4.01506 0.60449 3.31667 0.98712 2.181058935 1.627410016 2.138062099 2.368958482 3.642418056 2.444966754 3.434259719 2.18106 1.62741 2.13806 2.36896 3.64243 2.44497 3.43426

8 2000 17.07841 0.3 100 10 1 20 1 1 591 593 928 929 933 936 937 3.91004 0.8057 2.5357 2.44157 1.859 1.28434 2.70583 1.227613303 2.330732427 2.140282105 2.702523597 3.036219139 2.909132487 2.2443197 1.22761 2.33073 2.14028 2.70253 3.03622 2.90914 2.24432

7 2000 23.11063 0.3 100 10 1 20 1 1 929 930 931 932 935 936 2.71557 4.542 0.60449 1.859 3.81531 5.37112 2.659990856 2.291466623 3.642425096 3.036221645 3.003172421 1.728849489 2.65999 2.29146 3.64242 3.03622 3.00317 1.72885

7 2000 16.76585 0.3 100 10 1 20 1 1 446 448 740 931 935 940 1.38037 4.27535 1.00773 3.31667 5.33043 1.16643 2.360435943 1.448204325 2.72668092 2.444966086 1.875199811 2.76853136 2.36043 1.4482 2.72668 2.44497 1.8752 2.76853

7 2000 22.91416 0.3 100 10 1 20 1 1 931 933 934 936 940 945 0.98712 3.81531 5.33043 1.62287 1.99135 5.22789 3.434262554 3.003174651 1.87519801 3.239891052 2.849722881 1.922748409 3.43426 3.00317 1.8752 3.23989 2.84973 1.92275

7 2000 18.60407 0.3 100 10 1 20 1 1 932 933 935 937 944 945 1.28434 5.37112 1.62287 3.81078 4.32027 0.80835 2.909140386 1.728850161 3.239891052 1.989554783 2.003827542 3.326726198 2.90913 1.72885 3.23989 1.98955 2.00383 3.32672

7 2000 13.69562 0.3 100 10 1 20 1 1 593 595 932 936 938 944 3.86838 0.88161 2.70583 3.81078 2.95995 0.29055 1.353319835 2.28069546 2.244318775 1.989549017 1.941193822 2.564490235 1.35332 2.2807 2.24432 1.98955 1.9412 2.56449

6 2000 13.12701 0.3 100 10 1 20 1 1 595 597 937 939 944 3.70977 0.35138 2.95995 3.17269 4.31376 1.621434971 2.608670417 1.94119586 2.164572297 1.555218186 1.62144 2.60867 1.94119 2.16457 1.55522

6 2000 18.5456 0.3 100 10 1 20 1 1 597 854 938 944 949 3.08785 1.067 3.17269 0.75691 4.44234 1.673083123 1.896614477 2.164565469 2.744394554 2.509230869 1.67309 1.89662 2.16457 2.74441 2.50923

9 2000 12.16647 0.3 100 10 1 20 1 1 351 739 740 934 935 945 946 950 0.32827 1.79874 2.72716 1.16643 1.99135 2.11016 2.75967 0.50719 0.519084957 0.54871142 0.540010948 2.768531016 2.84972942 2.915666117 1.861213684 2.976950539 0.51909 0.54872 0.54001 2.76853 2.84972 2.91567 1.86121 2.97695

6 2000 12.07156 0.3 100 10 1 20 1 1 360 667 738 745 746 0.35747 2.20742 1.38272 1.58187 3.83233 0.600889064 3.368335232 4.936053587 0.679506436 0.560703735 0.60089 3.36832 4.93605 0.6795 0.5607

5 2000 4.88248 0.3 100 10 1 20 1 1 350 737 738 1109 0.36241 2.0247 2.12408 1.76385 0.668326249 0.622312345 0.748534343 1.856098263 0.66833 0.62232 0.74853 1.8561

6 2000 5.81433 0.3 100 10 1 20 1 1 152 549 550 1010 1111 0.33364 1.88562 2.51561 1.76495 0.24503 0.656758064 0.69843883 0.655214225 2.447882812 2.009740616 0.65675 0.69843 0.65521 2.44788 2.00976

7 2000 16.98999 0.3 100 10 1 20 1 1 936 937 938 939 945 949 4.32027 0.29055 4.31376 0.75691 2.98947 3.64698 2.003830512 2.564485148 1.555218245 2.744405959 2.62310951 2.179879379 2.00383 2.56449 1.55522 2.74439 2.62311 2.17988

7 2000 20.43072 0.3 100 10 1 20 1 1 935 936 940 944 949 950 5.22789 0.80835 2.11016 2.98947 2.51874 3.94624 1.922748354 3.326724177 2.91566502 2.623109492 2.371962429 2.065713774 1.92275 3.32673 2.91567 2.62311 2.37197 2.06572

7 2000 14.49373 0.3 100 10 1 20 1 1 452 454 739 940 947 950 2.89487 0.03128 1.31743 2.75967 4.41198 3.90435 2.054437463 2.921891566 1.891717796 1.861213684 1.677233586 2.028573594 2.05444 2.92189 1.89172 1.86121 1.67723 2.02858

5 2000 14.12916 0.3 100 10 1 20 1 1 454 946 948 950 3.17043 4.41198 1.05873 1.55874 2.375565029 1.677229717 3.040126346 2.624916334 2.37556 1.67723 3.04013 2.62492

4 2000 11.65015 0.3 100 10 1 20 1 1 947 949 950 1.05873 4.05784 4.20155 3.040127282 2.096537237 1.695546577 3.04013 2.09654 1.69555

6 2000 20.94164 0.3 100 10 1 20 1 1 939 944 945 948 950 4.44234 3.64698 2.51874 4.05784 1.94897 2.509230504 2.179884641 2.371966841 2.096542022 2.275860625 2.50923 2.17988 2.37196 2.09654 2.27586

7 2000 16.61655 0.3 100 10 1 20 1 1 940 945 946 947 948 949 0.50719 3.94624 3.90435 1.55874 4.20155 1.94897 2.976953531 2.065719477 2.028578331 2.624923861 1.695547957 2.275857107 2.97695 2.06571 2.02857 2.62492 1.69555 2.27586

7 2000 11.56787 0.3 100 10 1 20 1 1 533 535 585 721 723 952 4.30305 1.56774 0.51791 1.59442 4.28004 1.5551 1.202222242 2.228058053 2.596475674 2.375011275 1.30513156 2.412686033 1.20222 2.22805 2.59647 2.37501 1.30513 2.41268

8 2000 13.0319 0.3 100 10 1 20 1 1 535 537 723 725 951 953 954 3.56925 0.27086 0.76033 4.24493 1.5551 2.99701 0.82494 1.668433419 2.285411484 2.540160889 1.412550729 2.412684756 1.915318936 2.509225785 1.66844 2.2854 2.54016 1.41255 2.41269 1.91532 2.50923

5 2000 8.66723 0.3 100 10 1 20 1 1 440 537 952 954 3.01049 3.59196 2.99701 2.31713 1.196563645 0.944612033 1.915320361 1.984768364 1.19656 0.94461 1.91532 1.98477

7 2000 8.71768 0.3 100 10 1 20 1 1 440 442 725 727 952 953 1.28504 2.34044 1.38554 3.37193 0.82494 2.31713 2.04345688 1.198412278 2.299434336 0.637538483 2.509230553 1.984767728 2.04345 1.19841 2.29943 0.63754 2.50923 1.98477

7 2000 12.94231 0.3 100 10 1 20 1 1 532 534 583 956 959 960 0.24037 4.17611 2.20603 2.46643 1.36271 3.72782 2.337101177 1.230285128 2.208656335 2.15907206 2.411693623 1.797574113 2.33711 1.23028 2.20866 2.15907 2.4117 1.79757

7 2000 12.18649 0.3 100 10 1 20 1 1 534 536 955 957 958 959 0.1552 3.42248 2.46643 2.61568 1.25198 3.72646 2.497280011 1.481536756 2.159071354 1.723342896 2.29146283 1.667283552 2.49728 1.48153 2.15907 1.72334 2.29147 1.66729

7 2000 10.07391 0.3 100 10 1 20 1 1 436 438 536 538 956 958 0.72714 1.95021 1.3936 2.75261 2.61568 2.82685 2.058356654 1.60369929 1.979007034 1.295104577 1.723342896 1.660142605 2.05836 1.6037 1.97901 1.29511 1.72334 1.66015

7 2000 11.96065 0.3 100 10 1 20 1 1 434 436 956 957 959 963 0.62858 3.76769 1.25198 2.82685 2.15993 2.77337 2.226378704 1.055909033 2.29146667 1.660149016 2.421527203 2.073753417 2.22638 1.05591 2.29146 1.66014 2.42153 2.07375

7 2000 16.62244 0.3 100 10 1 20 1 1 955 956 958 960 962 963 1.36271 3.72646 2.15993 3.25761 4.28373 1.00235 2.411701463 1.667287398 2.421529529 2.273773159 1.960681745 2.702523437 2.41169 1.66728 2.42153 2.27377 1.96068 2.70253

7 2000 14.31871 0.3 100 10 1 20 1 1 581 583 955 959 961 962 4.15095 0.28622 3.72782 3.25761 3.4366 0.24113 1.390152989 2.598958458 1.797573691 2.273769808 2.11459595 3.102024841 1.39015 2.59895 1.79757 2.27377 2.11459 3.10202

7 2000 14.14353 0.3 100 10 1 20 1 1 577 579 581 960 962 965 0.41822 4.22632 0.18837 3.4366 3.37138 3.25325 2.278955936 0.979760251 2.373183702 2.114593711 2.595796024 2.068008423 2.27896 0.97976 2.37319 2.1146 2.5958 2.06802

8 2000 17.74456 0.3 100 10 1 20 1 1 959 960 961 963 964 965 966 4.28373 0.24113 3.37138 3.36013 1.52585 0.08378 3.43992 1.960681506 3.102018738 2.595796672 2.00974729 2.317243504 3.00316751 2.0495512 1.96068 3.10202 2.5958 2.00975 2.31724 3.00318 2.04955

7 2000 13.30185 0.3 100 10 1 20 1 1 432 434 958 959 962 964 0.91848 3.96453 2.77337 1.00235 3.36013 2.15243 2.30847033 1.131344604 2.073751499 2.702525427 2.009750538 2.223048322 2.30848 1.13135 2.07375 2.70252 2.00975 2.22305

7 2000 13.63337 0.3 100 10 1 20 1 1 430 432 962 963 966 968 0.26431 3.81717 1.52585 2.15243 3.98237 2.71337 2.481418951 1.543222313 2.317239048 2.22304881 1.598907377 2.223049542 2.48142 1.54322 2.31724 2.22305 1.59891 2.22305

7 2000 13.80318 0.3 100 10 1 20 1 1 577 961 962 966 967 969 3.9889 3.25325 0.08378 4.46197 2.74268 0.39035 1.261690907 2.068016052 3.00317956 1.892859055 2.206960305 2.806039257 1.26169 2.06801 3.00317 1.89286 2.20696 2.80604

6 2000 15.06495 0.3 100 10 1 20 1 1 962 964 965 968 969 3.43992 3.98237 4.46197 0.27595 3.40232 2.049545559 1.598905074 1.892857962 2.745265923 2.206959686 2.04955 1.59891 1.89286 2.74526 2.20696

6 2000 11.99661 0.3 100 10 1 20 1 1 575 577 965 969 970 4.06784 0.12416 2.74268 4.14197 2.95946 1.010683828 2.40417416 2.206960566 1.892859838 1.922747427 1.01069 2.40417 2.20696 1.89286 1.92275

7 2000 12.07557 0.3 100 10 1 20 1 1 428 430 964 966 969 971 0.56716 4.16665 2.71337 0.27595 3.56691 2.53265 2.17817919 1.092394342 2.223049482 2.74526223 1.881528607 1.920273893 2.17818 1.09239 2.22305 2.74527 1.88153 1.92028

8 2000 16.23732 0.3 100 10 1 20 1 1 965 966 967 968 970 971 972 0.39035 3.40232 4.14197 3.56691 0.08185 1.17359 2.87622 2.806039257 2.206961193 1.892857181 1.881526875 2.791603662 2.376968688 2.190750882 2.80604 2.20696 1.89286 1.88153 2.79161 2.37697 2.19075

7 2000 10.98015 0.3 100 10 1 20 1 1 573 575 967 969 972 973 4.22096 0.44267 2.95946 0.08185 3.63466 2.08863 0.795411994 2.131983038 1.922747438 2.791610754 1.961892164 2.206960129 0.79541 2.13198 1.92275 2.7916 1.96189 2.20696
7 2000 11.1759 0.3 100 10 1 20 1 1 426 428 968 969 972 974 0.07123 3.96429 2.53265 1.17359 3.44416 2.05238 2.384827064 1.131608676 1.920276134 2.37696922 1.65584459 2.114594111 2.38483 1.13161 1.92027 2.37697 1.65585 2.1146
7 2000 14.19744 0.3 100 10 1 20 1 1 969 970 971 973 974 975 2.87622 3.63466 3.44416 0.49894 1.38919 2.67224 2.190753257 1.961891207 1.655849011 2.392909633 2.15797142 1.896618851 2.19075 1.96189 1.65584 2.3929 2.15797 1.89662
8 2000 9.98555 0.3 100 10 1 20 1 1 571 573 772 774 970 972 975 3.70754 0.11076 1.53134 1.04826 2.08863 0.49894 3.73801 1.157170911 2.351169305 2.003764014 2.00369016 2.206959677 2.392903324 1.189981815 1.15717 2.35117 2.00376 2.00369 2.20696 2.39291 1.18998
7 2000 10.10725 0.3 100 10 1 20 1 1 426 774 776 971 972 975 3.02745 0.78045 2.11436 2.05238 1.38919 3.00895 1.12562442 2.154938 1.418152207 2.114595543 2.157968001 1.591458978 1.12563 2.15493 1.41816 2.11459 2.15797 1.59146
5 2000 9.32441 0.3 100 10 1 20 1 1 774 972 973 974 2.92039 2.67224 3.73801 3.00895 1.487411237 1.896618136 1.189982425 1.591459008 1.48741 1.89662 1.18998 1.59146
6 2000 7.09644 0.3 100 10 1 20 1 1 422 424 483 773 977 0.8261 2.15714 3.04995 3.01318 1.58683 2.039835793 1.996705245 0.921526663 1.095242015 1.316977811 2.03983 1.9967 0.92152 1.09524 1.31698
14 2000 7.19479 0.3 100 10 1 20 1 1 67 68 91 92 393 394 481 482 483 484 771 773 976 0.23182 0.19583 0.23222 0.19595 0.10184 0.08854 2.19408 0.26322 1.25462 0.21507 2.34059 1.71079 1.58683 1.240230623 1.571460275 1.242041221 1.572870028 1.446719752 1.645639713 1.131546758 1.360744321 1.487189763 1.668221969 1.328642693 1.542872052 1.316978407 1.24024 1.57147 1.24201 1.57289 1.44672 1.64565 1.13155 1.36073 1.48719 1.66819 1.32864 1.54287 1.31698
8 2000 17.06446 0.3 100 10 1 20 1 1 418 420 482 484 565 567 979 0.79201 4.05965 0.83826 3.56688 3.70747 0.53143 2.42058 2.730302518 1.696793945 2.732132289 1.968279821 2.15852596 2.774793376 2.598538982 2.7303 1.6968 2.73214 1.96828 2.15853 2.7748 2.59854
8 2000 15.18205 0.3 100 10 1 20 1 1 416 418 561 563 565 978 980 0.66961 3.86668 0.10543 4.22592 0.98315 2.42058 2.93966 2.462767138 1.871894171 2.530566737 1.508900147 2.656237533 2.598539733 2.018007319 2.46276 1.8719 2.53057 1.5089 2.65623 2.59854 2.01801
6 2000 11.99946 0.3 100 10 1 20 1 1 414 416 561 979 981 0.82413 3.83934 3.91224 2.93966 2.26431 2.297138094 1.453240423 1.507685645 2.018007939 2.073750619 2.29714 1.45323 1.50769 2.01801 2.07375
7 2000 10.28558 0.3 100 10 1 20 1 1 412 414 559 561 980 982 0.2852 3.81045 3.89528 0.47424 2.26431 2.18909 2.258034059 1.309347791 1.237117105 2.385494034 2.073751825 1.960680096 2.25804 1.30935 1.23712 2.38549 2.07375 1.96068
7 2000 8.98745 0.3 100 10 1 20 1 1 410 412 557 559 981 983 0.93363 4.09301 4.02589 0.63391 2.18909 0.59707 2.263376449 0.977083036 1.178917412 2.216434552 1.960679391 2.376965875 2.26338 0.97708 1.17892 2.21644 1.96068 2.37697
7 2000 7.2568 0.3 100 10 1 20 1 1 408 410 555 557 982 984 1.23314 4.10577 4.13613 0.76526 0.59707 0.87879 1.992690331 0.938165497 0.787076455 2.268262061 2.37696877 2.041419041 1.99269 0.93816 0.78708 2.26826 2.37697 2.04142
6 2000 5.28872 0.3 100 10 1 20 1 1 406 408 553 555 983 1.47516 3.96274 4.06487 0.28215 0.87879 1.982665759 0.654769943 0.653421271 2.154792656 2.041420295 1.98267 0.65477 0.65342 2.15479 2.04142
6 2000 3.75207 0.3 100 10 1 20 1 1 153 551 552 986 1160 0.33143 0.85291 1.74093 0.85933 1.37143 0.667358703 0.699002359 0.675773719 1.10509297 1.819904309 0.66736 0.699 0.67577 1.10509 1.81991
7 2000 2.88952 0.3 100 10 1 20 1 1 1 405 406 551 985 1036 0.33192 1.71291 0.74813 0.64747 0.85933 0.28096 0.762184232 0.779052874 0.780982371 1.066264533 1.105094237 1.772291278 0.76218 0.77905 0.78098 1.06626 1.10509 1.77228
6 2000 5.19965 0.3 100 10 1 20 1 1 203 599 600 1126 1136 0.33065 2.00866 2.23854 1.50211 0.32077 0.671692549 0.695868703 0.687513236 2.283156494 1.98955145 0.67169 0.69587 0.68751 2.28316 1.98955
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8 2000 5.63647 0.3 100 10 1 20 1 1 398 779 780 990 992 993 1084 0.33219 1.88226 1.3852 2.92278 1.0833 0.5647 1.66856 0.766558997 0.779183494 0.789388722 1.034009813 1.973960235 2.376963284 1.171876264 0.76656 0.77918 0.78939 1.03401 1.97397 2.37697 1.17188
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8 2000 14.71719 0.3 100 10 1 20 1 1 487 489 777 779 989 991 993 0.08102 3.91618 0.10624 3.23565 1.0833 3.27816 3.36764 2.717608343 1.947654505 2.658455963 1.656910906 1.973966147 2.138058882 2.018006123 2.7176 1.94765 2.65846 1.65691 1.97396 2.13806 2.01801
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9 2000 24.22282 0.3 100 10 1 20 1 1 647 990 993 994 995 1001 1004 1019 2.66161 0.39996 1.03871 4.80989 0.42191 3.70242 3.50035 2.14994 2.814246064 3.110436643 3.206721056 2.140279707 3.231075138 2.609492245 2.505439558 2.92624144 2.81425 3.11044 3.20672 2.14028 3.23108 2.60949 2.50544 2.92624
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7 2000 23.31269 0.3 100 10 1 20 1 1 996 997 1001 1003 1020 1021 3.74593 1.06326 4.40645 4.26613 3.43289 1.62243 2.662667765 3.177693344 2.206957638 2.258045635 2.633956096 3.003175782 2.66267 3.17769 2.20696 2.25804 2.63396 3.00317
5 2000 23.19834 0.3 100 10 1 20 1 1 997 998 1002 1021 3.18909 2.65992 4.26613 4.72264 2.573733198 2.842212505 2.258042523 2.096543068 2.57374 2.84222 2.25805 2.09654
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8 2000 16.29108 0.3 100 10 1 20 1 1 546 548 655 657 1007 1009 1011 3.1541 0.07339 0.38344 4.0113 2.86539 4.10106 1.15169 2.165084417 2.905041995 2.820550541 1.72349188 2.376965817 1.881528987 2.620392161 2.16509 2.90503 2.82055 1.72349 2.37697 1.88153 2.62039
5 2000 16.32916 0.3 100 10 1 20 1 1 548 1008 1010 1011 3.94252 4.10106 4.52645 3.66821 2.109207347 1.881525935 1.906616409 2.179880321 2.10921 1.88153 1.90662 2.17988

