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Modeling Stutter and Pull-up Using the GlobalFiler Human DNA Amplification Kit in Forensic DNA Analysis

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Modeling Stutter and Pull-up Using the GlobalFiler Human DNA Amplification Kit in Forensic DNA Analysis

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Abstract

The processing of forensic DNA samples from extraction to interpretation can introduce non-biological, process-related stutter and pull-up artifacts that can significantly complicate DNA profile interpretation by appearing as biologically significant alleles. This project aims to model stutter and pull-up product formation to enable automated identification and removal of non-allelic influence from the profile. The results will provide more accurate and reliable means of artifact identification and will also contribute to understanding the Globalfiler Human DNA Amplification system (ThermoFisher Scientific), a relatively new amplification kit that is currently undergoing widespread implementation. Stutter and pull-up are modeled using GlobalFiler-amplified human DNA data. Stutter is modeled using nonlinear regression and pull-up is modeled using symbolic regression via genetic programming, a form of artificial intelligence. Both leverage large datasets and computational methods to determine optimal models for artifact detection. The resulting stutter models used in conjunction with a dynamic, locus, sample specific analytical threshold (LSST) successfully removed 96.91% of stutter from human DNA profiles. Pull-up models using a dynamic, locus, sample specific analytical threshold (LSST) successfully removed 98.1 % of pull-up peaks in human DNA profiles overall across all dye relationships.

Executive Summary

In forensic DNA analysis, the processing of DNA samples from extraction to interpretation can introduce non-biological, process-related artifacts that can significantly complicate DNA profile interpretation. Two of the most common artifacts are stutter and pull-up, which can arise during polymerase chain reaction (PCR) amplification [1] and capillary electrophoresis detection [2].

PCR is a method that produces millions of identical copies of a DNA target [1]. In forensic DNA analysis, the preferred PCR targets are polymorphic microsatellite DNA sequences, i.e. short tandem repeats (STRs), found in the noncoding regions of the human genome [3]. STRs are two to six base pair repetitive DNA sequences that are typically 100 to 400 bases in total length. Forensic laboratories target 13 to 27 autosomal STRs through the use of commercially available multiplex primer sets, each of which is fluorescently labelled [4]. Following PCR amplification, the STR amplicons are detected using capillary electrophoresis [2]. This process, however, can introduce artifacts known as stutter and pull-up, both of which can complicate DNA profile interpretation.

In a DNA profile, stutter artifacts manifest as non-allelic peaks that are typically one repeat unit smaller or larger than the true allele peaks [5]. Stutter products are a consequence of the PCR amplification of repetitive DNA sequences and occur due to slipped strand mispairing, in which regions of the DNA template or non-template strand assume a hairpin, or secondary loop structure, that can cause the DNA polymerase to either replicate or omit repeat motifs [3]. This can be problematic, because these non-allelic peaks can be misinterpreted as true biological allelic peaks when not detected by the analyst or the software program [6]. Stutter artifacts can be detected by applying a peak height threshold based on the “parent” (stutter causing) fragment

[7]. These static thresholds are commonly used to account for the stutter proportions expected at each locus, however, this can lead to the elimination of smaller true allelic peaks that result from a minor contributor(s) [8].

A second artifact that can lead to misinterpretation is pull-up, which is a result of the DNA detection process [9]. Capillary electrophoresis detects the fluorescent dyes attached to differently sized DNA fragments [2]. The dyes are excited by the capillary laser, producing broad fluorescent spectrums unique to each dye, which are then detected and differentiated through an analysis software [10]. However, the software's inability to remove the effects of spectral overlap caused by the use of various fluorescent dyes can produce non-biological pull-up artifacts [9]. These artifacts can manifest as peaks with the morphology of true alleles and can be difficult to distinguish, specifically when they fall within an allelic bin.

In addition, true allelic peaks can be affected by partial pull-up, where peak heights of the true alleles are artificially increased by pull-up artifacts from other peaks' overlapping sizes in a different dye channel [11]. This can distort the necessary calculations for determining the ratio and possible number of contributors based on the profile peak height balance. While the use of spectral calibration and manual detection can remove most pull-up, it is possible that these artifacts persist, creating non-allelic peaks that can be mistaken for true allelic peaks [9]. This, like stutter, can complicate mixture analyses and interpretation reliability.

This project seeks to model stutter and pull-up artifacts using the GlobalFiler Human DNA Amplification Kit [12]. It is a relatively new amplification kit that is currently undergoing widespread implementation. It is a multiplex system that uses six different fluorescent dyes for 24 STR markers, containing 10 mini-STR markers that increases the sensitivity for low level and degraded DNA samples. It is currently the only system that contains all the STR markers

included in major global databases recommended for inclusion by the CODIS Core Loci Working Group and has a discriminatory power of up to $1x10^{27}$[13]. However, the system is not as well-characterized as the previously used kits. Its multiplex creates copious amounts of stutters and is subject to pull-up on the resulting DNA profiles. Thus, characterizing GlobalFiler's system trends and optimizing its reactions will provide information required to model stutter and pull-up that will aid in developing an increasingly accurate automated process of identifying and removing both from DNA profiles. This automated process will greatly decrease the amount of time DNA analysts will need to analyze a profile.

In this project, DNA data amplified with the GlobalFiler Human DNA Amplification Kit (24 loci) and ran on the 3500 Genetic Analyzer (ThermoFisher Scientific) were obtained from four participating laboratories. Samples have DNA templates of 0.003-3.5 ng and 1-6 number of contributors. They were ran with voltages of 5 kV, 15 kV, 24 kV, or 25 kV and injection times of 1.5 seconds or 15 seconds.

Stutter peaks arising from the parent, i.e. stutter causing peak, were modeled from positions a-8 to a+4, where "a" represents nucleotide bases of the stutter causing peak. Stutter ratios, or the stutter peak height divided by the allele peak height, were modeled using CurveExpert Professional, a software that contains curve fitting and data analysis capabilities [14]. The peak height ratios of the stutter types and parent allele heights were plotted against the log expected true allele peak heights using the software's nonlinear regression model. The expected allele peak height is the parent stutter causing allele. The model performances were then analyzed by applying them to four analytical thresholds, a dynamic, locus and sample specific threshold (LSST), and three static thresholds of 50, 100, and 150 RFU [16].

Pull-up modeling focused on the ratio of pull-up peak heights to true allele peak heights. This was performed using HeuristicLab, a program that utilizes a type of machine learning known as genetic programming [15]. Genetic programming uses symbolic regression, which applies evolutionary principles such as random mutation, crossover, and fitness to a dataset in order to find an optimal equation [11]. Data containing candidate variables such as peak height, DNA template, locus size, artifact locus size, peak area, injection time, peak size, and profile max height for pull-up were provided and imported into HeuristicLab. The equations with the highest fitness, or a coefficient of determination (R^2) value closest to 1, were simplified. Model performances for pull-up removal were analyzed through data analysis using three analytical thresholds, a dynamic, locus and sample specific threshold (LSST), and two static thresholds of 50 and 150 RFU to examine pull-up elimination accuracy [16].

Modeling stutter and pull-up is essential for the forensic human identification community, because it will allow the community to understand the limits and behaviors of the GlobalFiler Human Amplification Kit. Models generated from this research can also provide a novel method for accurately removing stutter and pull-up from other amplification systems. The results will enable analysts to provide more reliable and accurate DNA profile interpretations, casting a higher level of confidence on the evidence submitted to court.

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1. Introduction

Since the 1990's, DNA analysis has become an irreplaceable tool in the forensic science field [17]. DNA can be used to identify a perpetrator in a crime, determine paternal relationships and identify victims of mass disasters. To utilize this information, however, biological samples obtained must undergo the process of DNA extraction, quantitation, amplification, detection, and interpretation. Each step in this analytical and computational workflow can introduce problems that can cause DNA profile interpretation to be unduly complex. My project addresses some of the most common problems complicating interpretation, specifically non-allelic artifacts termed stutter (*in vitro* slipped strand mispairing) [5] and pull-up (spectral overlap) [9] using the Globalfiler Human DNA Amplification Kit [13].

In forensic science, the preferred targets for generating DNA profiles are microsatellite DNA sequences, i.e. short tandem repeats (STRs), found in the noncoding regions of the human genome [3]. STRs are two to six base pair DNA sequences that are typically 100 to 400 bases in total length [3]. They are useful for determining genetic identities, because they are highly polymorphic and discriminatory; they undergo mutation at an elevated rate compared to coding regions but remain relatively stable from generation to generation [18]. These mutations are caused by a phenomenon called slipped strand mispairing, where mispairing of the repeat sequences between the template and lagging strands can produce varying numbers of tandem repeat lengths and sizes from repeat deletions or expansions depending on the DNA polymerase processivity [3, 18]. This leads to variations in allele lengths between individuals and when amplified by PCR, allows discrimination among individuals through the comparison of the differing lengths [3]. Furthermore, the short overall lengths of STRs (100-400 bp) make them less prone to further degradation in low template and contaminated DNA samples. However,

DNA profile interpretation can be complex due to several artifacts that can arise during STR amplification and detection.

Polymerase chain reaction (PCR) is a core method that allows forensic scientists to target specific regions of the DNA and amplify them using oligonucleotide primers [1]. These different fluorescently labelled 5' primers are included in commercially available amplification kits that are used to target various STRs for PCR amplification and subsequent DNA fragment detection, particularly useful for DNA multiplexes [4]. Scientists have continuously improved these commercial kits' powers of discrimination, increasing their sensitivity and specificity for degraded and low template DNA samples, targeting different numbers of loci. For example, the AmpFISTR Profiler Plus PCR amplification kit includes 9 loci with a discriminatory power of up to $1x10^{11}$, while the PowerPlex 16 System includes 16 loci with a discriminatory power of up to $1x10^{17}$ [20, 21]. However, as useful as the use of the kits are, they are also a possible source for PCR stutter artifacts in subsequent detection and interpretation processes.

Capillary electrophoresis (CE) is used to separate and detect DNA fragments using an applied electrical field [2]. However, unlike standard gel electrophoresis, capillary electrophoresis separates DNA molecules using a capillary tube and different dye labels. It begins by pre-processing the amplicon with formamide to ensure that the DNA remains single stranded. An electrokinetic current is applied to the capillary, causing the DNA fragments to enter the capillary. The charged DNA molecules are then separated by size through a sieving polymer. The DNA fragments are detected when they pass through the detection window, where a laser excites the fluorophores that were incorporated into the amplicon during PCR. The fluorophores absorb light from the laser and emit light at different wavelengths, which are captured by the capillary's CCD camera. This allows different fragments to be spectrally

separated based on the fluorophores, permitting the use of large DNA multiplexes, where multiple amplicons can be spectrally separated using different fluorophores [10]. An electropherogram is then generated to visually illustrate the size and amount of each DNA fragment in the sample as peaks of differing intensity. The peaks are measured in relative fluorescent units (RFUs) from the fluorphores' detected signal intensity [9]. Peaks on an electropherogram are sized using a size standard of known DNA fragment sizes and labelled using an allelic ladder that contains most known alleles [22]. However, utilizing capillary electrophoresis for the detection process can introduce pull-up artifacts that can complicate DNA profile interpretation.

1.1 Stutter artifacts

Stutter artifacts (*Figure 1*) are non-allelic peaks in a DNA profile that are typically one repeat unit smaller or larger than the true allele peaks [5].