7 2000 24.19043 0.3 100 10 1 20 1 1 548 550 943 1009 1011 1012 0.32506 3.0528 1.76495 4.52645 1.44265 4.98649 2.864115501 2.212428072 2.447876344 1.90661595 3.040132532 2.744399113 2.86412 2.21243 2.44788 1.90662 3.04013 2.74439
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5 2000 21.64443 0.3 100 10 1 20 1 1 1010 1011 1014 1018 4.98649 0.97409 3.33813 3.81102 2.744392857 3.269820029 2.07260814 1.975169699 2.7444 3.26982 2.07261 1.97517
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5 2000 21.89684 0.3 100 10 1 20 1 1 1012 1016 1017 1018 3.33813 3.6793 2.48029 3.96321 2.072605373 2.765098428 2.842215304 1.931376232 2.07261 2.7651 2.84221 1.93138
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5 2000 23.46311 0.3 100 10 1 20 1 1 1014 1017 1020 1021 3.6793 4.75971 1.27809 4.63272 2.765095155 1.678650335 2.872976694 2.505437433 2.7651 1.67865 2.87298 2.50544
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6 2000 19.26734 0.3 100 10 1 20 1 1 1011 1012 1013 1014 1017 3.77689 3.81102 4.5914 3.96321 1.25854 2.428388202 1.975168393 2.179876702 1.931376092 3.315278656 2.42839 1.97517 2.17988 1.93138 3.31528
7 2000 21.78509 0.3 100 10 1 20 1 1 1000 1001 1004 1005 1015 1020 2.14994 3.2822 3.74587 0.49728 4.54992 3.66984 2.92623711 2.583870473 2.528094897 3.156685127 2.027403198 2.325433136 2.92624 2.58387 2.5281 3.15669 2.02741 2.32543
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5 2000 23.0693 0.3 100 10 1 20 1 1 1002 1003 1016 1020 1.62243 4.72264 4.63272 2.69585 3.003173301 2.09654045 2.505438642 3.009495644 3.00318 2.09654 2.50544 3.0095
7 2000 17.46726 0.3 100 10 1 20 1 1 419 486 488 1023 1030 1037 4.02184 1.67176 3.56409 1.30009 2.38275 3.07529 1.453876838 2.387614791 2.405209405 3.245021218 2.179882079 2.312111385 1.45388 2.38761 2.40521 3.24502 2.17988 2.31211
7 2000 19.5605 0.3 100 10 1 20 1 1 488 490 1022 1024 1037 1038 1.66333 4.1112 1.30009 3.9563 3.05854 2.83952 2.951359946 2.027092468 3.245016565 1.875203657 2.543088259 2.275860498 2.95136 2.0271 3.24502 1.8752 2.54309 2.27586
7 2000 18.03895 0.3 100 10 1 20 1 1 490 492 1023 1025 1038 1039 0.26927 3.61682 3.9563 3.98895 2.8204 1.87395 2.821182333 2.140570625 1.875200329 1.941196972 2.536534728 2.806887215 2.82119 2.14057 1.8752 1.94119 2.53654 2.80688
6 2000 17.72075 0.3 100 10 1 20 1 1 492 494 1024 1026 1039 0.91356 3.38188 3.98895 4.10969 4.14708 2.74343479 2.255136462 1.941191631 2.140283719 2.114595794 2.74344 2.25514 1.9412 2.14028 2.11459
7 2000 20.45785 0.3 100 10 1 20 1 1 494 496 1025 1027 1039 1040 1.26466 3.51533 4.10969 3.4776 0.55132 4.61293 2.753722954 2.283390027 2.140282338 2.505439689 3.114257037 2.206958003 2.75373 2.28339 2.14028 2.50544 3.11425 2.20696
7 2000 22.14009 0.3 100 10 1 20 1 1 496 498 1026 1028 1040 1041 1.2696 4.30854 3.4776 4.18561 2.03758 2.73924 2.761245384 1.953875398 2.505435862 2.190751465 3.157440237 2.935157745 2.76125 1.95388 2.50544 2.19075 3.15744 2.93516
7 2000 21.43957 0.3 100 10 1 20 1 1 498 500 1027 1029 1041 1042 0.0349 4.0476 4.18561 4.3869 3.58178 1.70516 3.038780303 2.328295731 2.190750813 2.273773798 2.509229132 3.059607295 3.03878 2.3283 2.19075 2.27377 2.50923 3.05961
7 2000 28.38005 0.3 100 10 1 20 1 1 500 502 999 1028 1042 1043 0.37668 4.01762 0.91167 4.3869 3.62143 3.02322 3.109033754 2.312617249 2.719175381 2.27377056 2.81364863 3.477574271 3.10903 2.31262 2.71918 2.27377 2.81365 3.47757
7 2000 14.40441 0.3 100 10 1 20 1 1 417 419 1022 1031 1037 1044 4.22156 0.31164 2.38275 2.70376 3.85241 1.3879 1.478353775 2.527161157 2.179878563 2.317243314 1.723346308 2.652833613 1.47835 2.52716 2.17988 2.31724 1.72335 2.65283
7 2000 15.13857 0.3 100 10 1 20 1 1 413 415 417 1030 1032 1044 0.71841 4.25962 0.04932 2.70376 3.4005 4.40562 2.402772002 1.338088292 2.608642207 2.317240996 2.225186145 2.018006052 2.40277 1.33809 2.60861 2.31724 2.22519 2.01801
7 2000 16.36576 0.3 100 10 1 20 1 1 411 413 1031 1033 1044 1051 0.50125 3.88873 3.4005 3.88267 0.10845 4.21674 2.387996129 1.465864676 2.225186528 1.961890836 3.213399998 2.443018617 2.38799 1.46586 2.22519 1.96189 3.21337 2.44302
7 2000 15.14294 0.3 100 10 1 20 1 1 409 411 1032 1034 1051 1058 0.18127 3.94152 3.88267 3.28719 0.05677 4.1939 2.531329366 1.475886582 1.96188952 2.138061087 3.187389771 2.189666012 2.53133 1.47588 1.96189 2.13806 3.1874 2.18966
8 2000 16.41038 0.3 100 10 1 20 1 1 407 409 1033 1035 1058 1063 1066 0.27493 4.14296 3.28719 3.43901 1.11302 3.18211 0.24727 2.483931223 1.417534569 2.138059156 2.114594869 2.856388205 2.52809423 2.99604494 2.48393 1.41753 2.13806 2.11459 2.85639 2.52809 2.99605
5 2000 13.69068 0.3 100 10 1 20 1 1 407 1034 1036 1066 3.90483 3.43901 3.43193 4.07139 1.423056502 2.114594792 1.856099783 2.009748119 1.42306 2.11459 1.8561 2.00975
6 2000 12.56037 0.3 100 10 1 20 1 1 405 407 986 1035 1066 3.25976 0.3259 0.28096 3.43193 2.44466 1.350368564 2.345456823 1.772277065 1.856100868 2.727026116 1.35037 2.34546 1.77229 1.8561 2.72703
6 2000 18.72236 0.3 100 10 1 20 1 1 1022 1023 1030 1038 1044 3.07529 3.05854 3.85241 3.71773 3.02588 2.312113078 2.543087693 1.723347112 2.253830043 2.4911722 2.31211 2.54309 1.72335 2.25383 2.49117
7 2000 23.28509 0.3 100 10 1 20 1 1 1023 1024 1037 1039 1044 1045 2.83952 2.8204 3.71773 2.52403 1.66571 4.75785 2.275860817 2.536539088 2.253832663 3.143864156 3.086667459 2.416620926 2.27586 2.53653 2.25383 3.14386 3.08666 2.41662
8 2000 26.24506 0.3 100 10 1 20 1 1 1024 1025 1026 1038 1040 1045 1046 1.87395 4.14708 0.55132 2.52403 3.22094 2.51392 4.48791 2.806881099 2.114593874 3.114250588 3.143861355 2.793308667 3.300911937 2.565413771 2.80689 2.1146 3.11426 3.14386 2.79331 3.30091 2.56541
7 2000 27.85242 0.3 100 10 1 20 1 1 1026 1027 1039 1041 1046 1047 4.61293 2.03758 3.22094 3.2734 2.71523 4.02976 2.206957991 3.157441792 2.793309359 3.204496478 3.005543906 2.839706285 2.20696 3.15744 2.79331 3.2045 3.00555 2.83971
7 2000 26.94382 0.3 100 10 1 20 1 1 1027 1028 1040 1042 1047 1048 2.73924 3.58178 3.2734 4.02304 1.82882 4.11964 2.935157425 2.509230405 3.204497066 2.471066405 3.2886544 2.528095142 2.93516 2.50923 3.2045 2.47107 3.28865 2.5281
7 2000 25.05155 0.3 100 10 1 20 1 1 1028 1029 1041 1043 1048 1049 1.70516 3.62143 4.02304 4.17644 1.54759 3.95804 3.059606906 2.813648368 2.471065066 2.471060524 3.146888518 2.416619309 3.05961 2.81365 2.47107 2.47106 3.14689 2.41662
5 2000 23.8562 0.3 100 10 1 20 1 1 1029 1042 1049 1050 3.02322 4.17644 2.67449 3.20828 3.477573027 2.471063925 2.813652261 2.70252237 3.47757 2.47106 2.81365 2.70252
8 2000 23.75705 0.3 100 10 1 20 1 1 1030 1031 1032 1037 1038 1045 1051 1.3879 4.40562 0.10845 3.02588 1.66571 3.47439 4.52647 2.65283347 2.018008424 3.213366687 2.491173381 3.086663992 2.964953857 2.565413411 2.65283 2.01801 3.2134 2.49117 3.08667 2.96496 2.56541
7 2000 30.48215 0.3 100 10 1 20 1 1 1038 1039 1044 1046 1051 1052 4.75785 2.51392 3.47439 2.71394 2.29934 5.19907 2.416619607 3.300914972 2.964957244 3.31456324 3.515627488 2.651936558 2.41662 3.30091 2.96495 3.31456 3.51563 2.65194
7 2000 29.30034 0.3 100 10 1 20 1 1 1039 1040 1045 1047 1052 1053 4.48791 2.71523 2.71394 3.75699 2.3814 4.33441 2.565414113 3.005546081 3.314562436 2.880410798 3.215600231 2.642063149 2.56541 3.00554 3.31456 2.88041 3.2156 2.64206
7 2000 28.07606 0.3 100 10 1 20 1 1 1040 1041 1046 1048 1053 1054 4.02976 1.82882 3.75699 4.46724 1.77866 4.24976 2.839706024 3.288654774 2.880411777 2.376967803 3.422478875 2.627636786 2.83971 3.28865 2.88041 2.37697 3.42248 2.62764
7 2000 26.76478 0.3 100 10 1 20 1 1 1041 1042 1047 1049 1054 1055 4.11964 1.54759 4.46724 3.57684 2.32438 3.54872 2.528096641 3.14688996 2.376965016 2.768528184 3.143864063 2.935156406 2.5281 3.14689 2.37697 2.76853 3.14387 2.93516
7 2000 27.41539 0.3 100 10 1 20 1 1 1042 1043 1048 1050 1055 1056 3.95804 2.67449 3.57684 3.23319 3.11554 3.00906 2.416619755 2.813647354 2.768532957 2.960946974 2.926239553 3.040130691 2.41662 2.81365 2.76853 2.96095 2.92624 3.04013
5 2000 21.38599 0.3 100 10 1 20 1 1 1043 1049 1056 1057 3.20828 3.23319 2.51987 3.27015 2.702522589 2.960946851 3.061156054 3.009495403 2.70252 2.96095 3.06116 3.0095