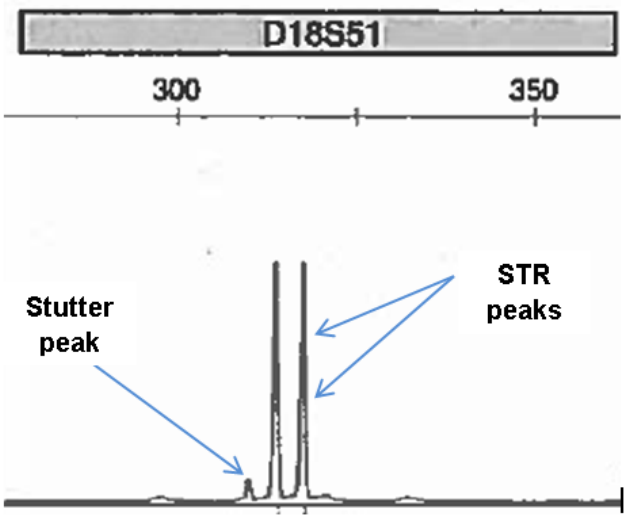

Figure 1: An example of a stutter peak to the left of two true allelic peaks under the loci D18S51. Source: "Interpretation of Cell Line STR Profiles - Instrumental Artefacts." *Culture Collections*, Culture Collections, www.pheculturecollections.org.uk/services/celllineauthenticationservices/interpretation-of-cell-line-str-profiles-instrumental-artefacts.aspx.

Stutter products form as a consequence of *in vitro* slipped strand mispairing (*Figure 2*), where regions of the DNA assume a hairpin or secondary loop structure during replication, causing the regions to either be replicated or deleted [3]. These deletions or insertions of repeat motifs are dependent on the DNA polymerase's processivity, or the ability of the polymerase to bind and polymerize before falling off the DNA strand, and often occur in STRs due to their repetitive nature [19]. Stutter products are traditionally described with n-1,2, 3, etc. where n is the size of the stutter causing peak and the number as the number of repeat units larger (+) or smaller (-). However, in this study, stutter products are described as a-1, 2, 3 etc., where "a" represents the overall size of the repetitive sequence and the number indicates the number of bases larger (+) or smaller (-) than the stutter causing peak sequence.

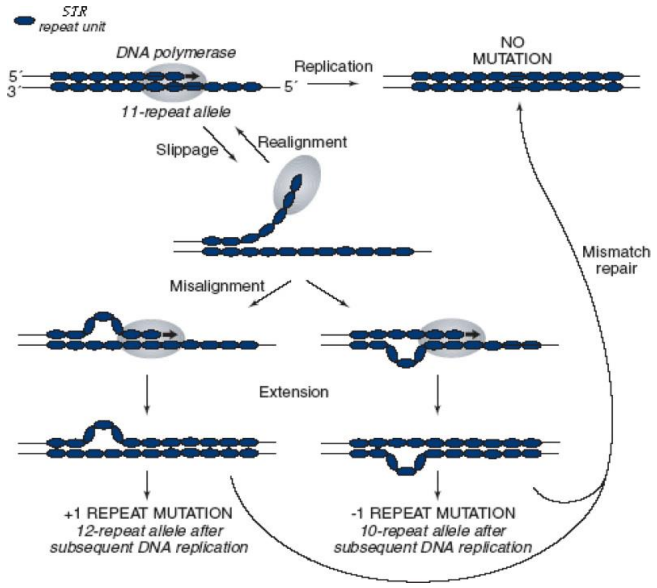

Figure 2: DNA replication showing slipped strand mispairing, where repeat motifs can be added or deleted. Source: Fan, Hao, and Jia-You Chu. "A Brief Review of Short Tandem Repeat Mutation." *Genomics, Proteomics & Bioinformatics*, Elsevier, 15 June 2007

The presence of stutter products can complicate DNA profile interpretation, because they can be mistaken as significant biological alleles [6]. And when not detected by the analyst or by the software program, the stutter peaks can lead to a risk of false inclusions or wrongful convictions in court. Additionally, it can be particularly difficult to distinguish whether a peak is stutter or a true allele in samples with an unknown number of contributors [8]. Stutter artifacts are traditionally accounted for using approximate percentages of observed stutter for each locus [23]. Using static thresholds, these stutter percentages are used to account for stutter proportions that could occur in each locus. Peaks in the stutter position that are in the stutter percentage ranges are removed, however, those that fall below or above the ratio thresholds are mistakenly left behind [24]. Furthermore, removing stutter peaks using the typical static threshold could also eliminate smaller true allelic peaks produced by minor contributors. Thus, accurate identification

and removal of stutter is important, because it inhibits accurate DNA profile interpretation and reliability in human identification.

1.2 Pull-up Artifacts

While capillary electrophoresis can accommodate large DNA multiplexes through the use of different fluorophores, the analysis software's inability to differentiate between the fluorophores' broad fluorescent spectral overlap can result in non-biological artifacts called pull-up (*Figure 3*) [9].

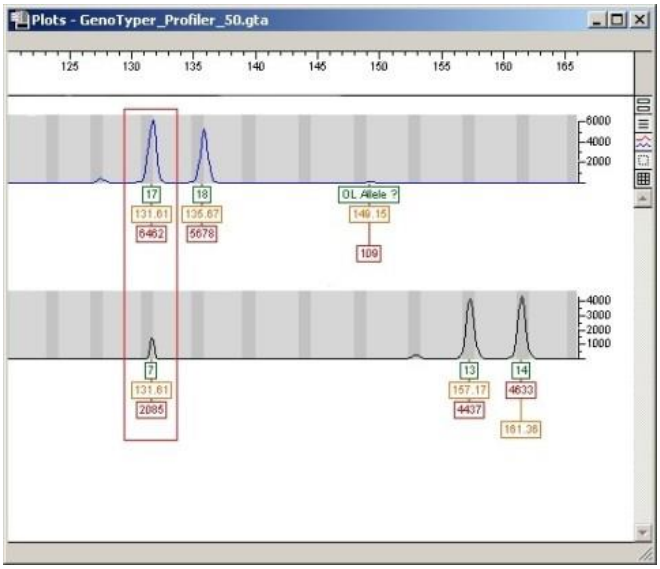

Figure 3: A pull-up peak (allele 7 in lower plot) is mistakenly labelled by the software as an allele 7, shown under a true allelic peak labelled 17 (upper plot). Source: "Forensic Bioinformatics - DNA Testing Issues." *Forensic Bioinformatics - DNA Testing Issues*

The incomplete removal of spectral overlaps between the broad fluorescent spectra for each dye can cause these non-allelic pull-up peaks when the signals of one dye channel cause

non-allelic signals in a different channel to be “pulled-up” (*Figure 4*) [25]. Pull-up artifacts are thus a common problem when performing multiplex PCR using multiple fluorescently labelled primers.

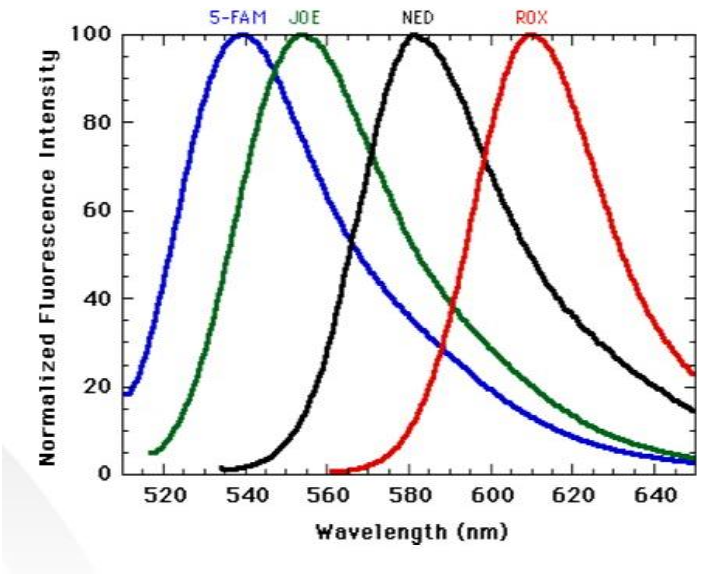

Figure 4: Spectral overlap can be observed between the wavelengths emitted by the dyes 5-FAM, JOE, NED, and ROX. Source: O'Brien, Robert. “Quantitative PCR Session 1: Introduction to Quantitation Methods.” *President's DNA Initiative*, National Institute of Justice,

Similar to stutter, pull-up in DNA profiles creates non-allelic peaks that can be mistaken as true allelic peaks. A spectral calibration can be used to remove pull-up peaks, in which a matrix of relative intensities at specific wavelengths filter out emission spectrums not from the expected dye channels [26]. While spectral calibrations can cleanse most pull-up present on the DNA profile, some can continue to persist. Those pull-up peaks can be manually identified by the analyst as smaller peaks, usually near true peaks with similar base pair sizes in an adjacent dye channel [27]. However, interpretation can be complicated by minor contributors, where

smaller peaks could be a result of biological DNA and not pull-up. Partial pull-up, peaks that overlap and become masked in true allelic peaks, can also complicate profile interpretation [11]. Partial pull-up can cause the true allelic peaks to be elevated across the DNA profile, which can distort the necessary calculations for determining the ratio and the possible number of contributors based on the profile's peak height balance. Thus, to improve the efficiency of identifying and removing pull-up from DNA profiles, addressing it can provide a more accurate and reliable interpretation.

1.3 Globalfiler Human DNA Amplification Kit

This project focuses on the modeling of stutter and pull-up artifacts resulting from the use of the GlobalFiler Human DNA Amplification Kit (24 loci) [13]. The GlobalFiler is a multiplex system that uses 6 different fluorescent dyes across 24 STR markers and contains 10 mini-STR markers that increases the sensitivity for low level and degraded DNA samples. It is currently the only system that contains all the STR markers included in major global databases recommended for inclusion by the CODIS Core Loci Working Group and has a discriminatory power of up to $1x10^{27}$ [12].

The GlobalFiler Human DNA Amplification Kit is a relatively new system that is currently being widely implemented. However, the system is not as well-characterized as the previously used kits, and its multiplex creates copious amounts of stutters and is subject to pull-up on the resulting DNA profiles. Current methods of removing non-allelic artifacts using static thresholds, manual removal, and spectral calibration have proved to be not as efficient. But, new computational tools, such as the ones that this project aims to help create, can better characterize the artifacts that can result from polymerase chain reaction and capillary electrophoresis.

Thus, the purpose and goal of my project is to model stutter and pull-up using human DNA amplified with the GlobalFiler Human DNA Amplification Kit (24 loci) and detected using the 3100 and 3500 series of Applied Biosystems' capillary electrophoresis instruments. This work aids in developing an increasingly accurate automated process of identifying and removing both from DNA profiles. An automatic process will greatly decrease the amount of time DNA analysts will need to analyze a profile, and models created from this research can provide a novel method for accurately removing stutter and pull-up from other amplification systems.

Finally, it is the duty of the forensic human identification community to understand the limits and behaviors of the GlobalFiler Human DNA Amplification Kit and any other amplification kits used for DNA analysis. The results will enable analysts to aid the general public by providing reliable and accurate DNA profile interpretations, casting a higher level of confidence on the evidence submitted into court.

2. Materials and Methods

Stutter and pull-up artifacts were modeled using a sample set (*Appendix C*) that was amplified using the GlobalFiler Human DNA Amplification Kit. These data were obtained as electronic sample files (.fsa or .HID) from four participating laboratories. Both .fsa and .HID files contain the raw electropherograms obtained from the 3100 or 3500 series of capillary electrophoresis Genetic Analyzers (ThermoFisher Scientific) and include specific run parameters that can be used to determine DNA sequence genotypes. Additional data required for modeling were also provided by the laboratories and summarized in *Table 1*.

Table 1

A summary of the samples set, containing 3921 samples in total. The full list of samples can be found in *Appendix C*.

Parameter	Value
DNA Template (ng)	0.003-3.5
Number of Contributors	1-6
kV	5, 15, 24, 25
Injection Times (s)	1.5, 15

2.1 Stutter

Single contributor source samples were used to model stutter peaks from a-8 to a+4, where “a” represents a nucleotide base and the number indicating the number of bases that are added (+) or omitted (-). Non-traditional stutter such as a-1, a-2, a-5, a-6, a-7, a-8, a+1, a+2 and

a+3 from tetranucleotide STRs and equivalent repeat units for tri- and penta-nucleotide STRs were also included. Modeling focused exclusively on homozygotic loci or heterozygous loci, where the alleles did not contain overlapping stutter peaks, because the stutter peak heights are influenced by more than one allele.

The amount of stutter was modeled by plotting parent peak height as the independent variable and the stutter ratio as the dependent variable using nonlinear regression. Stutter ratios were plotted with scatter plots by using each stutter position's binned true peak heights and the log expected allele peak heights (*Figure 5*). Binning consisted of averaging every twenty data points, thus leading to a more concise data set that can be modeled appropriately.

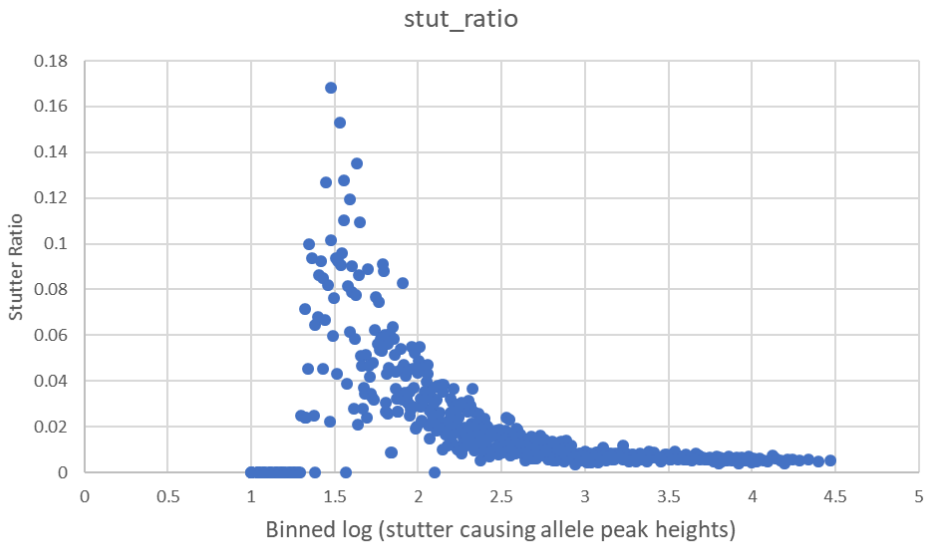

Figure 5: A stutter ratio scatter plot generated using the stutter ratio and binned log stutter causing allele peak heights.

Stutter ratios of zero (0) were removed, and 'dummy' points were inserted to the left of that threshold equal to the maximum observed stutter ratio to force a sigmoid-shaped curve. This

allows equations for the data to be better fit to the observed data. Scatter plots were generated for all stutter positions a-8 through a+4 that had over 100 occurrences across the data set for every locus.

The x,y data points of each scatter plot were uploaded to the CurveExpert Professional software for modeling using nonlinear regression. The software contains over ninety (90) built-in modeling functions, including linear regression and nonlinear regression models [14]. The resulting models provide equations for the data and all of their parameters (*Figure 6*).

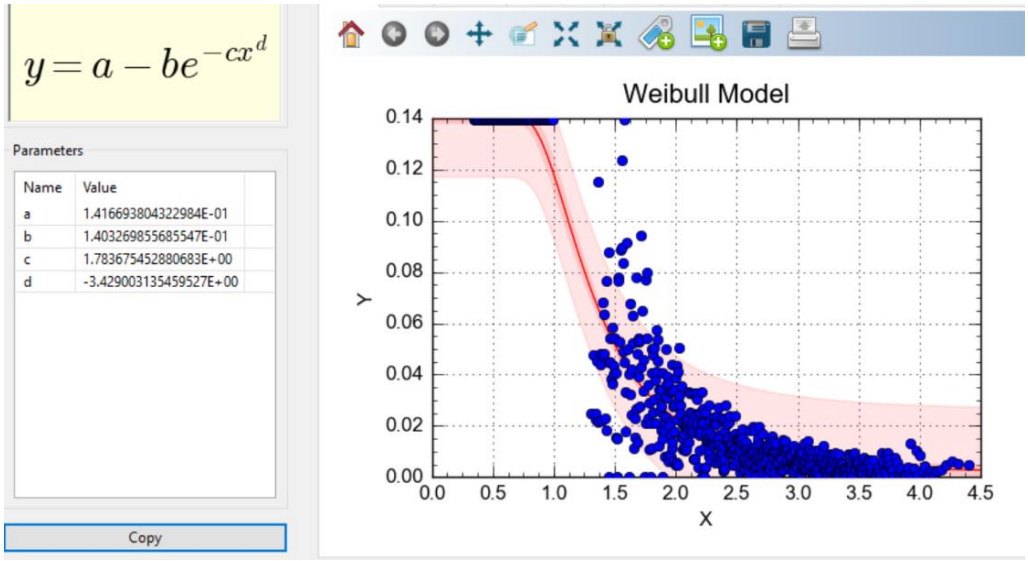

Figure 6: An example output from CurveExpert Professional depicting a nonlinear regression graph that provided both a visual and mathematical representation after adding pseudo points and removing as much stutter ratios of zero (0) as possible. X-axis is the binned log (stutter causing allele peak heights) and the y-axis is the stutter ratio.

Analytical thresholds, the lowest RFU value biological alleles can be distinguished from noise, were used in conjunction with the models to analyze overall model performance [28]. Four analytical thresholds were utilized: a dynamic, locus-specific threshold (LSST), a 50 RFU static

threshold, a 100 RFU static threshold, and a 150 RFU static threshold. The dynamic analytical threshold is calculated based on the mean and standard deviation of the noise in regions for every locus in a sample [16]. These different analytical thresholds were used to compare the models' capability of accurately removing stutter peaks. The LSST, for example, allows a maximum amount of information content to be used for removing stutter artifacts rather than removing true alleles.

2.2 Pull-up

Pull-up modeling focused on the ability to predict the ratio of pull-up peak height to true allele height for all observed pull-up. The GlobalFiler system has six dyes: 6-FAM, VIC, NED, TAZ, SID, and size standard LIZ [12], where each dye-dye relationship was modeled due to different levels of spectral overlap between the dye pairs: FAM_NED, FAM_VIC, FAM_TAZ, FAM_SID, NED_FAM, NED_VIC, NED_TAZ, NED_SID, VIC_FAM, VIC_NED, VIC_TAZ, VIC_SID, TAZ_FAM, TAZ_NED, TAZ_VIC, TAZ_SID, SID_FAM, SID_NED, SID_TAZ, SID_VIC.

Modeling of each dye relationship used data including the peak height, DNA template amplified, locus size, artifact locus size, peak area, injection time, peak size, and profile max height (*Table 2*). Models were generated using these candidate variables, which were expected to either directly or indirectly affect the amount and presence of pull-up that can be generated onto a profile.

Table 2

Candidate variables provided for modeling pull-up ratios. Note, not all variables were chosen for the final symbolic regression equation [11].

Variable	Rationale for Inclusion
Peak Height (RFU)	Peak height represents the amount of DNA in a sample
Template (ng)	Template is a quantitative measurement for the amount of DNA in a sample.
Locus Size (bases)	Locus size is the average sizes of the smallest and largest ladder allele in a locus for the locus causing the pull-up. Smaller loci are preferentially amplified and will typically exhibit the higher peak heights.
Artifact Locus Size (bases)	Artifact locus size is the average sizes of the smallest and largest ladder allele in a locus for the locus with any pull-up present.
Peak Area	Peak area of the pull-up causing peak. It represents another quantitative measure of the DNA amount in a sample and in a specific peak.
Injection Time (s)	Injection time influences the amount of DNA injected into the capillary that are subjected to detection using capillary electrophoresis.
Peak Size (bases)	Shorter peak size fragments are preferentially amplified and will tend to have higher signal than larger fragments.
Profile Max Height (RFU)	Profile max height is the highest peak in the DNA profile. It is an indirect measure of the amount of DNA signal present.

The data and candidate variables were imported into HeuristicLab [15], a machine learning-based software that is capable of modeling using evolutionary algorithms such as genetic programming. Genetic programming uses symbolic regression to apply evolutionary principles such as random mutation, crossover, and fitness to a dataset in multiple generations of evolutionary search in order to find an optimal equation between the features provided in the data [11]. The software provides a mathematical equation and a visual representation expressed as a tree diagram (*Figure 7*), focusing on accuracy and simplicity.

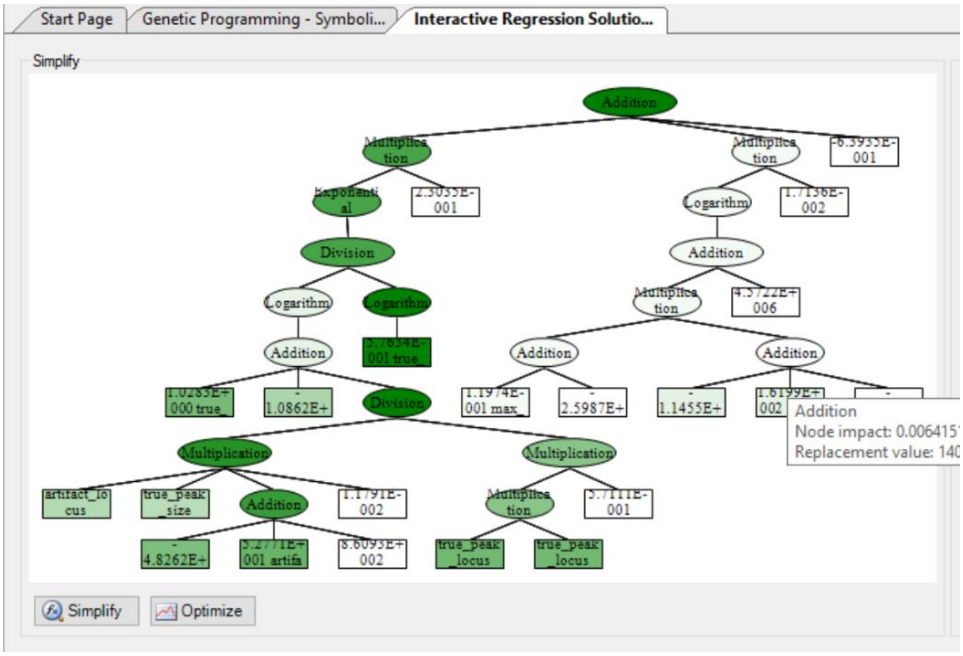

Figure 7: A tree diagram generated using genetic programming. Every rectangle and circle found on the tree diagram are called nodes, which represent parts of the equation.