8 2000 29.42289 0.3 100 10 1 20 1 1 1032 1033 1044 1045 1052 1058 1059 4.21674 0.05677 4.52647 2.29934 2.56193 4.88852 2.03001 2.443022959 3.187403 2.565412578 3.515625653 3.645680354 2.436203402 3.654144123 2.44302 3.18739 2.56541 3.51563 3.64568 2.43621 3.65414
7 2000 29.2806 0.3 100 10 1 20 1 1 1045 1046 1051 1053 1059 1060 5.19907 2.3814 2.56193 4.1502 5.48752 1.10095 2.651936318 3.215599329 3.645680608 2.598541837 2.428390058 3.329582504 2.65194 3.2156 3.64568 2.59854 2.42839 3.32958
7 2000 26.43222 0.3 100 10 1 20 1 1 1046 1047 1052 1054 1060 1061 4.33441 1.77866 4.1502 3.31191 4.82456 1.26097 2.642063309 3.422480412 2.598541128 3.009496014 2.190751999 3.175449642 2.64206 3.42248 2.59854 3.0095 2.19075 3.17545
7 2000 29.25209 0.3 100 10 1 20 1 1 1047 1048 1053 1055 1061 1062 4.24976 2.32438 3.31191 4.0886 5.6494 1.16919 2.627636134 3.143867136 3.00949624 3.117301616 2.261197855 3.885446445 2.62764 3.14386 3.0095 3.1173 2.2612 3.88545
6 2000 30.4725 0.3 100 10 1 20 1 1 1048 1049 1054 1056 1062 3.54872 3.11554 4.0886 5.1118 5.43105 2.935156883 2.92623769 3.117302381 2.561706329 2.867182152 2.93516 2.92624 3.1173 2.5617 2.86718
6 2000 30.82822 0.3 100 10 1 20 1 1 1049 1050 1055 1057 1062 3.00906 2.51987 5.1118 7.70791 3.71747 3.040130548 3.061159751 2.561704523 1.778972498 3.955739966 3.04013 3.06116 2.56171 1.77897 3.95575
3 2000 31.58721 0.3 100 10 1 20 1 1 1050 1056 3.27015 7.70791 3.009496857 1.778972016 3.0095 1.77897
6 2000 23.86978 0.3 100 10 1 20 1 1 1033 1034 1051 1059 1063 4.1939 1.11302 4.88852 3.80309 5.24817 2.189664227 2.856385228 2.436205662 3.260359877 2.108968185 2.18967 2.85639 2.4362 3.26036 2.10897
7 2000 30.28307 0.3 100 10 1 20 1 1 1051 1052 1058 1060 1063 1064 2.03001 5.48752 3.80309 4.04194 0.17038 6.02092 3.654141913 2.428390177 3.260356791 3.051829548 3.816343941 2.397867185 3.65414 2.42839 3.26036 3.05183 3.81634 2.39787
7 2000 27.5973 0.3 100 10 1 20 1 1 1052 1053 1059 1061 1064 1065 1.10095 4.82456 4.04194 4.78425 0.55446 5.14539 3.329583433 2.190752792 3.05183354 2.485444529 3.881166132 2.833842093 3.32958 2.19075 3.05183 2.48544 3.88116 2.83384
6 2000 38.76344 0.3 100 10 1 20 1 1 1053 1054 1060 1062 1065 1.26097 5.6494 4.78425 6.22977 4.35318 3.175446798 2.261198047 2.485444032 3.48848863 3.736443025 3.17545 2.2612 2.48544 3.48849 3.73644
5 2000 39.35589 0.3 100 10 1 20 1 1 1054 1055 1056 1061 1.16919 5.43105 3.71747 6.22977 3.885446063 2.867182372 3.955747606 3.488486623 3.88545 2.86718 3.95574 3.48849
7 2000 22.48325 0.3 100 10 1 20 1 1 1034 1058 1059 1064 1066 1067 3.18211 5.24817 0.17038 3.85952 4.2879 1.82252 2.528093807 2.108968858 3.816341016 2.986514564 1.988354708 2.826287273 2.52809 2.10897 3.81634 2.98651 1.98836 2.82629
6 2000 33.44131 0.3 100 10 1 20 1 1 1059 1060 1063 1065 1067 6.02092 0.55446 3.85952 6.03937 5.37965 2.397865003 3.881160556 2.986512235 3.082817343 2.84221365 2.39787 3.88117 2.98651 3.08281 2.84222
4 2000 33.78405 0.3 100 10 1 20 1 1 1060 1061 1064 5.14539 4.35318 6.03937 2.833841021 3.736436986 3.082814433 2.83384 3.73644 3.08282
6 2000 19.95977 0.3 100 10 1 20 1 1 1034 1035 1036 1063 1067 0.24727 4.07139 2.44466 4.2879 4.48212 2.996045059 2.009750886 2.727030872 1.988355355 2.046068652 2.99604 2.00975 2.72703 1.98835 2.04607
4 2000 18.71075 0.3 100 10 1 20 1 1 1063 1064 1066 1.82252 5.37965 4.48212 2.826286475 2.842215894 2.046065101 2.82629 2.84221 2.04607
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7 2000 15.36076 0.3 100 10 1 20 1 1 1069 1070 1071 1073 1075 1076 2.47884 0.98476 3.73674 4.61728 0.48437 3.15122 2.496889203 2.490221928 2.163467636 1.17794012 2.676908115 2.303878306 2.4969 2.49022 2.16347 1.17794 2.6769 2.30387
6 2000 9.48111 0.3 100 10 1 20 1 1 656 658 1070 1072 1075 4.25579 0.48836 1.90054 4.61728 1.86851 0.930113105 2.314310691 2.202649925 1.177938908 2.273773335 0.93012 2.31431 2.20265 1.17794 2.27377
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8 2000 12.56593 0.3 100 10 1 20 1 1 654 656 1072 1073 1076 1078 1079 4.35803 0.822 0.48437 1.86851 3.68775 2.14343 0.6663 0.685318156 2.25193002 2.676899133 2.273771485 2.16346833 2.267492488 2.867179888 0.68532 2.25193 2.67691 2.27377 2.16347 2.26749 2.86718
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7 2000 11.52399 0.3 100 10 1 20 1 1 429 431 1074 1076 1079 1080 0.0674 4.12526 2.27804 0.87307 3.98747 2.31159 2.36247306 0.999805469 2.056489116 2.485438332 1.695546372 2.227320219 2.36248 0.99981 2.05649 2.48545 1.69555 2.22732
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8 2000 16.5384 0.3 100 10 1 20 1 1 1075 1076 1077 1078 1080 1081 1082 0.6663 3.13537 3.98747 4.23071 0.40178 0.25649 3.20475 2.867180394 2.206958129 1.695549869 1.973963186 2.684882014 2.893580428 2.28211652 2.86718 2.20696 1.69555 1.97396 2.68488 2.89358 2.28212
7 2000 10.49648 0.3 100 10 1 20 1 1 427 429 1077 1079 1082 1083 0.26385 4.23206 2.31159 0.40178 3.8825 2.11845 2.225738195 0.901895418 2.227322115 2.684882632 1.573443808 2.007384355 2.22574 0.9019 2.22732 2.68488 1.57345 2.00738
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6 2000 16.30933 0.3 100 10 1 20 1 1 1079 1080 1081 1083 1084 3.20475 3.8825 4.94621 3.25095 1.02077 2.282116417 1.573445435 1.757472072 2.258045853 3.098188448 2.28212 1.57344 1.75747 2.25804 3.09819
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5 2000 8.96355 0.3 100 10 1 20 1 1 425 778 780 1083 2.86281 3.56086 2.24116 3.54916 1.284208303 0.579078809 2.203722735 2.041417288 1.2842 0.57908 2.20373 2.04142
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7 2000 11.50324 0.3 100 10 1 20 1 1 668 670 742 744 1093 1095 1.03324 2.11739 0.93843 3.88895 1.75232 3.90836 2.12983884 1.404486377 2.823001971 0.839805188 2.859713322 1.766910587 2.12984 1.40448 2.823 0.8398 2.85971 1.76691
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6 2000 11.67081 0.3 100 10 1 20 1 1 666 734 1095 1099 1100 3.48284 3.00769 1.85811 3.48133 1.68952 1.263919413 1.583131508 2.114592968 1.702535015 2.557992132 1.26392 1.58313 2.1146 1.70254 2.55799
7 2000 11.86104 0.3 100 10 1 20 1 1 443 445 447 1096 1099 1100 0.80296 4.24272 0.7806 1.81951 1.98405 4.25967 2.401900254 1.088870365 2.366310235 2.343750748 2.397867563 1.480070878 2.4019 1.08887 2.36632 2.34375 2.39787 1.48007
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4 2000 11.67421 0.3 100 10 1 20 1 1 850 851 852 2.91898 4.56427 1.75687 2.534664668 1.555217892 2.727025502 2.53467 1.55522 2.72703
4 2000 13.5223 0.3 100 10 1 20 1 1 920 921 923 4.71512 5.3713 0.30117 1.959464408 1.916555843 3.616889402 1.95946 1.91656 3.61689
7 2000 12.18185 0.3 100 10 1 20 1 1 545 547 661 1108 1110 1112 3.20448 0.26224 4.39113 1.7261 3.33717 1.07535 1.874232187 2.511903863 1.194293134 2.471067826 1.723345335 2.267496887 1.87423 2.51191 1.19429 2.47107 1.72334 2.2675
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6 2000 11.69246 0.3 100 10 1 20 1 1 547 549 1107 1111 1112 4.05322 0.20253 3.33717 2.38579 3.83989 1.640814306 2.688181134 1.72334473 2.23265011 1.331335608 1.64082 2.68819 1.72335 2.23265 1.33134
6 2000 13.79632 0.3 100 10 1 20 1 1 549 943 1109 1110 1112 3.37256 0.24503 1.57829 2.38579 2.40576 1.685127782 2.009757212 2.992872841 2.232645795 2.341720701 1.68512 2.00974 2.99287 2.23265 2.34172
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4 2000 13.17255 0.3 100 10 1 20 1 1 988 1126 1180 3.31511 2.72152 3.61753 1.622509929 2.202648613 2.065715519 1.62251 2.20265 2.06572
8 2000 12.3182 0.3 100 10 1 20 1 1 468 689 691 693 828 1115 1127 2.28811 0.05946 4.20312 0.73628 3.0169 2.35525 1.06356 2.105163468 2.364979077 0.920232432 2.202672964 2.146931321 2.141390703 2.509228321 2.10516 2.36498 0.92023 2.20267 2.14693 2.14139 2.50923
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6 2000 13.67006 0.3 100 10 1 20 1 1 608 1118 1120 1121 1123 4.05508 2.49813 2.41251 3.06551 2.29483 1.641179465 2.245379365 2.101067822 1.70254003 2.086316035 1.64118 2.24538 2.10107 1.70254 2.08632
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7 2000 13.72299 0.3 100 10 1 20 1 1 611 613 1129 1131 1138 1139 4.02374 0.05406 2.73827 2.67045 2.72602 2.11553 1.823583649 2.774530369 2.108968914 1.973963456 1.789627801 1.906615766 1.82359 2.77453 2.10897 1.97397 1.78963 1.90662
7 2000 15.24945 0.3 100 10 1 20 1 1 609 611 1130 1132 1139 1140 4.09726 0.37086 2.67045 2.45298 3.20764 2.24209 1.839713619 2.655556899 1.973965312 2.424472968 1.723346416 2.332571422 1.83971 2.65556 1.97396 2.42447 1.72334 2.33257

8 2000 15.5487 0.3 100 10 1 20 1 1 605 607 609 1131 1133 1140 1141 0.18618 4.28127 0.3384 2.45298 2.33018 3.07611 2.50889 2.687880332 1.718869418 2.798794117 2.424471943 2.225184773 1.973963086 2.02740532 2.68788 1.71887 2.7988 2.42447 2.22519 1.97397 2.0274

7 2000 13.63675 0.3 100 10 1 20 1 1 603 605 1132 1134 1141 1142 0.1024 4.1783 2.33018 3.11077 2.99502 1.68387 2.528107409 1.570943143 2.225185773 1.90661615 1.856099283 2.242204249 2.5281 1.57095 2.22518 1.90662 1.8561 2.24221

7 2000 14.81503 0.3 100 10 1 20 1 1 601 603 1133 1135 1142 1143 0.14988 4.21985 3.11077 2.56071 2.77127 2.08089 2.70856023 1.555497342 1.906615381 2.407755747 2.018006424 2.388931832 2.70857 1.5555 1.90662 2.40775 2.01801 2.38893

7 2000 15.16238 0.3 100 10 1 20 1 1 599 601 1134 1136 1143 1144 0.12546 4.22416 2.56071 3.6865 3.13603 1.47008 2.466942997 1.522475628 2.407754655 1.745264901 2.291467135 2.583870212 2.46694 1.52248 2.40776 1.74527 2.29147 2.58387

5 2000 12.3602 0.3 100 10 1 20 1 1 599 987 1135 1144 3.28179 0.32077 3.6865 3.00031 1.619544151 1.989548879 1.745265034 2.138060087 1.61954 1.98955 1.74526 2.13806

7 2000 16.73114 0.3 100 10 1 20 1 1 1128 1129 1138 1145 1147 1148 2.89701 3.51123 3.72211 4.2552 1.36312 0.39342 2.15797142 1.591461259 2.078328077 1.971555846 3.033875591 3.461826538 2.15797 1.59146 2.07833 1.97156 3.03387 3.46182

6 2000 16.60058 0.3 100 10 1 20 1 1 1129 1130 1137 1139 1148 1.93392 2.72602 3.72211 3.0955 4.4805 2.056494153 1.789626412 2.078328721 1.989549677 2.33257038 2.05649 1.78963 2.07833 1.98955 2.33257

7 2000 17.15199 0.3 100 10 1 20 1 1 1130 1131 1138 1140 1148 1149 2.11553 3.20764 3.0955 2.76388 1.03491 3.44021 1.906615352 1.723343645 1.989551346 2.437178054 2.932727295 2.56170553 1.90662 1.72335 1.98955 2.43718 2.93273 2.56171

7 2000 20.02583 0.3 100 10 1 20 1 1 1131 1132 1139 1141 1149 1150 2.24209 3.07611 2.76388 3.0585 1.9423 3.75381 2.332572586 1.973965688 2.43717875 2.202649595 3.02131566 2.506387835 2.33257 1.97396 2.43718 2.20265 3.02132 2.50639

7 2000 18.35247 0.3 100 10 1 20 1 1 1132 1133 1140 1142 1150 1151 2.50889 2.99502 3.0585 3.46979 1.93189 2.12212 2.027404648 1.856098322 2.202648638 2.078329075 2.992871463 2.982534532 2.02741 1.8561 2.20265 2.07833 2.99287 2.98253

7 2000 18.84895 0.3 100 10 1 20 1 1 1133 1134 1141 1143 1151 1152 1.68387 2.77127 3.46979 3.85919 3.31884 1.36635 2.242205597 2.018008052 2.078329623 2.028576319 2.720049413 3.119588621 2.2422 2.01801 2.07833 2.02858 2.72005 3.11959

7 2000 20.20144 0.3 100 10 1 20 1 1 1134 1135 1142 1144 1152 1153 2.08089 3.13603 3.85919 3.04454 3.54054 1.35369 2.388932711 2.291467013 2.028575604 2.437178782 2.558921602 2.908321644 2.38893 2.29147 2.02858 2.43718 2.55892 2.90832

5 2000 15.07991 0.3 100 10 1 20 1 1 1135 1136 1143 1153 1.47008 3.00031 3.04454 3.62961 2.583869323 2.13805828 2.437178967 1.862489709 2.58387 2.13806 2.43718 1.86249

6 2000 13.59664 0.3 100 10 1 20 1 1 1128 1137 1147 1164 1165 1.11184 4.2552 3.61352 1.86864 3.89326 2.660880958 1.971555089 1.906616276 1.920274437 1.378677368 2.66088 1.97156 1.90661 1.92028 1.37868

7 2000 16.69432 0.3 100 10 1 20 1 1 480 566 568 1147 1154 1164 2.10722 3.9 1.05976 2.7407 3.20828 2.53621 2.620881037 1.627916806 2.569148317 2.23264718 2.018007575 2.444965126 2.62088 1.62792 2.56915 2.23264 2.01801 2.44496

7 2000 20.6593 0.3 100 10 1 20 1 1 1137 1145 1146 1148 1154 1164 1.36312 3.61352 2.7407 3.81661 2.97153 2.74447 3.033868237 1.906614837 2.232644956 2.944854564 2.542153287 1.960678891 3.03388 1.90662 2.23265 2.94485 2.54215 1.96068

8 2000 25.98781 0.3 100 10 1 20 1 1 1137 1138 1139 1147 1149 1154 1155 0.39342 4.4805 1.03491 3.81661 4.59074 2.08753 3.04279 3.46181927 2.332571931 2.932727358 2.944854169 2.232646531 3.162703537 2.969760379 3.46183 2.33257 2.93273 2.94485 2.23265 3.1627 2.96976

7 2000 26.37579 0.3 100 10 1 20 1 1 1139 1140 1148 1150 1155 1156 3.44021 1.9423 4.59074 4.22001 1.41875 3.92844 2.561705321 3.021315295 2.23264749 2.744396997 3.292266565 2.944854639 2.56171 3.02132 2.23265 2.7444 3.29227 2.94485

8 2000 24.48246 0.3 100 10 1 20 1 1 1140 1141 1149 1151 1156 1157 1161 3.75381 1.93189 4.22001 2.86436 0.70523 1.44414 3.92926 2.506387791 2.992873414 2.744397953 2.447880451 3.699374901 3.129475335 2.049549668 2.50639 2.99287 2.7444 2.44788 3.69938 3.12947 2.04955

7 2000 21.65916 0.3 100 10 1 20 1 1 1141 1142 1150 1152 1161 1162 2.12212 3.31884 2.86436 2.67323 3.39998 3.11763 2.982534531 2.720048328 2.44787833 2.663557782 2.003828303 2.250663923 2.98253 2.72005 2.44788 2.66356 2.00383 2.25066

7 2000 20.89665 0.3 100 10 1 20 1 1 1142 1143 1151 1153 1162 1163 1.36635 3.54054 2.67323 2.97582 3.23808 3.42702 3.119589415 2.558923338 2.663558678 2.498792656 2.128034281 2.049549542 3.11959 2.55892 2.66356 2.49879 2.12803 2.04955

5 2000 16.42308 0.3 100 10 1 20 1 1 1143 1144 1152 1163 1.35369 3.62961 2.97582 3.25117 2.908321469 1.862489898 2.498791866 2.529034378 2.90832 1.86249 2.49879 2.52904

7 2000 18.24067 0.3 100 10 1 20 1 1 564 566 1146 1147 1148 1155 3.87763 0.50921 3.20828 2.97153 2.08753 3.7159 1.63655516 2.497933478 2.018006645 2.542153909 3.16270428 2.215556164 1.63655 2.49793 2.01801 2.54215 3.1627 2.21556

7 2000 19.2081 0.3 100 10 1 20 1 1 562 564 1148 1149 1154 1156 4.10051 0.61907 3.04279 1.41875 3.7159 3.99463 1.529380691 2.517143798 2.969759671 3.292266653 2.215555274 2.164565991 1.52938 2.51715 2.96976 3.29227 2.21556 2.16457

7 2000 19.52879 0.3 100 10 1 20 1 1 560 562 1149 1150 1155 1157 4.02711 0.21401 3.92844 0.70523 3.99463 4.49189 1.575203134 2.589488637 2.944854088 3.69937743 2.164566121 2.078329193 1.5752 2.58949 2.94485 3.69937 2.16457 2.07833

7 2000 16.54488 0.3 100 10 1 20 1 1 558 560 1150 1156 1158 1161 4.14753 0.32905 1.44414 4.49189 2.15552 3.61689 1.498412057 2.515690874 3.129473091 2.078327601 2.223049517 2.046070393 1.49841 2.51569 3.12948 2.07833 2.22305 2.04607

8 2000 13.78289 0.3 100 10 1 20 1 1 554 556 558 1157 1159 1161 1162 0.13694 4.221 0.14118 2.15552 2.73105 3.5156 1.65833 2.549328221 1.467049808 2.59059924 2.223049982 2.041418937 1.819906256 2.347802491 2.54933 1.46705 2.5906 2.22305 2.04142 1.81991 2.3478

7 2000 13.41111 0.3 100 10 1 20 1 1 552 554 1158 1160 1162 1163 0.18857 4.14346 2.73105 2.89547 4.19087 0.48099 2.688344563 1.603435142 2.041418696 2.300779238 1.460683532 2.729640981 2.68834 1.60343 2.04142 2.30078 1.46068 2.72964

5 2000 14.19736 0.3 100 10 1 20 1 1 552 985 1159 1163 2.95202 1.37143 2.89547 4.73685 1.638719068 1.819905297 2.30077917 1.622509932 1.63872 1.8199 2.30078 1.62251

6 2000 15.93923 0.3 100 10 1 20 1 1 1150 1151 1157 1158 1162 3.92926 3.39998 3.61689 3.5156 1.21639 2.049549144 2.003828641 2.046070303 1.819905368 2.642063446 2.04955 2.00383 2.04607 1.81991 2.64206

7 2000 16.00061 0.3 100 10 1 20 1 1 1151 1152 1158 1159 1161 1163 3.11763 3.23808 1.65833 4.19087 1.21639 1.96573 2.250664315 2.1280333 2.347800627 1.460681561 2.642063012 2.474906859 2.25066 2.12803 2.3478 1.46068 2.64206 2.47491

6 2000 18.52098 0.3 100 10 1 20 1 1 1152 1153 1159 1160 1162 3.42702 3.25117 0.48099 4.73685 1.96573 2.049549264 2.529035729 2.729639626 1.622508758 2.474907333 2.04955 2.52903 2.72964 1.62251 2.47491