Each dye relationship data was partitioned as 75% training and 25% testing in HeuristicLab. The training data were used to create the pull-up models, and the testing data are unseen data used to evaluate the resulting models' performances and fit.

The equations with the highest fitness after 500 generations of evolutionary search were selected and then simplified by removing all nodes with importance scores below 0.01. Equation fitness is determined by the coefficient of determination (R^2), which is the amount of variability in the dependent variable that is predictable from the independent variable. It assesses model accuracy and how well a model can predict future outcomes [29]. A R^2 value closer to 1 indicates that the dependent variable can be predicted without significant error from the independent variable. Mean squared error is also used to assess model fitness. It takes account of residual

error, or the difference between each observed data point and the predicted value derived from the model equation [30]. The smaller the means squared error, the better fit the model.

Simplified equations (*Figure 8*) create generalized models capable of predicting pull-up ratios for dye-dye relationships that are not specific to the initial dataset used in this project. Generalized equations can also be applied to future analyses for different datasets.

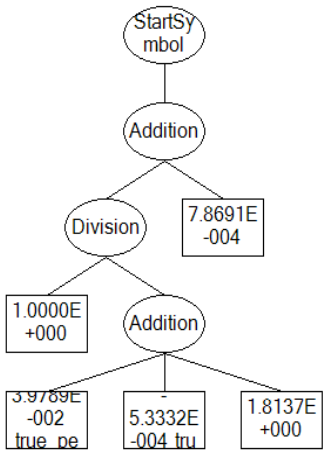

Figure 8: An example of a simplified tree diagram that provides a generalized equation for future dataset analyses.

The performance of the pull-up models was evaluated by using the models in conjunction with three analytical thresholds - a dynamic, locus- and sample-specific threshold (LSST), a 50 RFU static threshold, and a 150 RFU static threshold - applied in separate analyses for each locus [16]. Any potential artifact peak height that fell below the threshold was then removed from the DNA profile for that analysis.

3. Results and Discussion

3.1 Stutter

The optimal stutter models were most often fit using the Weibull functions, which led to the best fit after testing all the available nonlinear regression models (*Figure 9*). However, other functions were also utilized, including Hoerl, Logistics, and MMF. The equations used to generate each stutter model are found in *Appendix A* and the model parameters are found in *Appendix B.*

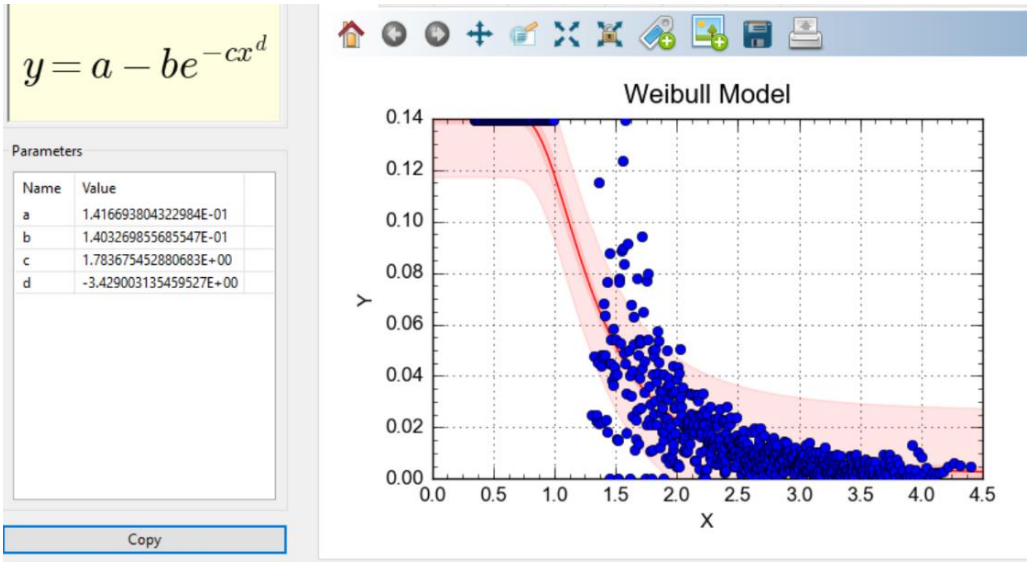

Figure 9: An example output from CurveExpert Professional depicting a Weibull graph that provided both a visual and mathematical representation after adding pseudo points and removing as much stutter ratios of zero (0) as possible. *x*-axis is the binned log (stutter causing allele peak heights) and the *y*-axis is the stutter ratio.

The overall accuracy of stutter artifact removal using the models developed in this study are shown in *Table 3*. 96.9% (204677/211195) of the true stutter peaks were removed when using the models in conjunction with the LSST analytical threshold. Whereas, 86.3%

(5311/6154) of the stutter peaks detected were correctly removed with the 50 RFU static threshold, 72.5% (2663/3672) using the 100 RFU static threshold, and 65% (1758/2705) with the 150 RFU static threshold.

Table 3

A summary of the accuracy of stutter peak identification and removal using four analytical thresholds of LSST, 50 RFU, 100 RFU, and 150 RFU.

Threshold	Total Stutter Peaks Detected	Stutter Peaks Correctly Removed	Non-stutter Peaks Removed	Accuracy (%)
LSST	211195	204677	6518	96.9
50 RFU	6154	5311	843	86.3
100 RFU	3672	2663	1009	72.5
150 RFU	2705	1758	947	65.0

Stutter peaks that fell higher than the predicted stutter percentages modelled were not removed by the threshold. Some non-stutter peaks were removed due to peak heights that were lowered from filtering the modelled stutter percentages, decreasing their heights below the analytical threshold. Because it is difficult to predict where stutter would actually arise in the PCR process, there is an expected variability in the actual percentage of observed stutter. Furthermore, higher static thresholds account for more peaks that fall underneath them, increasing the likelihood of removing a true allelic peak as a stutter peak.

3.2 Pull-up

Pull-up modeling summary statistics are provided in *Table 4*. After simplifying the initial tree structures, the average tree structure depth (i.e. the number of edges between the root node and the furthest terminal node) is 10 with a range between 6 to 14, and the average length (i.e.

the total number of nodes) is 29 with a range between 9 to 57 [11]. This illustrates that the resulting model equations for each dye-dye relationship varied in complexity. The coefficients of determination (R^2) for the training models had an average of 0.800 $\pm$ 0.073. Mean squared error (MSE) for the training models had an average of 0.00075 $\pm$ 0.00030. The coefficients of determination for the testing models had an average of 0.801 $\pm$ 0.075, and the MSE for the testing models had an average of 0.00074 $\pm$ 0.00031.

Not all candidate variables were included in each final model. Final variables used for each dye relationship model are listed in *Table 5*. Because peak height determines overall signal intensity detected during capillary electrophoresis, it is expected to have the highest influence on the amount and height of the resulting pull-up heights [11]. In other words, higher signal intensity leads to higher peak heights and thus higher pull-up peak heights possible. As variable 'peak height' was found in every final, optimized model, it can be seen that it is the most important variable in symbolic regression. Peak size was the next most frequent variable used in the final models, showing up in 75% of all models. Peak size accounts for the variation in peak height intensity within different loci and helps illustrate the preferential amplification of smaller alleles. Smaller allele fragments are usually more easily and preferentially amplified, thus leading to higher signal intensity and higher peak heights compared to larger alleles.

Table 4

Summary statistics for each dye-dye relationship containing the depth and length of the final optimized models, the size of the sample set, the coefficient of determination (R^2) and mean squared errors (MSE) for both training and testing. Tree depth is the length from the tree diagram's root node to the furthest available terminal node. Tree length is the total number of nodes after tree diagram simplification. N is the sample size used for the dye-dye relationship modeling [11].

Peak Dye	**Artifact Dye**	**Depth**	**Length**	**N**	**R^2_{train}**	**MSE_{train}**	**R^2_{test}**	**MSE_{test}**
FAM	NED	11	57	65400	0.678	1.320E-03	0.688	1.220E-03
FAM	SID	12	39	173200	0.811	9.518E-04	0.802	9.854E-04
FAM	TAZ	8	13	108250	0.711	1.440E-03	0.693	1.498E-03
FAM	VIC	11	32	240270	0.905	4.509E-04	0.910	4.345E-04
NED	FAM	13	43	46060	0.789	8.542E-04	0.776	8.949E-04
NED	SID	11	42	185740	0.796	8.765E-04	0.780	9.574E-04
NED	TAZ	8	11	95370	0.848	7.083E-04	0.833	7.817E-04
NED	VIC	12	31	257960	0.790	9.434E-04	0.786	9.329E-04
SID	FAM	8	18	98970	0.778	5.703E-04	0.783	5.620E-04
SID	NED	10	18	36590	0.716	6.664E-04	0.732	7.064E-04
SID	TAZ	10	30	178890	0.785	7.141E-04	0.805	6.677E-04
SID	VIC	14	39	209280	0.871	6.041E-04	0.884	5.581E-04
TAZ	FAM	6	9	98710	0.888	2.658E-04	0.890	2.552E-04
TAZ	NED	10	41	103690	0.753	4.898E-04	0.750	5.175E-04
TAZ	SID	11	26	153140	0.796	9.266E-04	0.803	8.783E-04
TAZ	VIC	12	31	185080	0.869	6.846E-04	0.868	6.828E-04
VIC	FAM	6	9	70070	0.930	1.902E-04	0.964	1.051E-04
VIC	NED	11	32	80960	0.683	7.754E-04	0.699	6.855E-04
VIC	SID	11	26	165490	0.859	6.100E-04	0.858	5.931E-04
VIC	TAZ	11	26	234090	0.741	9.872E-04	0.718	9.823E-04
Mean		10	29	139361	0.800	0.00075	0.801	0.00074

Locus size and profile max height were the next most frequent variables used, showing up in 72.5% of all models. Profile max height is the highest peak in a DNA profile. It relates to the level of individual peak heights across the profile and thus indirectly influences peak height. Higher profile max heights can lead to higher individual peak heights across the profile. Locus size also indirectly influences peak height elements, because it helps determine allele size. Similar to peak size, smaller loci are also preferentially amplified, leading to higher peak heights. Thus, variables such as peak size, peak area and profile max height can all help describe the resulting signal intensity observed on a profile. However, they are expected to have less influence on pull-up, because they indirectly relate to individual peak heights.

The variables that appeared the least in all the dye-dye relationships are injection voltage with frequency of occurrence as 55% of all models and injection time with frequency of occurrence as 50% of all models. While both variables can influence the amount of signal on DNA profiles, they also do not directly influence peak heights. Increasing injection time can produce higher peak heights, but thresholds are present so that the effects are not significant [11]. Similarly, injection voltage can influence peak heights through injecting smaller fragments and primers, however, it would have minimal impacts on the pull-up models because it does not contain the amount of higher-level information that the other variables do [11].

Table 5

Variable presence in final optimized models for each dye-dye relationship. Frequency of occurrence for each variable is also calculated.

Peak Dye	Artifact Dye	Peak Height	Template	Locus Size	Artifact Locus Size	Peak Area	Injection Time	Voltage	Peak Size	Profile Max Height
FAM	NED	*		*	*	*			*	*
FAM	SID	*			*				*	*
FAM	TAZ	*								
FAM	VIC	*		*					*	
NED	FAM	*			*			*		
NED	SID	*			*	*			*	*
NED	TAZ	*								
NED	VIC	*		*					*	
SID	FAM	*		*					*	*
SID	NED	*	*							
SID	TAZ	*		*						*
SID	VIC	*		*					*	
TAZ	FAM	*								
TAZ	NED	*		*					*	*
TAZ	SID	*							*	*
TAZ	VIC	*		*					*	
VIC	FAM	*								
VIC	NED	*		*		*				*
VIC	SID	*						*		
VIC	TAZ	*								*
Frequency of occurrence		1	0.525	0.725	0.6	0.575	0.5	0.55	0.75	0.725

The overall trimming accuracy for removing exclusively pull-up peaks was calculated against its relationship with profile max peak height (*Figure 10*). Using the dynamic threshold (LSST), pull-up trimming accuracy varied in relation to the DNA profile's maximum peak height (RFU). The higher the maximum peak height in a profile, the more accurate trimming accuracy

becomes. This is likely because higher maximum peak heights can lead to higher individual peak heights across the profile. Higher peak heights allow pull-up peaks to be more predictable than with smaller peak heights, which would complicate artifact removal should those smaller peaks be from minor contributors or from larger alleles that were not preferentially amplified. This also supports the previous results (*Table 5*) that profile max height plays an important role in pull-up production.

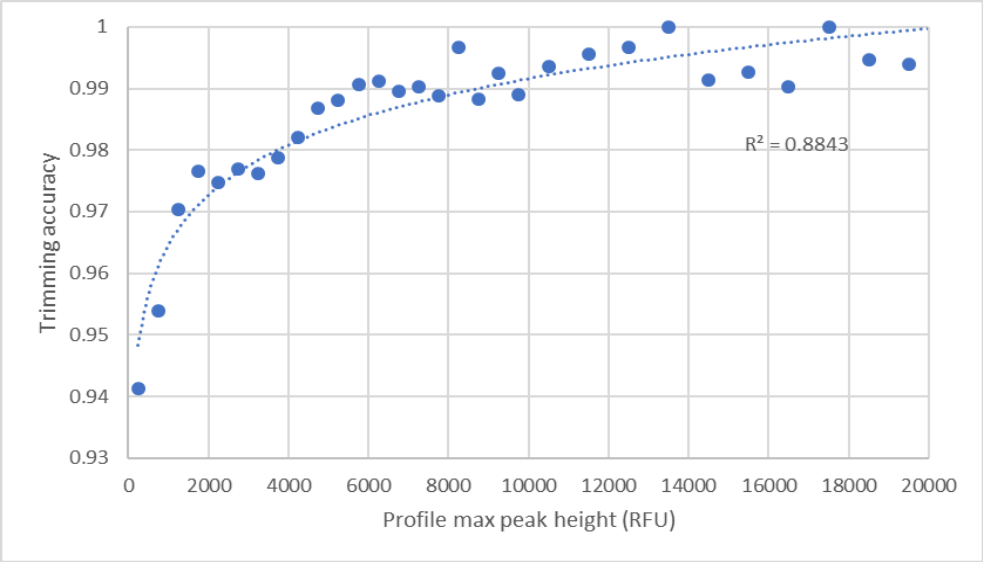

Figure 10: Relationship between pull-up peak trimming accuracy and the DNA profile's max peak height (RFU) using a dynamic threshold.

The trimming accuracies for individual dyes were calculated for all three analytical thresholds (*Table 6*). The overall trimming accuracy for pull-up peaks varied across the three analytical thresholds. Pull-up trimming using the dynamic threshold was 98.1% accurate across all dye profiles, 90.2% when using a static 50 RFU threshold, and 73.2% when using a 150 RFU static threshold (*Table 6*). In general, trimming pull-up artifacts using a dynamic threshold was more accurate across all dyes compared to the static thresholds. This is because the dynamic

analytical threshold is implemented to minimize the number of peaks that are incorrectly trimmed, whether those peaks are from true alleles or due to pull-up artifacts [11]. Pull-up trimming accuracy decreased with the use of different analytical thresholds, particularly with the 150 RFU static threshold. As the threshold size increases, more peaks are removed, thus leading to fewer peaks in general and causing peak detection to be more difficult. Higher thresholds also increase the probability of removing a true allelic peak erroneously as an artifact peak.

Table 6

Pull-up models' overall accuracy in correctly trimming pull-up peaks for three different analytical thresholds.

Data set	**Trimming accuracy (%)**		
	Dynamic (LSST)	50 RFU	150 RFU
Overall	98.1	90.2	73.2
FAM artifact dye	96.6	76.1	42.8
VIC artifact dye	98.5	91.8	70.6
NED artifact dye	98.7	90.9	75.2
TAZ artifact dye	98.0	91.1	77.7
SID artifact dye	98.0	92.2	77.7

The influence of partial pull-up on heterozygote peak height balance was also assessed using the pull-up models (*Table 7*). For each profile, the peak height balance for each genotype was calculated (1) for all loci without exhibited partial pull-up, (2) for all loci with partial pull-up that is left untouched, and (3) for those same loci with partial pull-up after the pull-up has been removed from the true allele. In other words, the closer the numbers (*Table* 7) are to zero (0), the more similar the peak height balance is to loci with no partial pull-up influences. The positive values (Major and Minor 1) in *Table 7* indicate that removing partial pull-up from true alleles makes the peak height balance more similar to loci that do not exhibit partial pull-up. The small

negative values (Minor 2 and Minor 3) illustrate that the additional minor contributors can cause the peak height balance to be slightly over trimmed. This is likely caused by increased profile complexity from a higher number of contributors. Nonetheless, both positive and negative values show that the models used can lead to true peak heigh balances that are not influenced by partial pull-up. Thus, although the impacts are small, the generated pull-up models can be used to remove partial pull-up from true allelic peaks. However, the exact correction ratio of the models on partial pull-up is yet to be determined.

Table 7

Influence of partial pull-up on heterozygote peak height balance assessed through changes in peak height balance (PHB) before and after removing partial pull-up from alleles; performed using models optimized with LSST.

	Major	**Minor 1**	**Minor 2**	**Minor 3**
Average	0.001012	0.005958	-0.00057	-0.00076
Standard Deviation	0.042181	0.129414	0.019279	0.023111

Finally, symbolic regression has proved to be a strong method for studying complex datasets such as those found in DNA analysis. It is capable of leveraging large datasets with multiple independent variables to generate models that can be optimized for further analysis. However, there are some disadvantages to symbolic regression using genetic programming, such as long times spent on data preparation and training.

4. Conclusion

Removal of stutter and pull-up artifacts has been primarily dependent on manual identification and/or software analysis. The removal of these artifacts is typically performed using suboptimal models that do not capture the expected amount of stutter and pull-up effectively. This project demonstrates that modeling both artifacts can provide an automated means of removing pull-up, partial pull-up, and stutter to more accurately represent the true peak height balance in a DNA profile.

The proposed stutter models were used to successfully remove 96.9% of stutter from DNA profiles using LSST. Those same stutter models removed stutter peaks with an accuracy of 86.3% using a 50 RFU threshold, 72.5% when using a 100 RFU threshold, and 65% when using a 150 RFU threshold. Generated pull-up models using an LSST removed pull-up peaks with an accuracy of 98.1%. Those same models removed pull-up peaks with an accuracy of 90.2% when using a 50 RFU threshold and 73.2% using a 150 RFU threshold. In addition, high model performances suggest that both nonlinear regression and symbolic regression using genetic programming could be viable methods of finding optimized equations for both artifacts in DNA analysis. However, further studies might be necessary to re-evaluate method strategy through other available datasets. Data comparison of resulting artifact models from further experiments can illuminate possible error rates, unexpected factors, and means for improvement.

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* Note: Portions of the study described are included in a manuscript that has been submitted for publication.

Appendices

Appendix A

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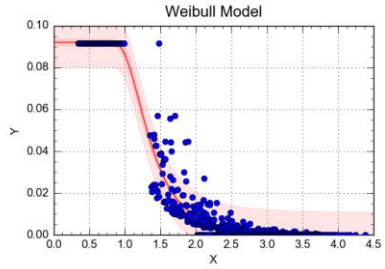

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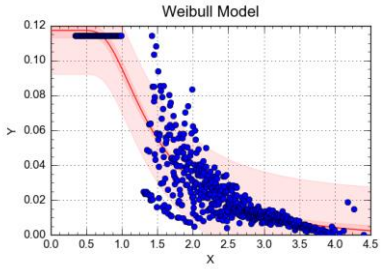

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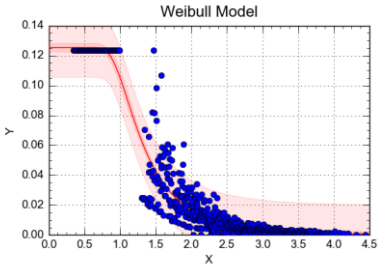

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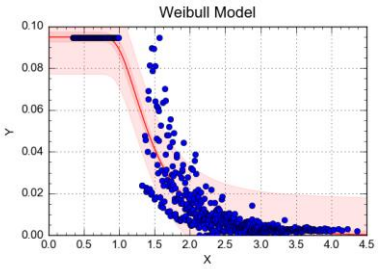

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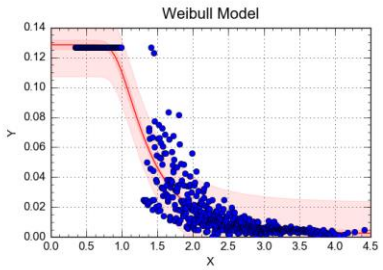

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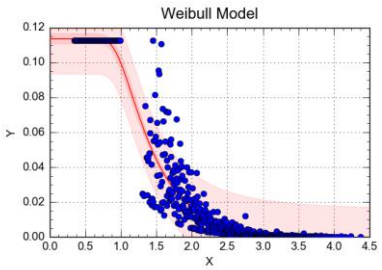

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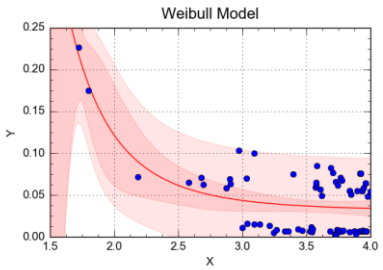

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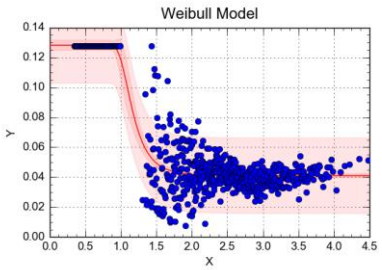

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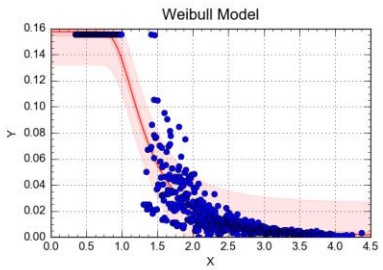

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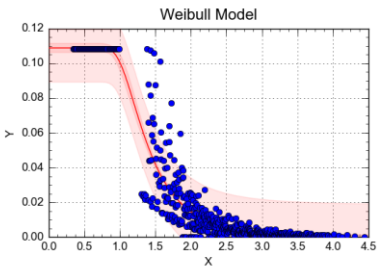