7 2000 14.37096 0.3 100 10 1 20 1 1 478 480 1145 1146 1147 1165 3.90133 1.35855 1.86864 2.53621 2.74447 2.05994 1.542367281 2.648930073 1.920275591 2.444962981 1.960680595 1.9202755 1.54237 2.64893 1.92027 2.44497 1.96068 1.92027

7 2000 12.30036 0.3 100 10 1 20 1 1 476 478 763 1128 1145 1164 4.09305 0.72495 1.26016 1.87391 3.89326 2.05994 1.339836799 2.314120583 2.536989138 2.624921008 1.378677368 1.920274525 1.33984 2.31412 2.53699 2.62492 1.37868 1.92028

5 2000 9.28164 0.3 100 10 1 20 1 1 456 829 1167 1207 3.39969 0.29705 2.73519 2.81808 1.288681647 1.689935836 1.809431509 1.586974468 1.28868 1.68993 1.80943 1.58698

7 2000 12.45776 0.3 100 10 1 20 1 1 456 458 1166 1168 1199 1207 0.02758 3.90935 2.73519 2.49859 3.15434 1.46487 2.376367813 1.412282224 1.809431099 2.190750748 1.862487796 2.06916247 2.37643 1.41228 1.80943 2.19075 1.86249 2.06916

7 2000 14.70679 0.3 100 10 1 20 1 1 458 460 1167 1169 1191 1199 0.81166 4.28839 2.49859 1.67436 3.88216 1.83645 2.369855778 1.349148073 2.190751531 2.443020847 1.896619526 2.601280909 2.36986 1.34915 2.19075 2.44302 1.89662 2.60128

7 2000 13.1796 0.3 100 10 1 20 1 1 460 462 1168 1170 1181 1191 0.13369 4.21503 1.67436 2.70832 2.55453 2.88798 2.657535858 1.427904772 2.443021266 1.85609925 1.941192805 2.046069204 2.65754 1.42791 2.44302 1.8561 1.94119 2.04607

7 2000 12.72863 0.3 100 10 1 20 1 1 462 464 466 1169 1171 1181 0.17734 4.36038 0.21114 2.70832 3.92581 2.9922 2.424638765 1.467286319 2.780310412 1.856100195 1.901624361 1.854818831 2.42464 1.46729 2.78031 1.8561 1.90162 1.85482

7 2000 16.17437 0.3 100 10 1 20 1 1 466 692 694 1170 1172 1181 1.59126 3.77963 0.73854 3.92581 3.65619 2.05874 2.485637571 1.561904023 2.454547121 1.901623041 2.138059666 2.620392445 2.48564 1.56191 2.45455 1.90162 2.13806 2.62039

7 2000 18.00885 0.3 100 10 1 20 1 1 690 692 1171 1173 1181 1182 3.87825 0.746 3.65619 3.7181 1.22188 3.11007 1.386274419 2.381487846 2.138062545 2.078329057 3.28359617 2.992871208 1.38628 2.38149 2.13806 2.07833 3.28359 2.99287

7 2000 17.98085 0.3 100 10 1 20 1 1 688 690 1172 1174 1182 1183 3.90212 0.57175 3.7181 3.69945 1.92074 2.47062 1.360504362 2.354482041 2.078327931 2.086314824 3.215599198 3.110435302 1.36051 2.35448 2.07833 2.08632 3.2156 3.11044

8 2000 19.41164 0.3 100 10 1 20 1 1 684 686 688 1173 1175 1183 1184 0.07381 4.21438 0.52814 3.69945 3.40442 2.66381 2.27088 2.654906805 1.401905841 2.37346381 2.08631611 2.437180204 3.082813872 3.187397612 2.65493 1.40191 2.37347 2.08631 2.43718 3.08281 3.1874

7 2000 18.07336 0.3 100 10 1 20 1 1 682 684 1174 1176 1184 1185 0.32916 4.17455 3.40442 4.17929 3.43097 1.05039 2.410738624 1.472779446 2.437180382 1.825119708 2.898502382 3.175447903 2.41074 1.47278 2.43718 1.82512 2.8985 3.17545

5 2000 15.30539 0.3 100 10 1 20 1 1 682 1175 1177 1185 3.70728 4.17929 4.04705 3.73964 1.605793199 1.825119285 1.892858317 2.505439504 1.60579 1.82512 1.89286 2.50544

7 2000 17.62989 0.3 100 10 1 20 1 1 680 682 1176 1178 1185 1186 3.8002 0.40728 4.04705 3.23643 1.08733 3.72181 1.761473292 2.494250542 1.892856829 2.284197434 3.071232105 2.460465208 1.76147 2.49425 1.89286 2.2842 3.07123 2.46046

7 2000 17.84274 0.3 100 10 1 20 1 1 678 680 1177 1179 1186 1187 3.94695 0.67818 3.23643 3.60213 2.21069 2.47051 1.688350412 2.602228126 2.28419703 1.9606801 2.842215303 2.638464238 1.68835 2.60223 2.2842 1.96068 2.84221 2.63846

8 2000 16.63297 0.3 100 10 1 20 1 1 676 678 988 1178 1180 1187 1188 3.10043 0.34992 0.87641 3.60213 3.60129 3.08311 1.03952 1.82621085 2.5866712 2.164564692 1.960679387 2.056493276 2.373966953 2.89932101 1.82621 2.58667 2.16457 1.96068 2.05649 2.37397 2.89932

6 2000 21.22095 0.3 100 10 1 20 1 1 988 1113 1179 1188 1189 1.56529 3.61753 3.60129 2.5579 3.37299 2.311082686 2.065715179 2.056493361 2.528095756 2.609488745 2.31108 2.06572 2.05649 2.5281 2.60949

8 2000 20.46372 0.3 100 10 1 20 1 1 1169 1170 1171 1172 1182 1191 1192 2.55453 2.9922 2.05874 1.22188 4.37124 2.76161 1.07801 1.941192685 1.854818206 2.620391074 3.283594416 2.515849991 2.397866995 3.146887956 1.94119 1.85482 2.62039 3.2836 2.51585 2.39787 3.14689

7 2000 26.19537 0.3 100 10 1 20 1 1 1172 1173 1181 1183 1192 1193 3.11007 1.92074 4.37124 4.7356 4.38645 1.10392 2.992871078 3.215597092 2.515849665 2.359913214 2.53466736 3.274899847 2.99287 3.2156 2.51585 2.35991 2.53467 3.2749

7 2000 24.75774 0.3 100 10 1 20 1 1 1173 1174 1182 1184 1193 1194 2.47062 2.66381 4.7356 4.04115 4.49086 0.70892 3.110435697 3.08281364 2.359914657 2.558921772 2.215555031 3.036220548 3.11044 3.08281 2.35991 2.55892 2.21555 3.03622

7 2000 25.70633 0.3 100 10 1 20 1 1 1174 1175 1183 1185 1194 1195 2.27088 3.43097 4.04115 3.60355 4.35291 1.48373 3.187396942 2.898500838 2.558919374 2.696362024 2.225185342 3.023674559 3.1874 2.8985 2.55892 2.69636 2.22519 3.02367

8 2000 23.61572 0.3 100 10 1 20 1 1 1175 1176 1177 1184 1186 1195 1196 1.05039 3.73964 1.08733 3.60355 3.04108 4.04881 1.77176 3.175447709 2.50543846 3.071231561 2.696362895 2.702522516 2.093137594 2.69636137 3.17545 2.50544 3.07123 2.69636 2.70252 2.09314 2.69636

7 2000 24.85072 0.3 100 10 1 20 1 1 1177 1178 1185 1187 1196 1197 3.72181 2.21069 3.04108 3.73099 4.10843 1.98023 2.460464958 2.842214244 2.702522834 2.702522365 2.35285645 3.177690565 2.46047 2.84222 2.70252 2.70252 2.35286 3.17769

7 2000 22.69368 0.3 100 10 1 20 1 1 1178 1179 1186 1188 1197 1198 2.47051 3.08311 3.73099 3.91676 2.76214 1.98984 2.638464645 2.373967288 2.702522794 2.02740484 2.960144384 2.688420078 2.63846 2.37397 2.70252 2.0274 2.96014 2.68842

6 2000 16.96551 0.3 100 10 1 20 1 1 1179 1180 1187 1189 1198 1.03952 2.5579 3.91676 4.78205 4.10949 2.899320501 2.528096129 2.027403513 1.67723218 2.065716245 2.89932 2.5281 2.0274 1.67723 2.06572

5 2000 22.73536 0.3 100 10 1 20 1 1 1180 1188 1190 1198 3.37299 4.78205 3.52305 1.09507 2.609489129 1.677232377 3.395297046 3.003174244 2.60949 1.67723 3.3953 3.00317

4 2000 30.18169 0.3 100 10 1 20 1 1 1189 1198 1206 3.52305 2.99548 4.43494 3.395297336 2.842213804 2.29146632 3.3953 2.84221 2.29147

6 2000 19.60502 0.3 100 10 1 20 1 1 1168 1169 1181 1192 1199 3.88216 2.88798 2.76161 4.86376 2.80275 1.896618085 2.046067827 2.397867298 2.325432197 2.856389317 1.89662 2.04607 2.39787 2.32543 2.85639

8 2000 25.54158 0.3 100 10 1 20 1 1 1181 1182 1191 1193 1199 1200 1201 1.07801 4.38645 4.86376 2.8409 0.1203 4.41212 1.78742 3.146888851 2.534665112 2.325431114 3.105083982 3.566615641 2.416618626 2.992870273 3.14689 2.53467 2.32543 3.10508 3.56662 2.41662 2.99287

7 2000 23.59055 0.3 100 10 1 20 1 1 1182 1183 1192 1194 1201 1202 1.10392 4.49086 2.8409 4.04507 4.25634 1.88599 3.27489953 2.215554508 3.105084718 2.14139319 2.530913861 2.842215915 3.2749 2.21556 3.10508 2.14139 2.53091 2.84221

7 2000 20.29316 0.3 100 10 1 20 1 1 1183 1184 1193 1195 1202 1203 0.70892 4.35291 4.04507 2.93994 3.81721 1.49745 3.036219548 2.225185204 2.141391381 2.689303154 2.096540197 2.789052767 3.03622 2.22519 2.14139 2.6893 2.09654 2.78905

7 2000 20.59884 0.3 100 10 1 20 1 1 1184 1185 1194 1196 1203 1204 1.48373 4.04881 2.93994 4.01534 4.34957 0.71136 3.023673987 2.093137553 2.689302756 2.086315722 2.253830647 3.022101672 3.02367 2.09314 2.6893 2.08632 2.25383 3.0221

6 2000 19.41823 0.3 100 10 1 20 1 1 1185 1186 1195 1197 1204 1.77176 4.10843 4.01534 2.74961 4.60784 2.696361354 2.352855628 2.08631547 2.703401614 1.862488835 2.69636 2.35286 2.08632 2.7034 1.86249

8 2000 23.80213 0.3 100 10 1 20 1 1 1186 1187 1196 1198 1204 1205 1213 1.98023 2.76214 2.74961 2.878 2.52075 3.54239 1.66185 3.177691957 2.960143591 2.703400726 2.41662063 2.662665666 2.068015072 2.833842708 3.17769 2.96014 2.7034 2.41662 2.66267 2.06802 2.83384

8 2000 21.35713 0.3 100 10 1 20 1 1 1187 1188 1189 1190 1197 1205 1206 1.98984 4.10949 1.09507 2.99548 2.878 2.55638 1.92483 2.688418459 2.065715761 3.003174233 2.842213664 2.416619896 2.141390455 2.412683487 2.68842 2.06572 3.00317 2.84221 2.41662 2.14139 2.41268

8 2000 19.52887 0.3 100 10 1 20 1 1 1167 1168 1191 1192 1200 1207 1208 3.15434 1.83645 2.80275 0.1203 3.46593 2.95338 2.28335 1.862487996 2.601281475 2.85639086 3.566619362 2.551482877 1.911593467 2.400836617 1.86249 2.60128 2.85639 3.56662 2.55148 1.91159 2.40084

6 2000 18.6534 0.3 100 10 1 20 1 1 1192 1199 1201 1208 1209 4.41212 3.46593 3.43249 2.93067 2.42377 2.416620004 2.551484601 2.000269312 2.069163623 2.00974994 2.41662 2.55148 2.00027 2.06916 2.00975

7 2000 20.99138 0.3 100 10 1 20 1 1 1192 1193 1200 1202 1209 1210 1.78742 4.25634 3.43249 1.82324 2.88272 3.16424 2.992872189 2.530913284 2.000268343 3.033088684 2.035590316 2.40083811 2.99287 2.53091 2.00027 3.03309 2.03559 2.40084

7 2000 20.10981 0.3 100 10 1 20 1 1 1193 1194 1201 1203 1210 1211 1.88599 3.81721 1.82324 3.21281 3.36728 2.83151 2.842214094 2.096540501 3.033088678 2.138059502 2.400837718 2.250665855 2.84222 2.09654 3.03309 2.13806 2.40084 2.25067

7 2000 19.89374 0.3 100 10 1 20 1 1 1194 1195 1202 1204 1211 1212 1.49745 4.34957 3.21281 1.67137 2.67977 3.56361 2.789051113 2.253831822 2.138058872 3.033873547 2.223048462 2.219840962 2.78905 2.25383 2.13806 3.03387 2.22305 2.21984

7 2000 21.28216 0.3 100 10 1 20 1 1 1195 1196 1197 1203 1212 1213 0.71136 4.60784 2.52075 1.67137 4.10963 4.28485 3.022101672 1.862488902 2.662666185 3.033872188 2.43717888 2.341721354 3.0221 1.86249 2.66267 3.03387 2.43718 2.34172

5 2000 15.82158 0.3 100 10 1 20 1 1 1197 1198 1206 1213 3.54239 2.55638 4.83068 3.9358 2.068015125 2.14139097 1.325968958 2.373967303 2.06802 2.14139 1.32597 2.37397

4 2000 15.60559 0.3 100 10 1 20 1 1 1190 1198 1205 4.43494 1.92483 4.83068 2.29146625 2.412683487 1.325968471 2.29147 2.41268 1.32597

5 2000 11.80146 0.3 100 10 1 20 1 1 1166 1167 1199 1208 2.81808 1.46487 2.95338 2.27335 1.586976871 2.069162574 1.911592717 2.347800065 1.58697 2.06916 1.91159 2.3478

5 2000 13.09289 0.3 100 10 1 20 1 1 1199 1200 1207 1209 2.28335 2.93067 2.27335 2.24849 2.400838652 2.069163325 2.347802822 2.069164069 2.40084 2.06916 2.3478 2.06917

5 2000 12.95396 0.3 100 10 1 20 1 1 1200 1201 1208 1210 2.42377 2.88272 2.24849 2.12838 2.009748313 2.035591369 2.069165197 2.482574937 2.00975 2.03559 2.06916 2.48257

5 2000 15.62059 0.3 100 10 1 20 1 1 1201 1202 1209 1211 3.16424 3.36728 2.12838 2.00223 2.400837158 2.400837546 2.482573485 2.554276119 2.40084 2.40084 2.48257 2.55428

5 2000 13.01486 0.3 100 10 1 20 1 1 1202 1203 1210 1212 2.83151 2.67977 2.00223 1.97385 2.25066554 2.223047369 2.554275463 2.41662018 2.25067 2.22305 2.55428 2.41662

5 2000 16.19812 0.3 100 10 1 20 1 1 1203 1204 1211 1213 3.56361 4.10963 1.97385 1.16728 2.219840973 2.437179003 2.416618504 3.308822632 2.21984 2.43718 2.41662 3.30882

5 2000 17.29143 0.3 100 10 1 20 1 1 1197 1204 1205 1212 1.66185 4.28485 3.9358 1.16728 2.833842507 2.341722056 2.373967351 3.308824539 2.83384 2.34172 2.37397 3.30882

5 2000 0.0575 0.3 100 10 1 20 1 1 1215 1 2 27 0.01412 0.01412 2.03616 2.03616 2.036158209 2.036158209 7.06E-03 7.06E-03 2.03616 2.03616 0.00706 0.00706

5 2000 0.04349 0.3 100 10 1 20 1 1 1214 1216 3 28 0.01068 0.01068 2.03616 2.03616 2.036158209 2.036158209 5.34E-03 5.34E-03 2.03616 2.03616 0.00534 0.00534

5 2000 0.04724 0.3 100 10 1 20 1 1 1215 1217 4 29 0.0116 0.0116 2.03616 2.03616 2.036158209 2.036158209 5.80E-03 5.80E-03 2.03616 2.03616 0.0058 0.0058