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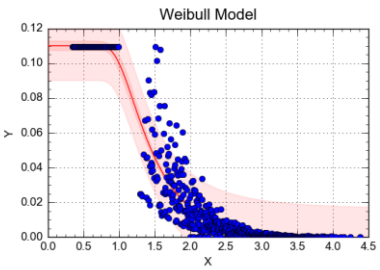

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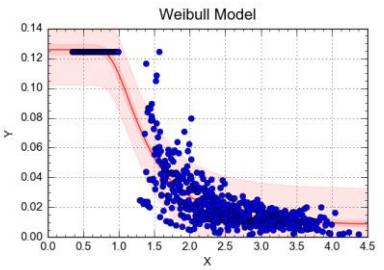

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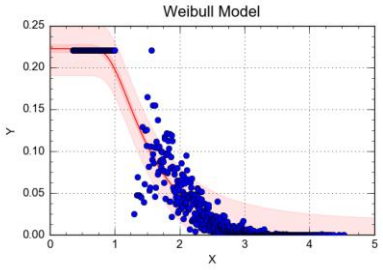

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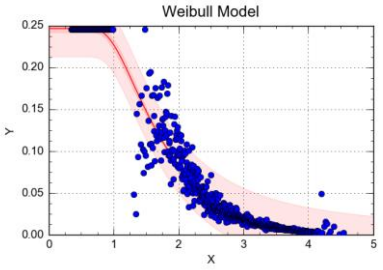

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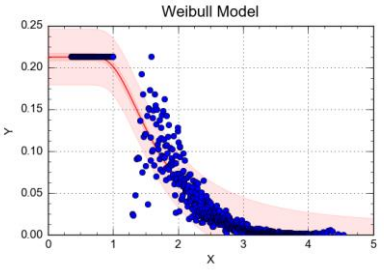

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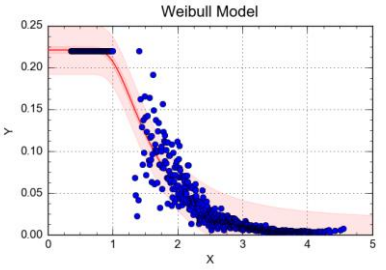

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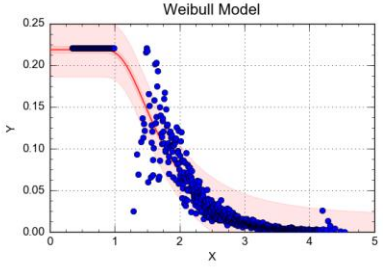

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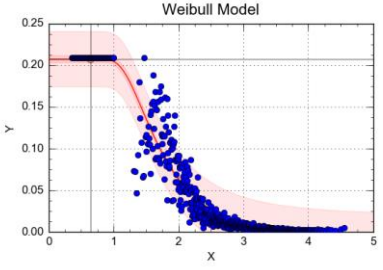

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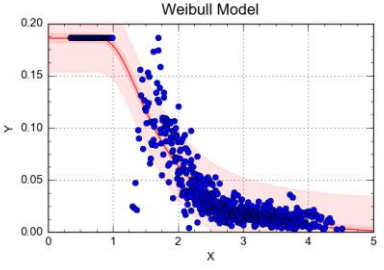

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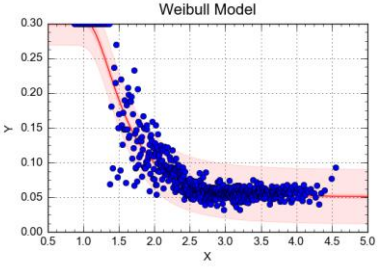

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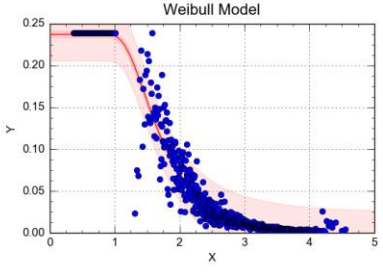

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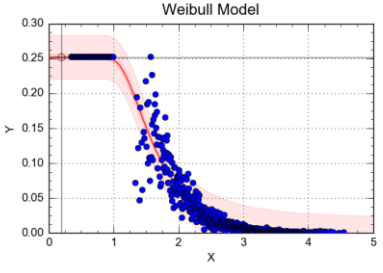

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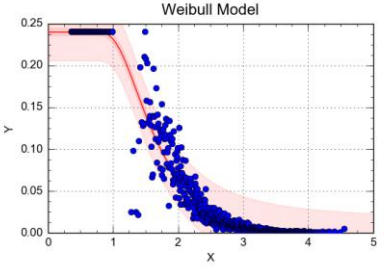

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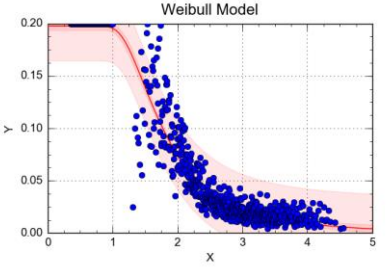

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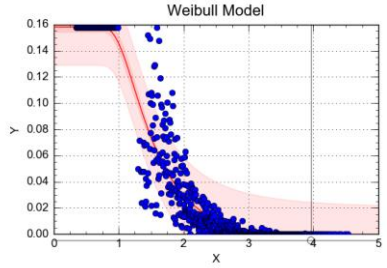

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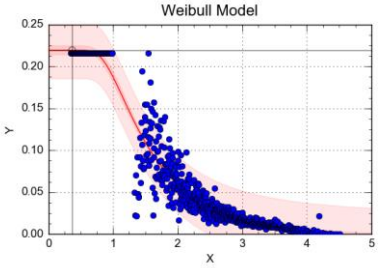

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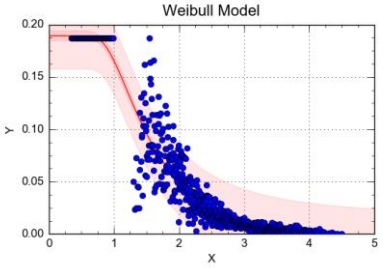

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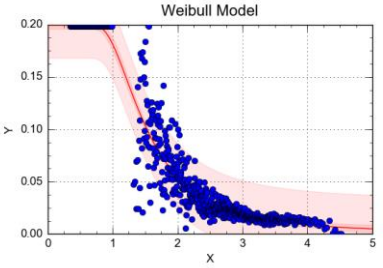

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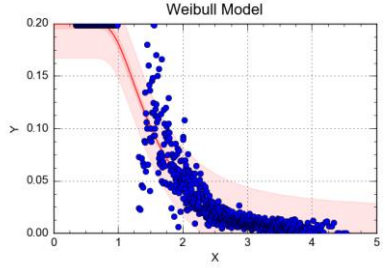

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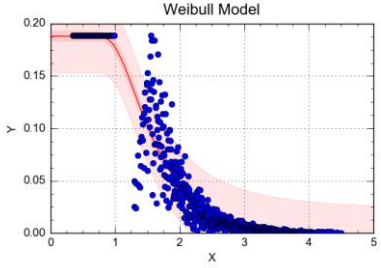

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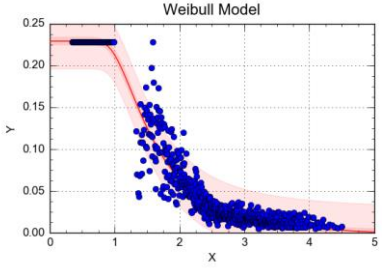

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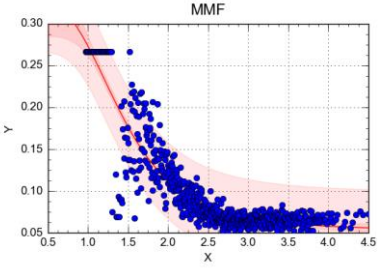

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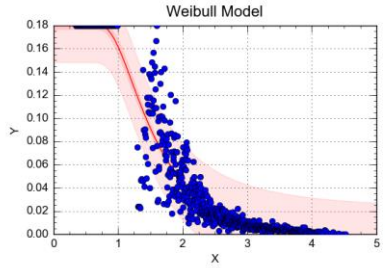

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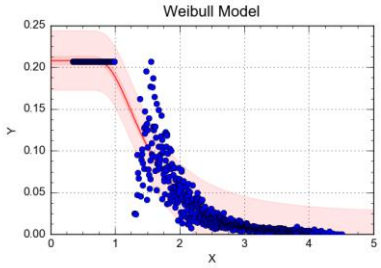

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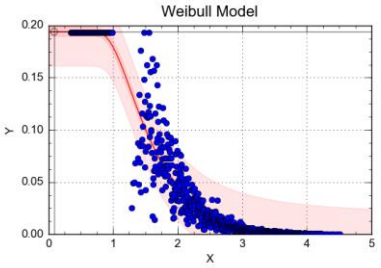

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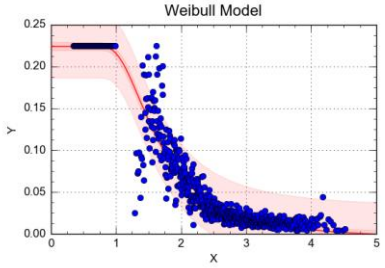

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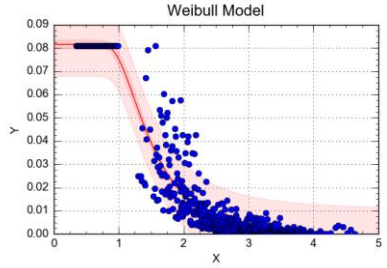

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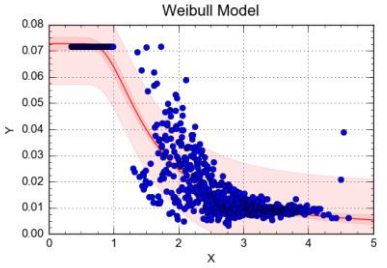

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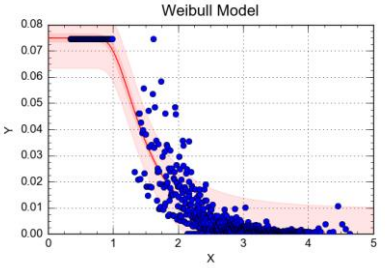

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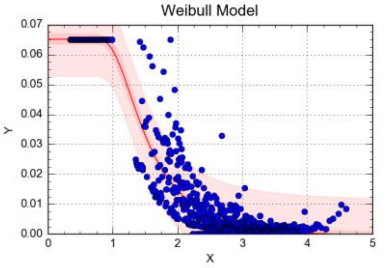

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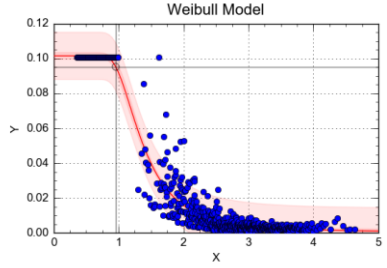

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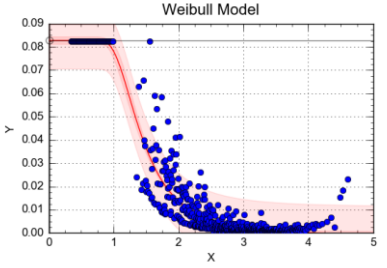

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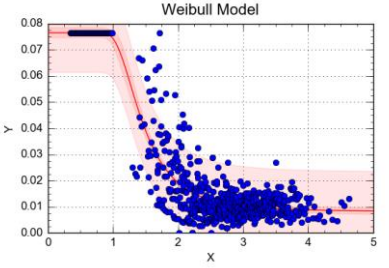

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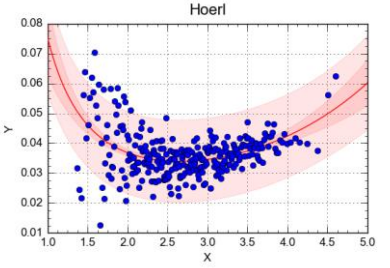

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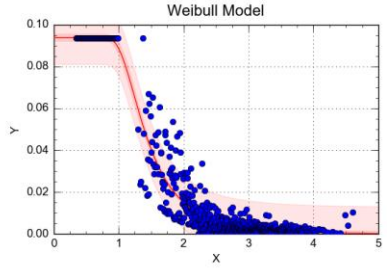

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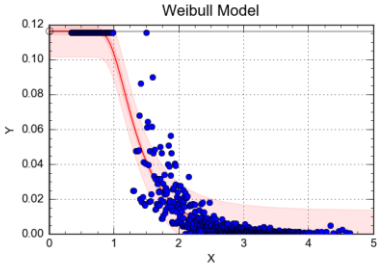

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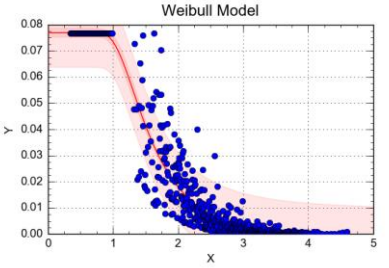

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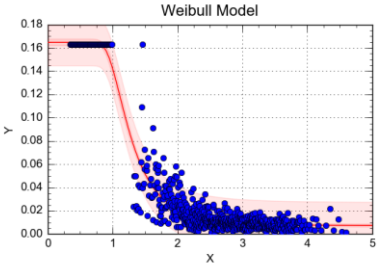

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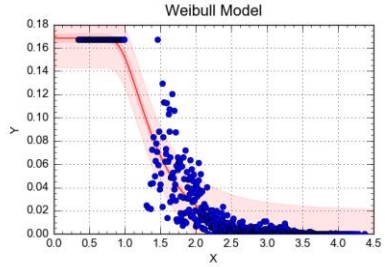

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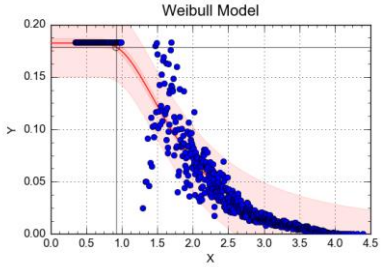

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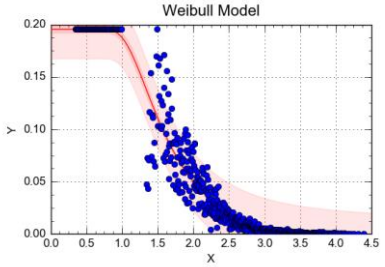

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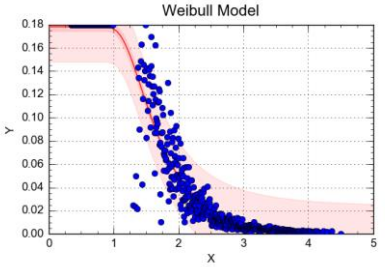

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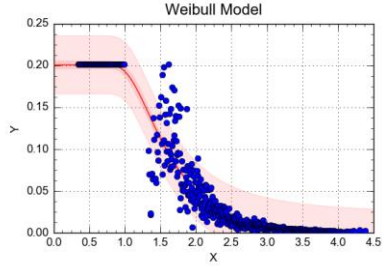

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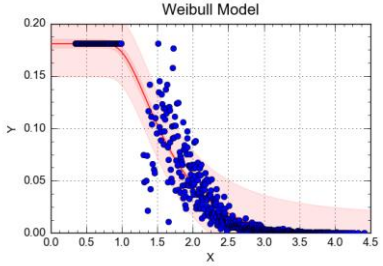

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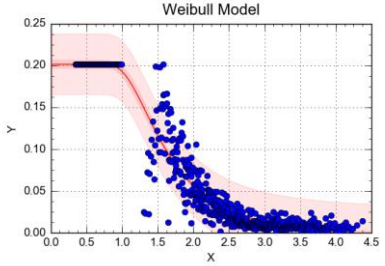

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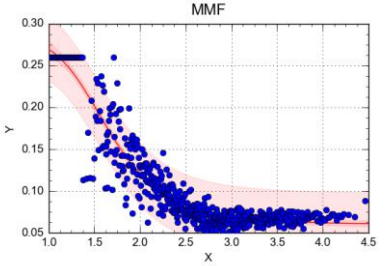

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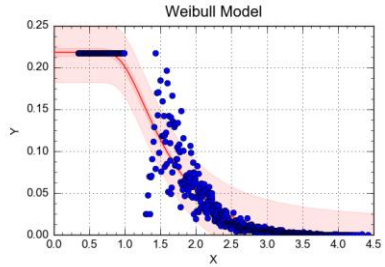

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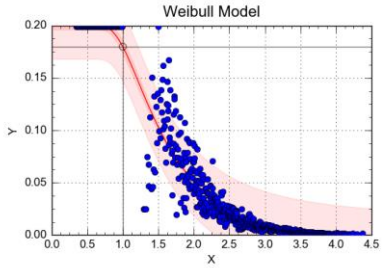

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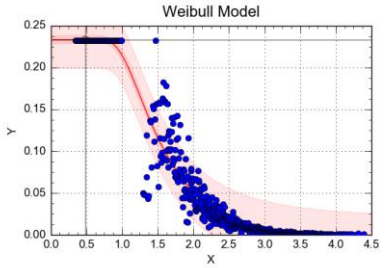

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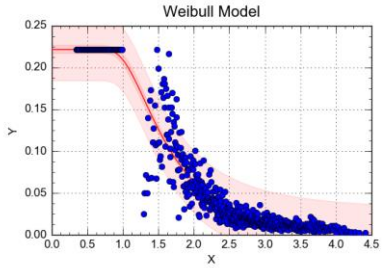

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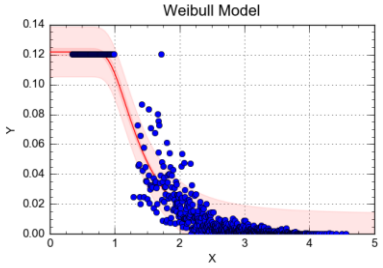

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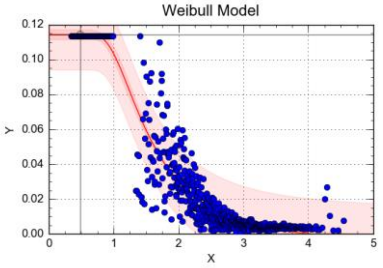

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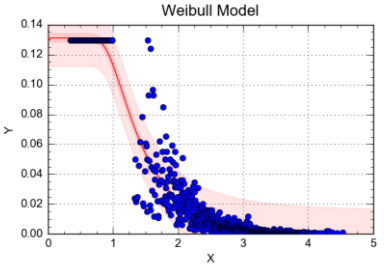

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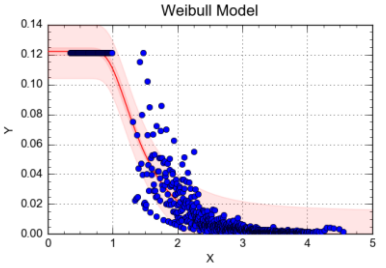

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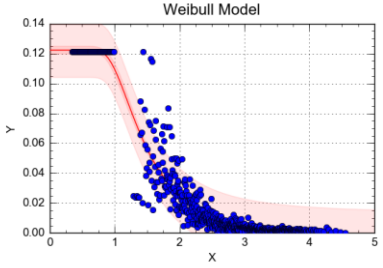

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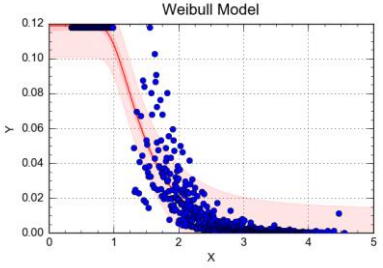

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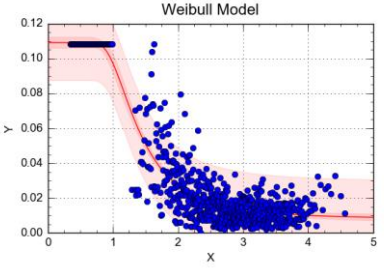

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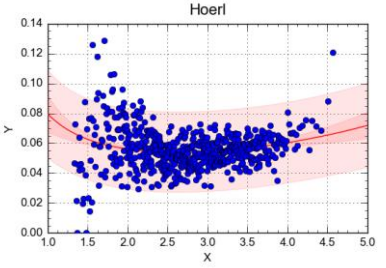

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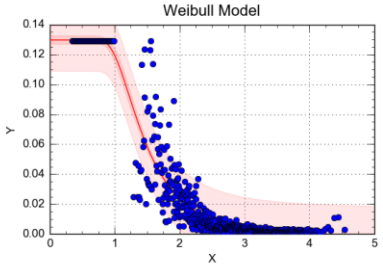

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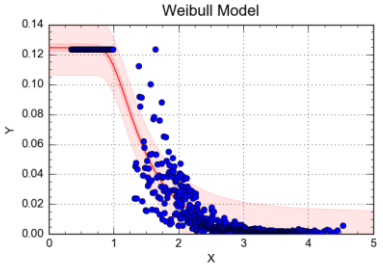

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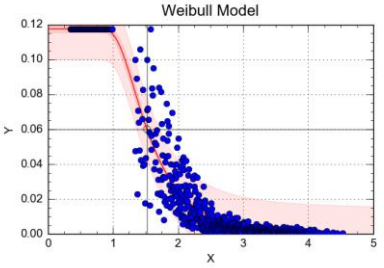

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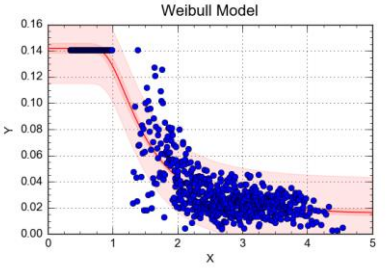

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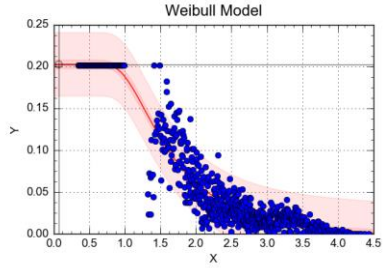

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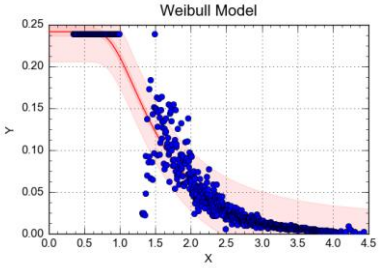