5 2000 0.02362 0.3 100 10 1 20 1 1 1216 1218 5 30 0.0058 0.0058 2.03616 2.03616 2.036158209 2.036158209 2.90E-03 2.90E-03 2.03616 2.03616 0.0029 0.0029
5 2000 0.02463 0.3 100 10 1 20 1 1 1217 1219 6 31 0.00605 0.00605 2.03616 2.03616 2.036158209 2.036158209 3.02E-03 3.02E-03 2.03616 2.03616 0.00302 0.00302
5 2000 0.06314 0.3 100 10 1 20 1 1 1218 1220 7 32 0.0155 0.0155 2.03616 2.03616 2.036158209 2.036158209 7.75E-03 7.75E-03 2.03616 2.03616 0.00775 0.00775
5 2000 0.00118 0.3 100 10 1 20 1 1 1219 1221 8 33 0.00029 0.00029 2.03616 2.03616 2.036158209 2.036158209 1.45E-04 1.45E-04 2.03616 2.03616 0.00015 0.00015
5 2000 0.062 0.3 100 10 1 20 1 1 1220 1222 9 34 0.01522 0.01522 2.03616 2.03616 2.036158209 2.036158209 7.61E-03 7.61E-03 2.03616 2.03616 0.00761 0.00761
5 2000 0.06638 0.3 100 10 1 20 1 1 1221 1223 10 35 0.0163 0.0163 2.03616 2.03616 2.036158209 2.036158209 8.15E-03 8.15E-03 2.03616 2.03616 0.00815 0.00815
5 2000 0.05779 0.3 100 10 1 20 1 1 1222 1224 11 36 0.01419 0.01419 2.03616 2.03616 2.036158209 2.036158209 7.10E-03 7.10E-03 2.03616 2.03616 0.0071 0.0071
5 2000 0.00373 0.3 100 10 1 20 1 1 1223 1225 12 37 0.00092 0.00092 2.03616 2.03616 2.036158209 2.036158209 4.59E-04 4.59E-04 2.03616 2.03616 0.00046 0.00046
5 2000 0.03376 0.3 100 10 1 20 1 1 1224 1226 13 38 0.00829 0.00829 2.03616 2.03616 2.036158209 2.036158209 4.15E-03 4.15E-03 2.03616 2.03616 0.00415 0.00415
5 2000 0.0703 0.3 100 10 1 20 1 1 1225 1227 14 39 0.01726 0.01726 2.03616 2.03616 2.036158209 2.036158209 8.63E-03 8.63E-03 2.03616 2.03616 0.00863 0.00863
5 2000 0.06442 0.3 100 10 1 20 1 1 1226 1228 15 40 0.01582 0.01582 2.03616 2.03616 2.036158209 2.036158209 7.91E-03 7.91E-03 2.03616 2.03616 0.00791 0.00791
5 2000 0.03046 0.3 100 10 1 20 1 1 1227 1229 16 41 0.00748 0.00748 2.03616 2.03616 2.036158209 2.036158209 3.74E-03 3.74E-03 2.03616 2.03616 0.00374 0.00374
5 2000 0.07839 0.3 100 10 1 20 1 1 1228 1230 17 42 0.01925 0.01925 2.03616 2.03616 2.036158209 2.036158209 9.62E-03 9.62E-03 2.03616 2.03616 0.00962 0.00962
5 2000 0.07102 0.3 100 10 1 20 1 1 1229 1231 18 43 0.01744 0.01744 2.03616 2.03616 2.036158209 2.036158209 8.72E-03 8.72E-03 2.03616 2.03616 0.00872 0.00872
5 2000 0.00462 0.3 100 10 1 20 1 1 1230 1232 19 44 0.00113 0.00113 2.03616 2.03616 2.036158209 2.036158209 5.67E-04 5.67E-04 2.03616 2.03616 0.00057 0.00057
5 2000 0.07738 0.3 100 10 1 20 1 1 1231 1233 20 45 0.019 0.019 2.03616 2.03616 2.036158209 2.036158209 9.50E-03 9.50E-03 2.03616 2.03616 0.0095 0.0095
5 2000 0.02969 0.3 100 10 1 20 1 1 1232 1234 21 46 0.00729 0.00729 2.03616 2.03616 2.036158209 2.036158209 3.65E-03 3.65E-03 2.03616 2.03616 0.00365 0.00365
5 2000 0.04279 0.3 100 10 1 20 1 1 1233 1235 22 47 0.01051 0.01051 2.03616 2.03616 2.036158209 2.036158209 5.25E-03 5.25E-03 2.03616 2.03616 0.00525 0.00525
5 2000 0.06252 0.3 100 10 1 20 1 1 1234 1236 23 48 0.01535 0.01535 2.03616 2.03616 2.036158209 2.036158209 7.68E-03 7.68E-03 2.03616 2.03616 0.00768 0.00768
5 2000 0.0044 0.3 100 10 1 20 1 1 1235 1237 24 49 0.00108 0.00108 2.03616 2.03616 2.036158209 2.036158209 5.40E-04 5.40E-04 2.03616 2.03616 0.00054 0.00054
5 2000 0.04829 0.3 100 10 1 20 1 1 1236 1238 25 50 0.01186 0.01186 2.03616 2.03616 2.036158209 2.036158209 5.93E-03 5.93E-03 2.03616 2.03616 0.00593 0.00593
5 2000 0.03821 0.3 100 10 1 20 1 1 1237 52 26 51 0.00938 0.01186 2.03616 2.03616 2.036158209 2.036158209 4.69E-03 4.69E-03 2.03616 2.03616 0.00469 0.00469
5 2000 0.02469 0.3 100 10 1 20 1 1 1240 53 54 78 0.00597 0.00597 2.06688 2.06688 2.066883657 2.066883657 2.99E-03 2.99E-03 2.06688 2.06688 0.00299 0.00299
5 2000 0.05152 0.3 100 10 1 20 1 1 1239 1241 55 79 0.01246 0.01246 2.06688 2.06688 2.066883657 2.066883657 6.23E-03 6.23E-03 2.06688 2.06688 0.00623 0.00623
5 2000 0.0536 0.3 100 10 1 20 1 1 1240 1242 56 80 0.01297 0.01297 2.06688 2.06688 2.066883657 2.066883657 6.48E-03 6.48E-03 2.06688 2.06688 0.00648 0.00648
5 2000 0.02185 0.3 100 10 1 20 1 1 1241 1243 57 81 0.00529 0.00529 2.06688 2.06688 2.066883657 2.066883657 2.64E-03 2.64E-03 2.06688 2.06688 0.00264 0.00264
5 2000 0.02314 0.3 100 10 1 20 1 1 1242 1244 58 82 0.0056 0.0056 2.06688 2.06688 2.066883657 2.066883657 2.80E-03 2.80E-03 2.06688 2.06688 0.0028 0.0028
5 2000 0.06865 0.3 100 10 1 20 1 1 1243 1245 59 83 0.01661 0.01661 2.06688 2.06688 2.066883657 2.066883657 8.30E-03 8.30E-03 2.06688 2.06688 0.0083 0.0083
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5 2000 0.04875 0.3 100 10 1 20 1 1 1245 1247 61 85 0.01179 0.01179 2.06688 2.06688 2.066883657 2.066883657 5.90E-03 5.90E-03 2.06688 2.06688 0.0059 0.0059
5 2000 0.08157 0.3 100 10 1 20 1 1 1246 1248 62 86 0.01973 0.01973 2.06688 2.06688 2.066883657 2.066883657 9.87E-03 9.87E-03 2.06688 2.06688 0.00987 0.00987
5 2000 0.07536 0.3 100 10 1 20 1 1 1247 1249 63 87 0.01823 0.01823 2.06688 2.06688 2.066883657 2.066883657 9.11E-03 9.11E-03 2.06688 2.06688 0.00911 0.00911
5 2000 0.0188 0.3 100 10 1 20 1 1 1248 1250 64 88 0.00455 0.00455 2.06688 2.06688 2.066883657 2.066883657 2.27E-03 2.27E-03 2.06688 2.06688 0.00227 0.00227
5 2000 0.05751 0.3 100 10 1 20 1 1 1249 1251 65 89 0.01391 0.01391 2.06688 2.06688 2.066883657 2.066883657 6.96E-03 6.96E-03 2.06688 2.06688 0.00696 0.00696
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5 2000 0.02021 0.3 100 10 1 20 1 1 1251 1253 67 91 0.00489 0.00489 2.06688 2.06688 2.066883657 2.066883657 2.44E-03 2.44E-03 2.06688 2.06688 0.00244 0.00244
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5 2000 0.08267 0.3 100 10 1 20 1 1 1254 1256 70 94 0.02 0.02 2.06688 2.06688 2.066883657 2.066883657 1.00E-02 1.00E-02 2.06688 2.06688 0.01 0.01
5 2000 0.05594 0.3 100 10 1 20 1 1 1255 1257 71 95 0.01353 0.01353 2.06688 2.06688 2.066883657 2.066883657 6.77E-03 6.77E-03 2.06688 2.06688 0.00677 0.00677
5 2000 0.00134 0.3 100 10 1 20 1 1 1256 1258 72 96 0.00032 0.00032 2.06688 2.06688 2.066883657 2.066883657 1.62E-04 1.62E-04 2.06688 2.06688 0.00016 0.00016
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5 2000 0.00831 0.3 100 10 1 20 1 1 1258 1260 74 98 0.00201 0.00201 2.06688 2.06688 2.066883657 2.066883657 1.01E-03 1.01E-03 2.06688 2.06688 0.00101 0.00101
5 2000 0.00856 0.3 100 10 1 20 1 1 1259 1261 75 99 0.00207 0.00207 2.06688 2.06688 2.066883657 2.066883657 1.04E-03 1.04E-03 2.06688 2.06688 0.00104 0.00104
5 2000 0.06609 0.3 100 10 1 20 1 1 1260 1262 76 100 0.01599 0.01599 2.06688 2.06688 2.066883657 2.066883657 7.99E-03 7.99E-03 2.06688 2.06688 0.00799 0.00799
5 2000 0.02356 0.3 100 10 1 20 1 1 1261 50 77 101 0.0057 0.01599 2.06688 2.06688 2.066883657 2.066883657 2.85E-03 2.85E-03 2.06688 2.06688 0.00285 0.00285
5 2000 0.00375 0.3 100 10 1 20 1 1 1264 103 104 128 0.00092 0.00092 2.03372 2.03372 2.033716988 2.033716988 4.61E-04 4.61E-04 2.03372 2.03372 0.00046 0.00046
5 2000 0.0241 0.3 100 10 1 20 1 1 1263 1265 105 129 0.00593 0.00593 2.03372 2.03372 2.033716988 2.033716988 2.96E-03 2.96E-03 2.03372 2.03372 0.00296 0.00296
5 2000 0.03112 0.3 100 10 1 20 1 1 1264 1266 106 130 0.00765 0.00765 2.03372 2.03372 2.033716988 2.033716988 3.83E-03 3.83E-03 2.03372 2.03372 0.00383 0.00383
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5 2000 0.07721 0.3 100 10 1 20 1 1 1266 1268 108 132 0.01898 0.01898 2.03372 2.03372 2.033716988 2.033716988 9.49E-03 9.49E-03 2.03372 2.03372 0.00949 0.00949
5 2000 0.07975 0.3 100 10 1 20 1 1 1267 1269 109 133 0.01961 0.01961 2.03372 2.03372 2.033716988 2.033716988 9.80E-03 9.80E-03 2.03372 2.03372 0.0098 0.0098
5 2000 0.03269 0.3 100 10 1 20 1 1 1268 1270 110 134 0.00804 0.00804 2.03372 2.03372 2.033716988 2.033716988 4.02E-03 4.02E-03 2.03372 2.03372 0.00402 0.00402
5 2000 0.02268 0.3 100 10 1 20 1 1 1269 1271 111 135 0.00558 0.00558 2.03372 2.03372 2.033716988 2.033716988 2.79E-03 2.79E-03 2.03372 2.03372 0.00279 0.00279
5 2000 0.01309 0.3 100 10 1 20 1 1 1270 1272 112 136 0.00322 0.00322 2.03372 2.03372 2.033716988 2.033716988 1.61E-03 1.61E-03 2.03372 2.03372 0.00161 0.00161
5 2000 0.01329 0.3 100 10 1 20 1 1 1271 1273 113 137 0.00327 0.00327 2.03372 2.03372 2.033716988 2.033716988 1.63E-03 1.63E-03 2.03372 2.03372 0.00163 0.00163
5 2000 0.05264 0.3 100 10 1 20 1 1 1272 1274 114 138 0.01294 0.01294 2.03372 2.03372 2.033716988 2.033716988 6.47E-03 6.47E-03 2.03372 2.03372 0.00647 0.00647
5 2000 0.0334 0.3 100 10 1 20 1 1 1273 1275 115 139 0.00821 0.00821 2.03372 2.03372 2.033716988 2.033716988 4.11E-03 4.11E-03 2.03372 2.03372 0.00411 0.00411
5 2000 0.03362 0.3 100 10 1 20 1 1 1274 1276 116 140 0.00827 0.00827 2.03372 2.03372 2.033716988 2.033716988 4.13E-03 4.13E-03 2.03372 2.03372 0.00413 0.00413
5 2000 0.05802 0.3 100 10 1 20 1 1 1275 1277 117 141 0.01426 0.01426 2.03372 2.03372 2.033716988 2.033716988 7.13E-03 7.13E-03 2.03372 2.03372 0.00713 0.00713
5 2000 0.02658 0.3 100 10 1 20 1 1 1276 1278 118 142 0.00653 0.00653 2.03372 2.03372 2.033716988 2.033716988 3.27E-03 3.27E-03 2.03372 2.03372 0.00327 0.00327
5 2000 0.05155 0.3 100 10 1 20 1 1 1277 1279 119 143 0.01267 0.01267 2.03372 2.03372 2.033716988 2.033716988 6.34E-03 6.34E-03 2.03372 2.03372 0.00634 0.00634
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5 2000 0.01517 0.3 100 10 1 20 1 1 1279 1281 121 145 0.00373 0.00373 2.03372 2.03372 2.033716988 2.033716988 1.87E-03 1.87E-03 2.03372 2.03372 0.00187 0.00187
5 2000 0.0475 0.3 100 10 1 20 1 1 1280 1282 122 146 0.01168 0.01168 2.03372 2.03372 2.033716988 2.033716988 5.84E-03 5.84E-03 2.03372 2.03372 0.00584 0.00584
5 2000 0.00661 0.3 100 10 1 20 1 1 1281 1283 123 147 0.00162 0.00162 2.03372 2.03372 2.033716988 2.033716988 8.12E-04 8.12E-04 2.03372 2.03372 0.00081 0.00081
5 2000 0.0373 0.3 100 10 1 20 1 1 1282 1284 124 148 0.00917 0.00917 2.03372 2.03372 2.033716988 2.033716988 4.58E-03 4.58E-03 2.03372 2.03372 0.00458 0.00458
5 2000 0.07372 0.3 100 10 1 20 1 1 1283 1285 125 149 0.01812 0.01812 2.03372 2.03372 2.033716988 2.033716988 9.06E-03 9.06E-03 2.03372 2.03372 0.00906 0.00906
5 2000 0.0213 0.3 100 10 1 20 1 1 1284 1286 126 150 0.00524 0.00524 2.03372 2.03372 2.033716988 2.033716988 2.62E-03 2.62E-03 2.03372 2.03372 0.00262 0.00262
5 2000 0.06392 0.3 100 10 1 20 1 1 1285 50 127 151 0.01571 0.00524 2.03372 2.03372 2.033716988 2.033716988 7.86E-03 7.86E-03 2.03372 2.03372 0.00786 0.00786
5 2000 0.03069 0.3 100 10 1 20 1 1 1288 153 154 178 0.00759 0.00759 2.02227 2.02227 2.022266442 2.022266442 3.79E-03 3.79E-03 2.02227 2.02227 0.00379 0.00379
5 2000 0.02347 0.3 100 10 1 20 1 1 1287 1289 155 179 0.0058 0.0058 2.02227 2.02227 2.022266442 2.022266442 2.90E-03 2.90E-03 2.02227 2.02227 0.0029 0.0029
5 2000 0.07441 0.3 100 10 1 20 1 1 1288 1290 156 180 0.0184 0.0184 2.02227 2.02227 2.022266442 2.022266442 9.20E-03 9.20E-03 2.02227 2.02227 0.0092 0.0092
5 2000 0.05114 0.3 100 10 1 20 1 1 1289 1291 157 181 0.01264 0.01264 2.02227 2.02227 2.022266442 2.022266442 6.32E-03 6.32E-03 2.02227 2.02227 0.00632 0.00632
5 2000 0.05081 0.3 100 10 1 20 1 1 1290 1292 158 182 0.01256 0.01256 2.02227 2.02227 2.022266442 2.022266442 6.28E-03 6.28E-03 2.02227 2.02227 0.00628 0.00628

5 2000 0.0347 0.3 100 10 1 20 1 1 1291 1293 159 183 0.00858 0.00858 2.02227 2.02227 2.022266442 2.022266442 4.29E-03 4.29E-03 2.02227 2.02227 0.00429 0.00429
5 2000 0.00797 0.3 100 10 1 20 1 1 1292 1294 160 184 0.00197 0.00197 2.02227 2.02227 2.022266442 2.022266442 9.85E-04 9.85E-04 2.02227 2.02227 0.00098 0.00098
5 2000 0.04542 0.3 100 10 1 20 1 1 1293 1295 161 185 0.01123 0.01123 2.02227 2.02227 2.022266442 2.022266442 5.62E-03 5.62E-03 2.02227 2.02227 0.00562 0.00562
5 2000 0.05622 0.3 100 10 1 20 1 1 1294 1296 162 186 0.0139 0.0139 2.02227 2.02227 2.022266442 2.022266442 6.95E-03 6.95E-03 2.02227 2.02227 0.00695 0.00695
5 2000 0.07395 0.3 100 10 1 20 1 1 1295 1297 163 187 0.01828 0.01828 2.02227 2.02227 2.022266442 2.022266442 9.14E-03 9.14E-03 2.02227 2.02227 0.00914 0.00914
5 2000 0.06757 0.3 100 10 1 20 1 1 1296 1298 164 188 0.01671 0.01671 2.02227 2.02227 2.022266442 2.022266442 8.35E-03 8.35E-03 2.02227 2.02227 0.00835 0.00835
5 2000 0.00187 0.3 100 10 1 20 1 1 1297 1299 165 189 0.00046 0.00046 2.02227 2.02227 2.022266442 2.022266442 2.31E-04 2.31E-04 2.02227 2.02227 0.00023 0.00023
5 2000 0.04399 0.3 100 10 1 20 1 1 1298 1300 166 190 0.01088 0.01088 2.02227 2.02227 2.022266442 2.022266442 5.44E-03 5.44E-03 2.02227 2.02227 0.00544 0.00544
5 2000 0.07415 0.3 100 10 1 20 1 1 1299 1301 167 191 0.01833 0.01833 2.02227 2.02227 2.022266442 2.022266442 9.17E-03 9.17E-03 2.02227 2.02227 0.00917 0.00917
5 2000 0.03484 0.3 100 10 1 20 1 1 1300 1302 168 192 0.00862 0.00862 2.02227 2.02227 2.022266442 2.022266442 4.31E-03 4.31E-03 2.02227 2.02227 0.00431 0.00431
5 2000 0.05488 0.3 100 10 1 20 1 1 1301 1303 169 193 0.01357 0.01357 2.02227 2.02227 2.022266442 2.022266442 6.78E-03 6.78E-03 2.02227 2.02227 0.00678 0.00678
5 2000 0.04068 0.3 100 10 1 20 1 1 1302 1304 170 194 0.01006 0.01006 2.02227 2.02227 2.022266442 2.022266442 5.03E-03 5.03E-03 2.02227 2.02227 0.00503 0.00503
5 2000 0.0416 0.3 100 10 1 20 1 1 1303 1305 171 195 0.01028 0.01028 2.02227 2.02227 2.022266442 2.022266442 5.14E-03 5.14E-03 2.02227 2.02227 0.00514 0.00514
5 2000 0.03749 0.3 100 10 1 20 1 1 1304 1306 172 196 0.00927 0.00927 2.02227 2.02227 2.022266442 2.022266442 4.63E-03 4.63E-03 2.02227 2.02227 0.00463 0.00463
5 2000 0.02863 0.3 100 10 1 20 1 1 1305 1307 173 197 0.00708 0.00708 2.02227 2.02227 2.022266442 2.022266442 3.54E-03 3.54E-03 2.02227 2.02227 0.00354 0.00354
5 2000 0.03279 0.3 100 10 1 20 1 1 1306 1308 174 198 0.00811 0.00811 2.02227 2.02227 2.022266442 2.022266442 4.05E-03 4.05E-03 2.02227 2.02227 0.00405 0.00405
5 2000 0.02186 0.3 100 10 1 20 1 1 1307 1309 175 199 0.0054 0.0054 2.02227 2.02227 2.022266442 2.022266442 2.70E-03 2.70E-03 2.02227 2.02227 0.0027 0.0027
5 2000 0.00454 0.3 100 10 1 20 1 1 1308 1310 176 200 0.00112 0.00112 2.02227 2.02227 2.022266442 2.022266442 5.61E-04 5.61E-04 2.02227 2.02227 0.00056 0.00056
5 2000 0.01977 0.3 100 10 1 20 1 1 1309 50 177 201 0.00489 0.00112 2.02227 2.02227 2.022266442 2.022266442 2.44E-03 2.44E-03 2.02227 2.02227 0.00244 0.00244
5 2000 0.08031 0.3 100 10 1 20 1 1 1312 203 204 228 0.01959 0.01959 2.04968 2.04968 2.049682733 2.049682733 9.80E-03 9.80E-03 2.04968 2.04968 0.0098 0.0098
5 2000 0.00504 0.3 100 10 1 20 1 1 1311 1313 205 229 0.00123 0.00123 2.04968 2.04968 2.049682733 2.049682733 6.14E-04 6.14E-04 2.04968 2.04968 0.00061 0.00061
5 2000 0.03204 0.3 100 10 1 20 1 1 1312 1314 206 230 0.00782 0.00782 2.04968 2.04968 2.049682733 2.049682733 3.91E-03 3.91E-03 2.04968 2.04968 0.00391 0.00391
5 2000 0.02997 0.3 100 10 1 20 1 1 1313 1315 207 231 0.00731 0.00731 2.04968 2.04968 2.049682733 2.049682733 3.65E-03 3.65E-03 2.04968 2.04968 0.00365 0.00365
5 2000 0.04021 0.3 100 10 1 20 1 1 1314 1316 208 232 0.00981 0.00981 2.04968 2.04968 2.049682733 2.049682733 4.90E-03 4.90E-03 2.04968 2.04968 0.0049 0.0049
5 2000 0.0128 0.3 100 10 1 20 1 1 1315 1317 209 233 0.00312 0.00312 2.04968 2.04968 2.049682733 2.049682733 1.56E-03 1.56E-03 2.04968 2.04968 0.00156 0.00156
5 2000 0.03894 0.3 100 10 1 20 1 1 1316 1318 210 234 0.0095 0.0095 2.04968 2.04968 2.049682733 2.049682733 4.75E-03 4.75E-03 2.04968 2.04968 0.00475 0.00475
5 2000 0.02113 0.3 100 10 1 20 1 1 1317 1319 211 235 0.00516 0.00516 2.04968 2.04968 2.049682733 2.049682733 2.58E-03 2.58E-03 2.04968 2.04968 0.00258 0.00258
5 2000 0.05159 0.3 100 10 1 20 1 1 1318 1320 212 236 0.01259 0.01259 2.04968 2.04968 2.049682733 2.049682733 6.29E-03 6.29E-03 2.04968 2.04968 0.00629 0.00629
5 2000 0.04448 0.3 100 10 1 20 1 1 1319 1321 213 237 0.01085 0.01085 2.04968 2.04968 2.049682733 2.049682733 5.43E-03 5.43E-03 2.04968 2.04968 0.00543 0.00543
5 2000 0.01286 0.3 100 10 1 20 1 1 1320 1322 214 238 0.00314 0.00314 2.04968 2.04968 2.049682733 2.049682733 1.57E-03 1.57E-03 2.04968 2.04968 0.00157 0.00157
5 2000 0.07699 0.3 100 10 1 20 1 1 1321 1323 215 239 0.01878 0.01878 2.04968 2.04968 2.049682733 2.049682733 9.39E-03 9.39E-03 2.04968 2.04968 0.00939 0.00939
5 2000 0.0537 0.3 100 10 1 20 1 1 1322 1324 216 240 0.0131 0.0131 2.04968 2.04968 2.049682733 2.049682733 6.55E-03 6.55E-03 2.04968 2.04968 0.00655 0.00655
5 2000 0.04153 0.3 100 10 1 20 1 1 1323 1325 217 241 0.01013 0.01013 2.04968 2.04968 2.049682733 2.049682733 5.07E-03 5.07E-03 2.04968 2.04968 0.00507 0.00507
5 2000 0.03205 0.3 100 10 1 20 1 1 1324 1326 218 242 0.00782 0.00782 2.04968 2.04968 2.049682733 2.049682733 3.91E-03 3.91E-03 2.04968 2.04968 0.00391 0.00391
5 2000 0.00884 0.3 100 10 1 20 1 1 1325 1327 219 243 0.00216 0.00216 2.04968 2.04968 2.049682733 2.049682733 1.08E-03 1.08E-03 2.04968 2.04968 0.00108 0.00108
5 2000 0.06432 0.3 100 10 1 20 1 1 1326 1328 220 244 0.01569 0.01569 2.04968 2.04968 2.049682733 2.049682733 7.84E-03 7.84E-03 2.04968 2.04968 0.00784 0.00784
5 2000 0.03773 0.3 100 10 1 20 1 1 1327 1329 221 245 0.0092 0.0092 2.04968 2.04968 2.049682733 2.049682733 4.60E-03 4.60E-03 2.04968 2.04968 0.0046 0.0046
5 2000 0.06183 0.3 100 10 1 20 1 1 1328 1330 222 246 0.01508 0.01508 2.04968 2.04968 2.049682733 2.049682733 7.54E-03 7.54E-03 2.04968 2.04968 0.00754 0.00754
5 2000 0.04891 0.3 100 10 1 20 1 1 1329 1331 223 247 0.01193 0.01193 2.04968 2.04968 2.049682733 2.049682733 5.97E-03 5.97E-03 2.04968 2.04968 0.00597 0.00597
5 2000 0.06831 0.3 100 10 1 20 1 1 1330 1332 224 248 0.01666 0.01666 2.04968 2.04968 2.049682733 2.049682733 8.33E-03 8.33E-03 2.04968 2.04968 0.00833 0.00833
5 2000 0.00158 0.3 100 10 1 20 1 1 1331 1333 225 249 0.00039 0.00039 2.04968 2.04968 2.049682733 2.049682733 1.93E-04 1.93E-04 2.04968 2.04968 0.00019 0.00019
5 2000 0.01729 0.3 100 10 1 20 1 1 1332 1334 226 250 0.00422 0.00422 2.04968 2.04968 2.049682733 2.049682733 2.11E-03 2.11E-03 2.04968 2.04968 0.00211 0.00211
5 2000 0.0061 0.3 100 10 1 20 1 1 1333 50 227 251 0.00149 0.00422 2.04968 2.04968 2.049682733 2.049682733 7.45E-04 7.45E-04 2.04968 2.04968 0.00074 0.00074
5 2000 0.0088 0.3 100 10 1 20 1 1 1336 253 254 268 0.00212 0.00212 2.07624 2.07624 2.076237233 2.076237233 1.06E-03 1.06E-03 2.07624 2.07624 0.00106 0.00106
5 2000 0.02759 0.3 100 10 1 20 1 1 1335 1337 255 269 0.00664 0.00664 2.07624 2.07624 2.076237233 2.076237233 3.32E-03 3.32E-03 2.07624 2.07624 0.00332 0.00332
5 2000 0.01069 0.3 100 10 1 20 1 1 1336 1338 256 270 0.00257 0.00257 2.07624 2.07624 2.076237233 2.076237233 1.29E-03 1.29E-03 2.07624 2.07624 0.00129 0.00129
5 2000 0.00006 0.3 100 10 1 20 1 1 1337 1339 257 271 0.00001 0.00001 2.07624 2.07624 2.076237233 2.076237233 7.41E-06 7.41E-06 2.07624 2.07624 0.00001 0.00001
5 2000 0.04462 0.3 100 10 1 20 1 1 1338 1340 258 272 0.01075 0.01075 2.07624 2.07624 2.076237233 2.076237233 5.37E-03 5.37E-03 2.07624 2.07624 0.00537 0.00537
5 2000 0.05461 0.3 100 10 1 20 1 1 1339 1341 259 273 0.01315 0.01315 2.07624 2.07624 2.076237233 2.076237233 6.58E-03 6.58E-03 2.07624 2.07624 0.00658 0.00658
5 2000 0.04522 0.3 100 10 1 20 1 1 1340 1342 260 274 0.01089 0.01089 2.07624 2.07624 2.076237233 2.076237233 5.45E-03 5.45E-03 2.07624 2.07624 0.00545 0.00545
5 2000 0.06876 0.3 100 10 1 20 1 1 1341 1343 261 275 0.01656 0.01656 2.07624 2.07624 2.076237233 2.076237233 8.28E-03 8.28E-03 2.07624 2.07624 0.00828 0.00828
5 2000 0.00684 0.3 100 10 1 20 1 1 1342 1344 262 276 0.00165 0.00165 2.07624 2.07624 2.076237233 2.076237233 8.24E-04 8.24E-04 2.07624 2.07624 0.00082 0.00082
5 2000 0.01598 0.3 100 10 1 20 1 1 1343 1345 263 277 0.00385 0.00385 2.07624 2.07624 2.076237233 2.076237233 0.001924225 0.001924225 2.07624 2.07624 0.00192 0.00192
5 2000 0.05642 0.3 100 10 1 20 1 1 1344 1346 264 278 0.01359 0.01359 2.07624 2.07624 2.076237233 2.076237233 6.79E-03 6.79E-03 2.07624 2.07624 0.00679 0.00679
5 2000 0.03776 0.3 100 10 1 20 1 1 1345 1347 265 279 0.00909 0.00909 2.07624 2.07624 2.076237233 2.076237233 4.55E-03 4.55E-03 2.07624 2.07624 0.00455 0.00455
5 2000 0.02969 0.3 100 10 1 20 1 1 1346 1348 266 280 0.00715 0.00715 2.07624 2.07624 2.076237233 2.076237233 3.58E-03 3.58E-03 2.07624 2.07624 0.00358 0.00358
5 2000 0.0125 0.3 100 10 1 20 1 1 1347 30 267 281 0.00301 0.00715 2.07624 2.07624 2.076237233 2.076237233 1.50E-03 1.50E-03 2.07624 2.07624 0.0015 0.0015
5 2000 0.0563 0.3 100 10 1 20 1 1 1350 283 284 306 0.0141 0.0141 1.99672 1.99672 1.996716105 1.996716105 7.05E-03 7.05E-03 1.99672 1.99672 0.00705 0.00705
5 2000 0.07422 0.3 100 10 1 20 1 1 1349 1351 285 307 0.01859 0.01859 1.99672 1.99672 1.996716105 1.996716105 9.29E-03 9.29E-03 1.99672 1.99672 0.00929 0.00929
5 2000 0.04239 0.3 100 10 1 20 1 1 1350 1352 286 308 0.01061 0.01061 1.99672 1.99672 1.996716105 1.996716105 5.31E-03 5.31E-03 1.99672 1.99672 0.00531 0.00531
5 2000 0.0072 0.3 100 10 1 20 1 1 1351 1353 287 309 0.0018 0.0018 1.99672 1.99672 1.996716105 1.996716105 9.01E-04 9.01E-04 1.99672 1.99672 0.0009 0.0009
5 2000 0.06056 0.3 100 10 1 20 1 1 1352 1354 288 310 0.01516 0.01516 1.99672 1.99672 1.996716105 1.996716105 7.58E-03 7.58E-03 1.99672 1.99672 0.00758 0.00758
5 2000 0.03213 0.3 100 10 1 20 1 1 1353 1355 289 311 0.00805 0.00805 1.99672 1.99672 1.996716105 1.996716105 4.02E-03 4.02E-03 1.99672 1.99672 0.00402 0.00402
5 2000 0.03693 0.3 100 10 1 20 1 1 1354 1356 290 312 0.00925 0.00925 1.99672 1.99672 1.996716105 1.996716105 4.62E-03 4.62E-03 1.99672 1.99672 0.00462 0.00462
5 2000 0.03935 0.3 100 10 1 20 1 1 1355 1357 291 313 0.00985 0.00985 1.99672 1.99672 1.996716105 1.996716105 4.93E-03 4.93E-03 1.99672 1.99672 0.00493 0.00493
5 2000 0.01662 0.3 100 10 1 20 1 1 1356 1358 292 314 0.00416 0.00416 1.99672 1.99672 1.996716105 1.996716105 2.08E-03 2.08E-03 1.99672 1.99672 0.00208 0.00208
5 2000 0.02638 0.3 100 10 1 20 1 1 1357 1359 293 315 0.0066 0.0066 1.99672 1.99672 1.996716105 1.996716105 3.30E-03 3.30E-03 1.99672 1.99672 0.0033 0.0033
5 2000 0.00766 0.3 100 10 1 20 1 1 1358 1360 294 316 0.00192 0.00192 1.99672 1.99672 1.996716105 1.996716105 9.59E-04 9.59E-04 1.99672 1.99672 0.00096 0.00096
5 2000 0.04715 0.3 100 10 1 20 1 1 1359 1361 295 317 0.01181 0.01181 1.99672 1.99672 1.996716105 1.996716105 5.90E-03 5.90E-03 1.99672 1.99672 0.0059 0.0059
5 2000 0.01361 0.3 100 10 1 20 1 1 1360 1362 296 318 0.00341 0.00341 1.99672 1.99672 1.996716105 1.996716105 1.70E-03 1.70E-03 1.99672 1.99672 0.0017 0.0017
5 2000 0.07413 0.3 100 10 1 20 1 1 1361 1363 297 319 0.01856 0.01856 1.99672 1.99672 1.996716105 1.996716105 9.28E-03 9.28E-03 1.99672 1.99672 0.00928 0.00928
5 2000 0.00786 0.3 100 10 1 20 1 1 1362 1364 298 320 0.00197 0.00197 1.99672 1.99672 1.996716105 1.996716105 9.84E-04 9.84E-04 1.99672 1.99672 0.00098 0.00098
5 2000 0.03549 0.3 100 10 1 20 1 1 1363 1365 299 321 0.00889 0.00889 1.99672 1.99672 1.996716105 1.996716105 4.44E-03 4.44E-03 1.99672 1.99672 0.00444 0.00444
5 2000 0.02184 0.3 100 10 1 20 1 1 1364 1366 300 322 0.00547 0.00547 1.99672 1.99672 1.996716105 1.996716105 2.73E-03 2.73E-03 1.99672 1.99672 0.00273 0.00273
5 2000 0.06973 0.3 100 10 1 20 1 1 1365 1367 301 323 0.01746 0.01746 1.99672 1.99672 1.996716105 1.996716105 8.73E-03 8.73E-03 1.99672 1.99672 0.00873 0.00873

5 2000 0.06 0.3 100 10 1 20 1 1 1366 1368 302 324 0.01502 0.01502 1.99672 1.99672 1.996716105 1.996716105 7.51E-03 7.51E-03 1.99672 1.99672 0.00751 0.00751
5 2000 0.02184 0.3 100 10 1 20 1 1 1367 1369 303 325 0.00547 0.00547 1.99672 1.99672 1.996716105 1.996716105 2.73E-03 2.73E-03 1.99672 1.99672 0.00273 0.00273
5 2000 0.05384 0.3 100 10 1 20 1 1 1368 1370 304 326 0.01348 0.01348 1.99672 1.99672 1.996716105 1.996716105 6.74E-03 6.74E-03 1.99672 1.99672 0.00674 0.00674
5 2000 0.02054 0.3 100 10 1 20 1 1 1369 46 305 327 0.00514 0.01348 1.99672 1.99672 1.996716105 1.996716105 2.57E-03 2.57E-03 1.99672 1.99672 0.00257 0.00257
5 2000 0.00747 0.3 100 10 1 20 1 1 1372 329 330 340 0.00181 0.00181 2.06642 2.06642 2.066417074 2.066417074 9.04E-04 9.04E-04 2.06642 2.06642 0.0009 0.0009
5 2000 0.0026 0.3 100 10 1 20 1 1 1371 1373 331 341 0.00063 0.00063 2.06642 2.06642 2.066417074 2.066417074 3.15E-04 3.15E-04 2.06642 2.06642 0.00031 0.00031
5 2000 0.02672 0.3 100 10 1 20 1 1 1372 1374 332 342 0.00646 0.00646 2.06642 2.06642 2.066417074 2.066417074 3.23E-03 3.23E-03 2.06642 2.06642 0.00323 0.00323
5 2000 0.06535 0.3 100 10 1 20 1 1 1373 1375 333 343 0.01581 0.01581 2.06642 2.06642 2.066417074 2.066417074 7.91E-03 7.91E-03 2.06642 2.06642 0.00791 0.00791
5 2000 0.02461 0.3 100 10 1 20 1 1 1374 1376 334 344 0.00596 0.00596 2.06642 2.06642 2.066417074 2.066417074 2.98E-03 2.98E-03 2.06642 2.06642 0.00298 0.00298
5 2000 0.01949 0.3 100 10 1 20 1 1 1375 1377 335 345 0.00472 0.00472 2.06642 2.06642 2.066417074 2.066417074 2.36E-03 2.36E-03 2.06642 2.06642 0.00236 0.00236
5 2000 0.03976 0.3 100 10 1 20 1 1 1376 1378 336 346 0.00962 0.00962 2.06642 2.06642 2.066417074 2.066417074 4.81E-03 4.81E-03 2.06642 2.06642 0.00481 0.00481
5 2000 0.02109 0.3 100 10 1 20 1 1 1377 1379 337 347 0.0051 0.0051 2.06642 2.06642 2.066417074 2.066417074 2.55E-03 2.55E-03 2.06642 2.06642 0.00255 0.00255
5 2000 0.02819 0.3 100 10 1 20 1 1 1378 1380 338 348 0.00682 0.00682 2.06642 2.06642 2.066417074 2.066417074 3.41E-03 3.41E-03 2.06642 2.06642 0.00341 0.00341
5 2000 0.00376 0.3 100 10 1 20 1 1 1379 22 339 349 0.00091 0.00682 2.06642 2.06642 2.066417074 2.066417074 4.54E-04 4.54E-04 2.06642 2.06642 0.00045 0.00045
5 2000 0.0409 0.3 100 10 1 20 1 1 1382 351 352 356 0.00966 0.00966 2.11703 2.11703 2.11703457 2.11703457 4.83E-03 4.83E-03 2.11703 2.11703 0.00483 0.00483
5 2000 0.01749 0.3 100 10 1 20 1 1 1381 1383 353 357 0.00413 0.00413 2.11703 2.11703 2.11703457 2.11703457 2.07E-03 2.07E-03 2.11703 2.11703 0.00207 0.00207
5 2000 0.07325 0.3 100 10 1 20 1 1 1382 1384 354 358 0.0173 0.0173 2.11703 2.11703 2.11703457 2.11703457 8.65E-03 8.65E-03 2.11703 2.11703 0.00865 0.00865
5 2000 0.04989 0.3 100 10 1 20 1 1 1383 10 355 359 0.01178 0.0173 2.11703 2.11703 2.11703457 2.11703457 5.89E-03 5.89E-03 2.11703 2.11703 0.00589 0.00589
5 2000 0.06262 0.3 100 10 1 20 1 1 1386 361 362 368 0.01511 0.01511 2.07233 2.07233 2.072329718 2.072329718 7.55E-03 7.55E-03 2.07233 2.07233 0.00755 0.00755
5 2000 0.07696 0.3 100 10 1 20 1 1 1385 1387 363 369 0.01857 0.01857 2.07233 2.07233 2.072329718 2.072329718 9.28E-03 9.28E-03 2.07233 2.07233 0.00928 0.00928
5 2000 0.02748 0.3 100 10 1 20 1 1 1386 1388 364 370 0.00663 0.00663 2.07233 2.07233 2.072329718 2.072329718 3.32E-03 3.32E-03 2.07233 2.07233 0.00332 0.00332
5 2000 0.04505 0.3 100 10 1 20 1 1 1387 1389 365 371 0.01087 0.01087 2.07233 2.07233 2.072329718 2.072329718 5.43E-03 5.43E-03 2.07233 2.07233 0.00543 0.00543
5 2000 0.00673 0.3 100 10 1 20 1 1 1388 1390 366 372 0.00162 0.00162 2.07233 2.07233 2.072329718 2.072329718 8.12E-04 8.12E-04 2.07233 2.07233 0.00081 0.00081
5 2000 0.05263 0.3 100 10 1 20 1 1 1389 14 367 373 0.0127 0.00162 2.07233 2.07233 2.072329718 2.072329718 6.35E-03 6.35E-03 2.07233 2.07233 0.00635 0.00635
5 2000 0.03199 0.3 100 10 1 20 1 1 1392 375 376 387 0.00821 0.00821 1.94834 1.94834 1.948342957 1.948342957 4.11E-03 4.11E-03 1.94834 1.94834 0.00411 0.00411
5 2000 0.07489 0.3 100 10 1 20 1 1 1391 1393 377 388 0.01922 0.01922 1.94834 1.94834 1.948342957 1.948342957 9.61E-03 9.61E-03 1.94834 1.94834 0.00961 0.00961
5 2000 0.00897 0.3 100 10 1 20 1 1 1392 1394 378 389 0.0023 0.0023 1.94834 1.94834 1.948342957 1.948342957 1.15E-03 1.15E-03 1.94834 1.94834 0.00115 0.00115
5 2000 0.07201 0.3 100 10 1 20 1 1 1393 1395 379 390 0.01848 0.01848 1.94834 1.94834 1.948342957 1.948342957 9.24E-03 9.24E-03 1.94834 1.94834 0.00924 0.00924
5 2000 0.04837 0.3 100 10 1 20 1 1 1394 1396 380 391 0.01241 0.01241 1.94834 1.94834 1.948342957 1.948342957 6.21E-03 6.21E-03 1.94834 1.94834 0.00621 0.00621
5 2000 0.02714 0.3 100 10 1 20 1 1 1395 1397 381 392 0.00696 0.00696 1.94834 1.94834 1.948342957 1.948342957 3.48E-03 3.48E-03 1.94834 1.94834 0.00348 0.00348
5 2000 0.01167 0.3 100 10 1 20 1 1 1396 1398 382 393 0.00299 0.00299 1.94834 1.94834 1.948342957 1.948342957 1.50E-03 1.50E-03 1.94834 1.94834 0.0015 0.0015
5 2000 0.03745 0.3 100 10 1 20 1 1 1397 1399 383 394 0.00961 0.00961 1.94834 1.94834 1.948342957 1.948342957 4.80E-03 4.80E-03 1.94834 1.94834 0.0048 0.0048
5 2000 0.01714 0.3 100 10 1 20 1 1 1398 1400 384 395 0.0044 0.0044 1.94834 1.94834 1.948342957 1.948342957 2.20E-03 2.20E-03 1.94834 1.94834 0.0022 0.0022
5 2000 0.07748 0.3 100 10 1 20 1 1 1399 1401 385 396 0.01988 0.01988 1.94834 1.94834 1.948342957 1.948342957 9.94E-03 9.94E-03 1.94834 1.94834 0.00994 0.00994
5 2000 0.0102 0.3 100 10 1 20 1 1 1400 24 386 397 0.00262 0.01988 1.94834 1.94834 1.948342957 1.948342957 1.31E-03 1.31E-03 1.94834 1.94834 0.00131 0.00131
5 2000 0.00229 0.3 100 10 1 20 1 1 1403 399 400 402 0.00059 0.00059 1.94553 1.94553 1.945528153 1.945528153 2.94E-04 2.94E-04 1.94553 1.94553 0.00029 0.00029
5 2000 0.02692 0.3 100 10 1 20 1 1 1402 6 401 403 0.00692 0.00059 1.94553 1.94553 1.945528153 1.945528153 3.46E-03 3.46E-03 1.94553 1.94553 0.00346 0.00346
5 2000 0.0575 0.99 1789.139633 179.942444 1 20 1 1 1215 1 2 27 0.01412 0.01412 2.03616 2.03616 2.036158209 2.036158209 7.06E-03 7.06E-03 2.03616 2.03616 0.00706 0.00706
5 2000 0.04349 0.99 1030.638136 102.6126742 1 20 1 1 1214 1216 3 28 0.01068 0.01068 2.03616 2.03616 2.036158209 2.036158209 5.34E-03 5.34E-03 2.03616 2.03616 0.00534 0.00534
5 2000 0.04724 0.99 1215.64484 120.7198542 1 20 1 1 1215 1217 4 29 0.0116 0.0116 2.03616 2.03616 2.036158209 2.036158209 5.80E-03 5.80E-03 2.03616 2.03616 0.0058 0.0058
5 2000 0.02362 0.99 301.7307318 30.43546429 1 20 1 1 1216 1218 5 30 0.0058 0.0058 2.03616 2.03616 2.036158209 2.036158209 2.90E-03 2.90E-03 2.03616 2.03616 0.0029 0.0029
5 2000 0.02463 0.99 330.4902309 32.90111368 1 20 1 1 1217 1219 6 31 0.00605 0.00605 2.03616 2.03616 2.036158209 2.036158209 3.02E-03 3.02E-03 2.03616 2.03616 0.00302 0.00302
5 2000 0.06314 0.99 2171.234657 217.2514068 1 20 1 1 1218 1220 7 32 0.0155 0.0155 2.03616 2.03616 2.036158209 2.036158209 7.75E-03 7.75E-03 2.03616 2.03616 0.00775 0.00775
5 2000 0.00118 0.99 0.763331947 7.59E-02 1 20 1 1 1219 1221 8 33 0.00029 0.00029 2.03616 2.03616 2.036158209 2.036158209 1.45E-04 1.45E-04 2.03616 2.03616 0.00015 0.00015
5 2000 0.062 0.99 2098.655051 209.2908171 1 20 1 1 1220 1222 9 34 0.01522 0.01522 2.03616 2.03616 2.036158209 2.036158209 7.61E-03 7.61E-03 2.03616 2.03616 0.00761 0.00761
5 2000 0.06638 0.99 2395.170615 239.3407211 1 20 1 1 1221 1223 10 35 0.0163 0.0163 2.03616 2.03616 2.036158209 2.036158209 8.15E-03 8.15E-03 2.03616 2.03616 0.00815 0.00815
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5 2000 0.03204 0.99 548.6414362 55.1282378 1 20 1 1 1312 1314 206 230 0.00782 0.00782 2.04968 2.04968 2.049682733 2.049682733 3.91E-03 3.91E-03 2.04968 2.04968 0.00391 0.00391
5 2000 0.02997 0.99 481.6468369 48.28178815 1 20 1 1 1313 1315 207 231 0.00731 0.00731 2.04968 2.04968 2.049682733 2.049682733 3.65E-03 3.65E-03 2.04968 2.04968 0.00365 0.00365
5 2000 0.04021 0.99 868.2108212 86.44847894 1 20 1 1 1314 1316 208 232 0.00981 0.00981 2.04968 2.04968 2.049682733 2.049682733 4.90E-03 4.90E-03 2.04968 2.04968 0.0049 0.0049
5 2000 0.0128 0.99 88.06980086 8.8124385 1 20 1 1 1315 1317 209 233 0.00312 0.00312 2.04968 2.04968 2.049682733 2.049682733 1.56E-03 1.56E-03 2.04968 2.04968 0.00156 0.00156
5 2000 0.03894 0.99 816.1795184 80.97577439 1 20 1 1 1316 1318 210 234 0.0095 0.0095 2.04968 2.04968 2.049682733 2.049682733 4.75E-03 4.75E-03 2.04968 2.04968 0.00475 0.00475
5 2000 0.02113 0.99 240.4000581 24.00362163 1 20 1 1 1317 1319 211 235 0.00516 0.00516 2.04968 2.04968 2.049682733 2.049682733 2.58E-03 2.58E-03 2.04968 2.04968 0.00258 0.00258
5 2000 0.05159 0.99 1429.369152 142.8284769 1 20 1 1 1318 1320 212 236 0.01259 0.01259 2.04968 2.04968 2.049682733 2.049682733 6.29E-03 6.29E-03 2.04968 2.04968 0.00629 0.00629
5 2000 0.04448 0.99 1065.275967 105.6468309 1 20 1 1 1319 1321 213 237 0.01085 0.01085 2.04968 2.04968 2.049682733 2.049682733 5.43E-03 5.43E-03 2.04968 2.04968 0.00543 0.00543
5 2000 0.01286 0.99 88.31783123 8.870820439 1 20 1 1 1320 1322 214 238 0.00314 0.00314 2.04968 2.04968 2.049682733 2.049682733 1.57E-03 1.57E-03 2.04968 2.04968 0.00157 0.00157
5 2000 0.07699 0.99 3170.760104 317.0753284 1 20 1 1 1321 1323 215 239 0.01878 0.01878 2.04968 2.04968 2.049682733 2.049682733 9.39E-03 9.39E-03 2.04968 2.04968 0.00939 0.00939
5 2000 0.0537 0.99 1544.824764 154.4507521 1 20 1 1 1322 1324 216 240 0.0131 0.0131 2.04968 2.04968 2.049682733 2.049682733 6.55E-03 6.55E-03 2.04968 2.04968 0.00655 0.00655
5 2000 0.04153 0.99 928.1670843 92.30714632 1 20 1 1 1323 1325 217 241 0.01013 0.01013 2.04968 2.04968 2.049682733 2.049682733 5.07E-03 5.07E-03 2.04968 2.04968 0.00507 0.00507
5 2000 0.03205 0.99 552.5401519 55.35460918 1 20 1 1 1324 1326 218 242 0.00782 0.00782 2.04968 2.04968 2.049682733 2.049682733 3.91E-03 3.91E-03 2.04968 2.04968 0.00391 0.00391
5 2000 0.00884 0.99 41.97993602 4.200971398 1 20 1 1 1325 1327 219 243 0.00216 0.00216 2.04968 2.04968 2.049682733 2.049682733 1.08E-03 1.08E-03 2.04968 2.04968 0.00108 0.00108

5 2000 0.06432 0.99 2221.576794 221.9639855 1 20 1 1 1326 1328 220 244 0.01569 0.01569 2.04968 2.04968 2.049682733 2.049682733 7.84E-03 7.84E-03 2.04968 2.04968 0.00784 0.00784
5 2000 0.03773 0.99 764.7953993 76.49210084 1 20 1 1 1327 1329 221 245 0.0092 0.0092 2.04968 2.04968 2.049682733 2.049682733 4.60E-03 4.60E-03 2.04968 2.04968 0.0046 0.0046
5 2000 0.06183 0.99 2046.47412 204.0436205 1 20 1 1 1328 1330 222 246 0.01508 0.01508 2.04968 2.04968 2.049682733 2.049682733 7.54E-03 7.54E-03 2.04968 2.04968 0.00754 0.00754
5 2000 0.04891 0.99 1288.363753 127.9236574 1 20 1 1 1329 1331 223 247 0.01193 0.01193 2.04968 2.04968 2.049682733 2.049682733 5.97E-03 5.97E-03 2.04968 2.04968 0.00597 0.00597
5 2000 0.06831 0.99 2509.022143 250.9835725 1 20 1 1 1330 1332 224 248 0.01666 0.01666 2.04968 2.04968 2.049682733 2.049682733 8.33E-03 8.33E-03 2.04968 2.04968 0.00833 0.00833
5 2000 0.00158 0.99 1.340389356 0.133715932 1 20 1 1 1331 1333 225 249 0.00039 0.00039 2.04968 2.04968 2.049682733 2.049682733 1.93E-04 1.93E-04 2.04968 2.04968 0.00019 0.00019
5 2000 0.01729 0.99 159.6259378 16.04412996 1 20 1 1 1332 1334 226 250 0.00422 0.00422 2.04968 2.04968 2.049682733 2.049682733 2.11E-03 2.11E-03 2.04968 2.04968 0.00211 0.00211
5 2000 0.0061 0.99 20.06470779 1.992016734 1 20 1 1 1333 50 227 251 0.00149 0.00422 2.04968 2.04968 2.049682733 2.049682733 7.45E-04 7.45E-04 2.04968 2.04968 0.00074 0.00074
5 2000 0.0088 0.99 40.51160477 4.061793937 1 20 1 1 1336 253 254 268 0.00212 0.00212 2.07624 2.07624 2.076237233 2.076237233 1.06E-03 1.06E-03 2.07624 2.07624 0.00106 0.00106
5 2000 0.02759 0.99 396.1027029 39.81477051 1 20 1 1 1335 1337 255 269 0.00664 0.00664 2.07624 2.07624 2.076237233 2.076237233 3.32E-03 3.32E-03 2.07624 2.07624 0.00332 0.00332
5 2000 0.01069 0.99 59.72941001 5.985862637 1 20 1 1 1336 1338 256 270 0.00257 0.00257 2.07624 2.07624 2.076237233 2.076237233 1.29E-03 1.29E-03 2.07624 2.07624 0.00129 0.00129
5 2000 0.00006 0.99 1.98E-03 1.99E-04 1 20 1 1 1337 1339 257 271 0.00001 0.00001 2.07624 2.07624 2.076237233 2.076237233 7.41E-06 7.41E-06 2.07624 2.07624 0.00001 0.00001
5 2000 0.04462 0.99 1036.927486 104.3030638 1 20 1 1 1338 1340 258 272 0.01075 0.01075 2.07624 2.07624 2.076237233 2.076237233 5.37E-03 5.37E-03 2.07624 2.07624 0.00537 0.00537
5 2000 0.05461 0.99 1561.563198 155.9987746 1 20 1 1 1339 1341 259 273 0.01315 0.01315 2.07624 2.07624 2.076237233 2.076237233 6.58E-03 6.58E-03 2.07624 2.07624 0.00658 0.00658
5 2000 0.04522 0.99 1066.739428 107.1875265 1 20 1 1 1340 1342 260 274 0.01089 0.01089 2.07624 2.07624 2.076237233 2.076237233 5.45E-03 5.45E-03 2.07624 2.07624 0.00545 0.00545
5 2000 0.06876 0.99 2462.881505 246.1732205 1 20 1 1 1341 1343 261 275 0.01656 0.01656 2.07624 2.07624 2.076237233 2.076237233 8.28E-03 8.28E-03 2.07624 2.07624 0.00828 0.00828
5 2000 0.00684 0.99 24.35230087 2.45737375 1 20 1 1 1342 1344 262 276 0.00165 0.00165 2.07624 2.07624 2.076237233 2.076237233 8.24E-04 8.24E-04 2.07624 2.07624 0.00082 0.00082
5 2000 0.01598 0.99 133.4417771 13.32085641 1 20 1 1 1343 1345 263 277 0.00385 0.00385 2.07624 2.07624 2.076237233 2.076237233 0.001924225 0.001924225 2.07624 2.07624 0.00192 0.00192
5 2000 0.05642 0.99 1667.841205 165.6883603 1 20 1 1 1344 1346 264 278 0.01359 0.01359 2.07624 2.07624 2.076237233 2.076237233 6.79E-03 6.79E-03 2.07624 2.07624 0.00679 0.00679
5 2000 0.03776 0.99 744.2630651 74.8290006 1 20 1 1 1345 1347 265 279 0.00909 0.00909 2.07624 2.07624 2.076237233 2.076237233 4.55E-03 4.55E-03 2.07624 2.07624 0.00455 0.00455
5 2000 0.02969 0.99 458.6780987 46.00601522 1 20 1 1 1346 1348 266 280 0.00715 0.00715 2.07624 2.07624 2.076237233 2.076237233 3.58E-03 3.58E-03 2.07624 2.07624 0.00358 0.00358
5 2000 0.0125 0.99 81.8614317 8.184474105 1 20 1 1 1347 30 267 281 0.00301 0.00715 2.07624 2.07624 2.076237233 2.076237233 1.50E-03 1.50E-03 2.07624 2.07624 0.0015 0.0015
5 2000 0.0563 0.99 1795.970901 178.9516562 1 20 1 1 1350 283 284 306 0.0141 0.0141 1.99672 1.99672 1.996716105 1.996716105 7.05E-03 7.05E-03 1.99672 1.99672 0.00705 0.00705
5 2000 0.07422 0.99 3097.789488 311.2177724 1 20 1 1 1349 1351 285 307 0.01859 0.01859 1.99672 1.99672 1.996716105 1.996716105 9.29E-03 9.29E-03 1.99672 1.99672 0.00929 0.00929
5 2000 0.04239 0.99 1010.710078 101.4905944 1 20 1 1 1350 1352 286 308 0.01061 0.01061 1.99672 1.99672 1.996716105 1.996716105 5.31E-03 5.31E-03 1.99672 1.99672 0.00531 0.00531
5 2000 0.0072 0.99 29.20358195 2.916067377 1 20 1 1 1351 1353 287 309 0.0018 0.0018 1.99672 1.99672 1.996716105 1.996716105 9.01E-04 9.01E-04 1.99672 1.99672 0.0009 0.0009
5 2000 0.06056 0.99 2076.768185 208.086899 1 20 1 1 1352 1354 288 310 0.01516 0.01516 1.99672 1.99672 1.996716105 1.996716105 7.58E-03 7.58E-03 1.99672 1.99672 0.00758 0.00758
5 2000 0.03213 0.99 581.8106379 58.4132533 1 20 1 1 1353 1355 289 311 0.00805 0.00805 1.99672 1.99672 1.996716105 1.996716105 4.02E-03 4.02E-03 1.99672 1.99672 0.00402 0.00402
5 2000 0.03693 0.99 771.6225566 77.18668315 1 20 1 1 1354 1356 290 312 0.00925 0.00925 1.99672 1.99672 1.996716105 1.996716105 4.62E-03 4.62E-03 1.99672 1.99672 0.00462 0.00462
5 2000 0.03935 0.99 873.8374951 87.66796019 1 20 1 1 1355 1357 291 313 0.00985 0.00985 1.99672 1.99672 1.996716105 1.996716105 4.93E-03 4.93E-03 1.99672 1.99672 0.00493 0.00493
5 2000 0.01662 0.99 155.6606012 15.5640537 1 20 1 1 1356 1358 292 314 0.00416 0.00416 1.99672 1.99672 1.996716105 1.996716105 2.08E-03 2.08E-03 1.99672 1.99672 0.00208 0.00208
5 2000 0.02638 0.99 392.5494782 39.1364618 1 20 1 1 1357 1359 293 315 0.0066 0.0066 1.99672 1.99672 1.996716105 1.996716105 3.30E-03 3.30E-03 1.99672 1.99672 0.0033 0.0033
5 2000 0.00766 0.99 33.19123538 3.330014038 1 20 1 1 1358 1360 294 316 0.00192 0.00192 1.99672 1.99672 1.996716105 1.996716105 9.59E-04 9.59E-04 1.99672 1.99672 0.00096 0.00096
5 2000 0.04715 0.99 1253.980988 125.0094312 1 20 1 1 1359 1361 295 317 0.01181 0.01181 1.99672 1.99672 1.996716105 1.996716105 5.90E-03 5.90E-03 1.99672 1.99672 0.0059 0.0059
5 2000 0.01361 0.99 104.802378 10.51112943 1 20 1 1 1360 1362 296 318 0.00341 0.00341 1.99672 1.99672 1.996716105 1.996716105 1.70E-03 1.70E-03 1.99672 1.99672 0.0017 0.0017
5 2000 0.07413 0.99 3105.060184 309.6398317 1 20 1 1 1361 1363 297 319 0.01856 0.01856 1.99672 1.99672 1.996716105 1.996716105 9.28E-03 9.28E-03 1.99672 1.99672 0.00928 0.00928
5 2000 0.00786 0.99 34.97864804 3.475562416 1 20 1 1 1362 1364 298 320 0.00197 0.00197 1.99672 1.99672 1.996716105 1.996716105 9.84E-04 9.84E-04 1.99672 1.99672 0.00098 0.00098
5 2000 0.03549 0.99 709.1469948 71.40958157 1 20 1 1 1363 1365 299 321 0.00889 0.00889 1.99672 1.99672 1.996716105 1.996716105 4.44E-03 4.44E-03 1.99672 1.99672 0.00444 0.00444
5 2000 0.02184 0.99 269.8980794 26.92907641 1 20 1 1 1364 1366 300 322 0.00547 0.00547 1.99672 1.99672 1.996716105 1.996716105 2.73E-03 2.73E-03 1.99672 1.99672 0.00273 0.00273
5 2000 0.06973 0.99 2741.025292 274.3890049 1 20 1 1 1365 1367 301 323 0.01746 0.01746 1.99672 1.99672 1.996716105 1.996716105 8.73E-03 8.73E-03 1.99672 1.99672 0.00873 0.00873
5 2000 0.06 0.99 2038.407486 202.7453668 1 20 1 1 1366 1368 302 324 0.01502 0.01502 1.99672 1.99672 1.996716105 1.996716105 7.51E-03 7.51E-03 1.99672 1.99672 0.00751 0.00751
5 2000 0.02184 0.99 269.7594321 26.84747155 1 20 1 1 1367 1369 303 325 0.00547 0.00547 1.99672 1.99672 1.996716105 1.996716105 2.73E-03 2.73E-03 1.99672 1.99672 0.00273 0.00273
5 2000 0.05384 0.99 1641.673724 163.1481773 1 20 1 1 1368 1370 304 326 0.01348 0.01348 1.99672 1.99672 1.996716105 1.996716105 6.74E-03 6.74E-03 1.99672 1.99672 0.00674 0.00674
5 2000 0.02054 0.99 238.9369067 23.81181348 1 20 1 1 1369 46 305 327 0.00514 0.01348 1.99672 1.99672 1.996716105 1.996716105 2.57E-03 2.57E-03 1.99672 1.99672 0.00257 0.00257
5 2000 0.00747 0.99 29.44093956 2.937843432 1 20 1 1 1372 329 330 340 0.00181 0.00181 2.06642 2.06642 2.066417074 2.066417074 9.04E-04 9.04E-04 2.06642 2.06642 0.0009 0.0009
5 2000 0.0026 0.99 3.548940603 0.357068599 1 20 1 1 1371 1373 331 341 0.00063 0.00063 2.06642 2.06642 2.066417074 2.066417074 3.15E-04 3.15E-04 2.06642 2.06642 0.00031 0.00031
5 2000 0.02672 0.99 376.6021707 37.6303856 1 20 1 1 1372 1374 332 342 0.00646 0.00646 2.06642 2.06642 2.066417074 2.066417074 3.23E-03 3.23E-03 2.06642 2.06642 0.00323 0.00323
5 2000 0.06535 0.99 2243.751962 224.3674422 1 20 1 1 1373 1375 333 343 0.01581 0.01581 2.06642 2.06642 2.066417074 2.066417074 7.91E-03 7.91E-03 2.06642 2.06642 0.00791 0.00791
5 2000 0.02461 0.99 320.203301 31.7997821 1 20 1 1 1374 1376 334 344 0.00596 0.00596 2.06642 2.06642 2.066417074 2.066417074 2.98E-03 2.98E-03 2.06642 2.06642 0.00298 0.00298
5 2000 0.01949 0.99 200.2209659 20.02320615 1 20 1 1 1375 1377 335 345 0.00472 0.00472 2.06642 2.06642 2.066417074 2.066417074 2.36E-03 2.36E-03 2.06642 2.06642 0.00236 0.00236
5 2000 0.03976 0.99 835.3840138 83.60355452 1 20 1 1 1376 1378 336 346 0.00962 0.00962 2.06642 2.06642 2.066417074 2.066417074 4.81E-03 4.81E-03 2.06642 2.06642 0.00481 0.00481
5 2000 0.02109 0.99 233.9659404 23.35501103 1 20 1 1 1377 1379 337 347 0.0051 0.0051 2.06642 2.06642 2.066417074 2.066417074 2.55E-03 2.55E-03 2.06642 2.06642 0.00255 0.00255
5 2000 0.02819 0.99 419.5413337 42.09423189 1 20 1 1 1378 1380 338 348 0.00682 0.00682 2.06642 2.06642 2.066417074 2.066417074 3.41E-03 3.41E-03 2.06642 2.06642 0.00341 0.00341
5 2000 0.00376 0.99 7.408954111 0.742064852 1 20 1 1 1379 22 339 349 0.00091 0.00682 2.06642 2.06642 2.066417074 2.066417074 4.54E-04 4.54E-04 2.06642 2.06642 0.00045 0.00045
5 2000 0.0409 0.99 839.8809272 83.93375105 1 20 1 1 1382 351 352 356 0.00966 0.00966 2.11703 2.11703 2.11703457 2.11703457 4.83E-03 4.83E-03 2.11703 2.11703 0.00483 0.00483
5 2000 0.01749 0.99 153.2106927 15.42616988 1 20 1 1 1381 1383 353 357 0.00413 0.00413 2.11703 2.11703 2.11703457 2.11703457 2.07E-03 2.07E-03 2.11703 2.11703 0.00207 0.00207
5 2000 0.07325 0.99 2708.728373 268.5634464 1 20 1 1 1382 1384 354 358 0.0173 0.0173 2.11703 2.11703 2.11703457 2.11703457 8.65E-03 8.65E-03 2.11703 2.11703 0.00865 0.00865
5 2000 0.04989 0.99 1248.087931 125.539776 1 20 1 1 1383 10 355 359 0.01178 0.0173 2.11703 2.11703 2.11703457 2.11703457 5.89E-03 5.89E-03 2.11703 2.11703 0.00589 0.00589
5 2000 0.06262 0.99 2049.894305 206.2647371 1 20 1 1 1386 361 362 368 0.01511 0.01511 2.07233 2.07233 2.072329718 2.072329718 7.55E-03 7.55E-03 2.07233 2.07233 0.00755 0.00755
5 2000 0.07696 0.99 3104.845083 311.7347623 1 20 1 1 1385 1387 363 369 0.01857 0.01857 2.07233 2.07233 2.072329718 2.072329718 9.28E-03 9.28E-03 2.07233 2.07233 0.00928 0.00928
5 2000 0.02748 0.99 395.1809061 39.45921452 1 20 1 1 1386 1388 364 370 0.00663 0.00663 2.07233 2.07233 2.072329718 2.072329718 3.32E-03 3.32E-03 2.07233 2.07233 0.00332 0.00332
5 2000 0.04505 0.99 1064.691375 106.5057056 1 20 1 1 1387 1389 365 371 0.01087 0.01087 2.07233 2.07233 2.072329718 2.072329718 5.43E-03 5.43E-03 2.07233 2.07233 0.00543 0.00543
5 2000 0.00673 0.99 23.84394 2.367986028 1 20 1 1 1388 1390 366 372 0.00162 0.00162 2.07233 2.07233 2.072329718 2.072329718 8.12E-04 8.12E-04 2.07233 2.07233 0.00081 0.00081
5 2000 0.05263 0.99 1452.843055 144.8210091 1 20 1 1 1389 14 367 373 0.0127 0.00162 2.07233 2.07233 2.072329718 2.072329718 6.35E-03 6.35E-03 2.07233 2.07233 0.00635 0.00635
5 2000 0.03199 0.99 606.1262863 60.51287804 1 20 1 1 1392 375 376 387 0.00821 0.00821 1.94834 1.94834 1.948342957 1.948342957 4.11E-03 4.11E-03 1.94834 1.94834 0.00411 0.00411
5 2000 0.07489 0.99 3320.960885 331.4606883 1 20 1 1 1391 1393 377 388 0.01922 0.01922 1.94834 1.94834 1.948342957 1.948342957 9.61E-03 9.61E-03 1.94834 1.94834 0.00961 0.00961
5 2000 0.00897 0.99 47.96031921 4.757540443 1 20 1 1 1392 1394 378 389 0.0023 0.0023 1.94834 1.94834 1.948342957 1.948342957 1.15E-03 1.15E-03 1.94834 1.94834 0.00115 0.00115
5 2000 0.07201 0.99 3067.917503 307.0051518 1 20 1 1 1393 1395 379 390 0.01848 0.01848 1.94834 1.94834 1.948342957 1.948342957 9.24E-03 9.24E-03 1.94834 1.94834 0.00924 0.00924
5 2000 0.04837 0.99 1392.173008 139.1438031 1 20 1 1 1394 1396 380 391 0.01241 0.01241 1.94834 1.94834 1.948342957 1.948342957 6.21E-03 6.21E-03 1.94834 1.94834 0.00621 0.00621
5 2000 0.02714 0.99 437.3834778 43.75256769 1 20 1 1 1395 1397 381 392 0.00696 0.00696 1.94834 1.94834 1.948342957 1.948342957 3.48E-03 3.48E-03 1.94834 1.94834 0.00348 0.00348
5 2000 0.01167 0.99 80.43489641 8.103074435 1 20 1 1 1396 1398 382 393 0.00299 0.00299 1.94834 1.94834 1.948342957 1.948342957 1.50E-03 1.50E-03 1.94834 1.94834 0.0015 0.0015
5 2000 0.03745 0.99 828.4254973 82.89115293 1 20 1 1 1397 1399 383 394 0.00961 0.00961 1.94834 1.94834 1.948342957 1.948342957 4.80E-03 4.80E-03 1.94834 1.94834 0.0048 0.0048
5 2000 0.01714 0.99 174.7513716 17.48935415 1 20 1 1 1398 1400 384 395 0.0044 0.0044 1.94834 1.94834 1.948342957 1.948342957 2.20E-03 2.20E-03 1.94834 1.94834 0.0022 0.0022
5 2000 0.07748 0.99 3567.784425 357.5989701 1 20 1 1 1399 1401 385 396 0.01988 0.01988 1.94834 1.94834 1.948342957 1.948342957 9.94E-03 9.94E-03 1.94834 1.94834 0.00994 0.00994
5 2000 0.0102 0.99 61.58273129 6.206513747 1 20 1 1 1400 24 386 397 0.00262 0.01988 1.94834 1.94834 1.948342957 1.948342957 1.31E-03 1.31E-03 1.94834 1.94834 0.00131 0.00131

5 2000 0.00229 0.99 3.124060694 0.309774447 1 20 1 1 1403 399 400 402 0.00059 0.00059 1.94553 1.94553 1.945528153 1.945528153 2.94E-04 2.94E-04 1.94553 1.94553 0.00029 0.00029
5 2000 0.02692 0.99 429.5995221 42.93146976 1 20 1 1 1402 6 401 403 0.00692 0.00059 1.94553 1.94553 1.945528153 1.945528153 3.46E-03 3.46E-03 1.94553 1.94553 0.00346 0.00346
END_CV

Rock and Fluid properties section

SWI 0.12
SGI 0.00

SWMAX 0.88
SGMAX 1.00
PB 4014.7
PREF 4790
ZREF 2000
CROCK 3.00E-06
DENOIL 46.244
DENWAT 63.238
DENGAS 0.0647

KROW 3
0 1 0 0
0.9999 1 0 0
1 0 1 0

NPVT 1
PVTDATA 10
14.7 1.062 1.04 1 0.9358295 0.008 1.04473539 0.31 0
264.7 1.15 0.975 90.5 0.0679021 0.0096 1.043962905 0.31 0
514.7 1.207 0.91 180 0.0352285 0.0112 1.04319042 0.31 0
1014.7 1.295 0.83 371 0.0179511 0.014 1.04164545 0.31 0
2014.7 1.435 0.695 636 0.0090626 0.0189 1.03855551 0.31 0
2514.7 1.5 0.641 775 0.0072658 0.0208 1.03701054 0.31 0
3014.7 1.565 0.594 930 0.0060642 0.0228 1.03546557 0.31 0
4014.7 1.695 0.51 1270 0.00455376 0.0268 1.03237563 0.31 0
5014.7 1.827 0.449 1600 0.003644 0.0329 1.02928569 0.31 0
9014.7 2.353 0.203 2984 0.00216739 0.047 1.01692593 0.31 0

COREF 1.47E-05
CWREF 3.00E-06
CGREF 3.00E-04
CROCK 3.0E-6

Numerical Controls

DELT 0.2
TMAX 730
DTMIN 0.2
DTMAX 0.5

RESIDERR 1E-4
EPSSOLVER 1E-5
ITSOLVER 60
ITMAX 20
NCUT 5

DPMAX 50
DSWMAX 0.10
DSGMAX 0.10
DSOMAX 0.10

DPPERT -5e-5
DSWPERT 5E-6
DSGPERT 5E-6

Schedule

TIME 1
TIME 2
TIME 10
TIME 15
TIME 20
TIME 90
TIME 365
TIME 500

TIME900
TIME1095
TIME1460
TIME1825
TIME2190
TIME2555
TIME2920
TIME3285
TIME3650

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