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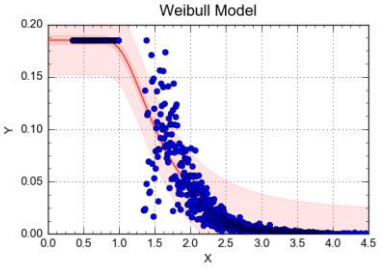

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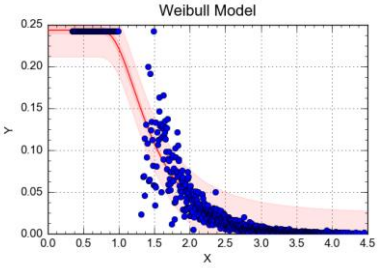

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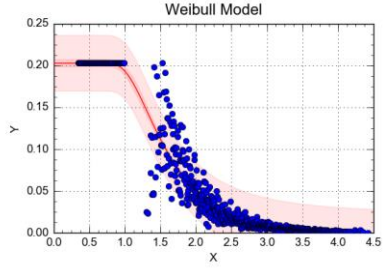

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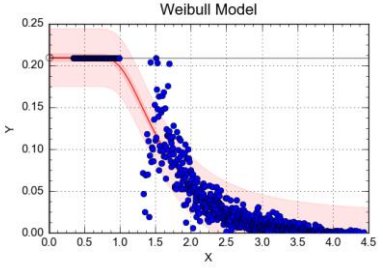

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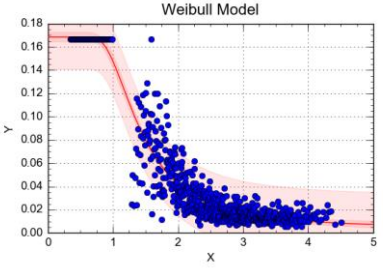

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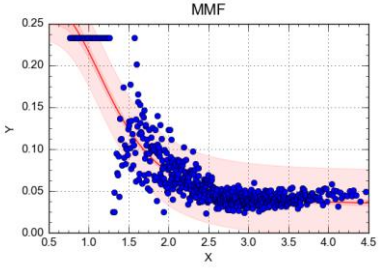

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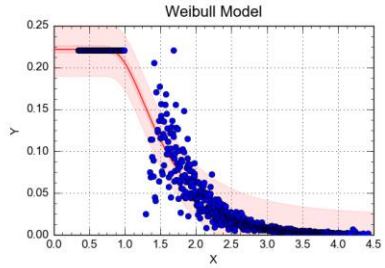

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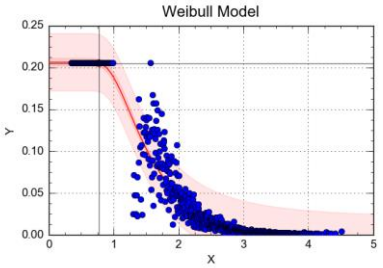

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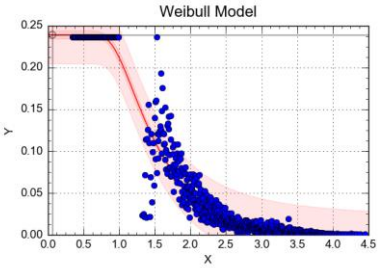

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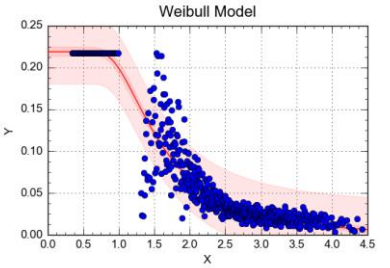

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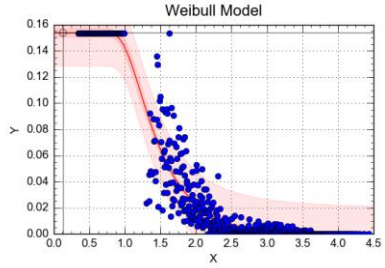

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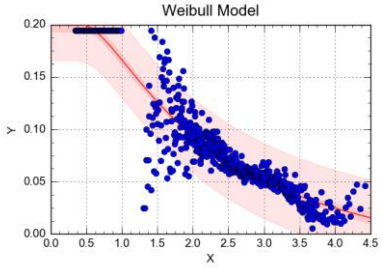

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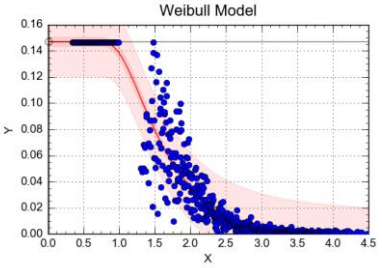

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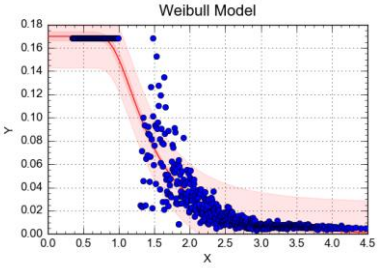

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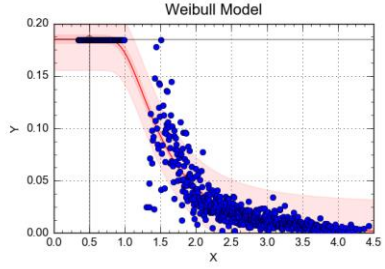

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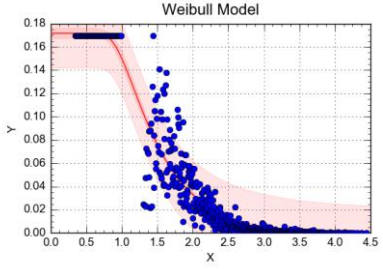

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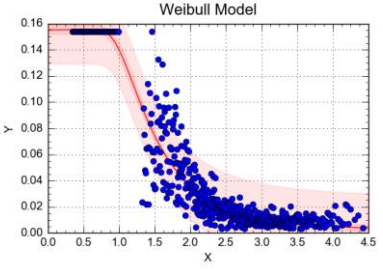

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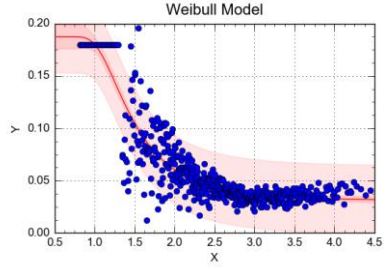

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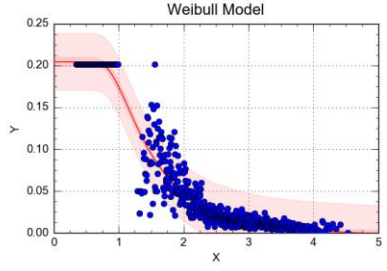

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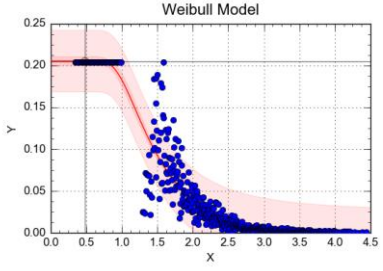

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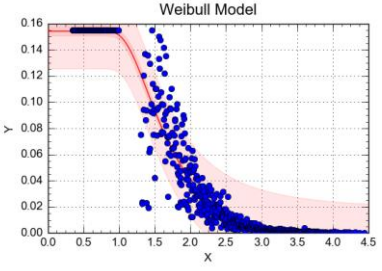

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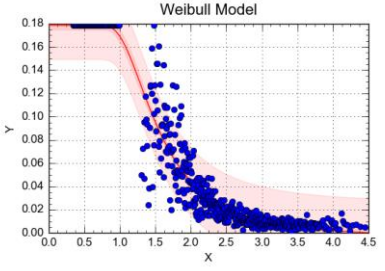

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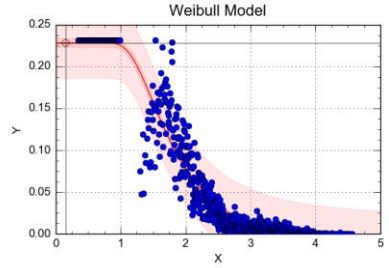

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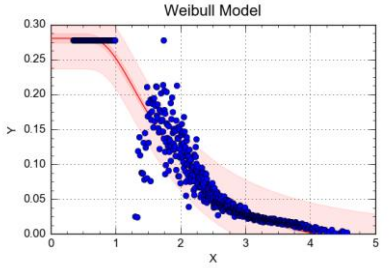

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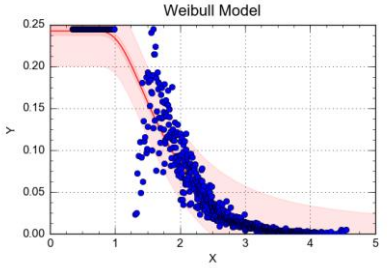

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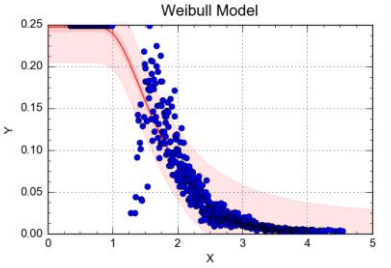

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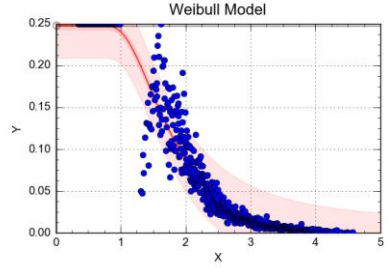

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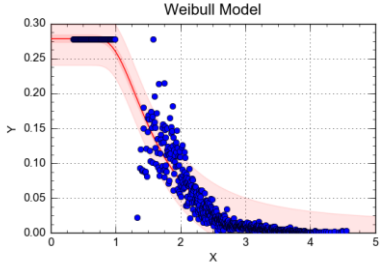

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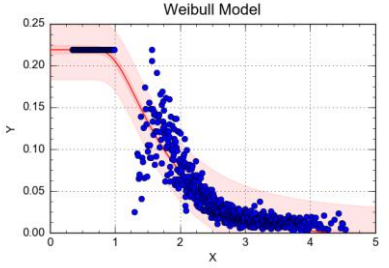

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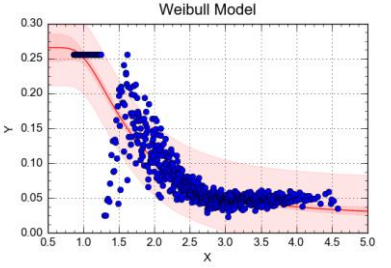

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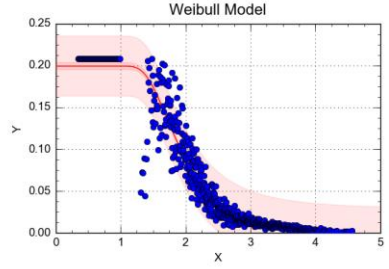

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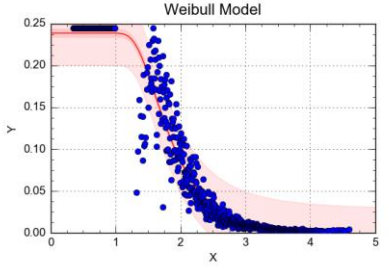

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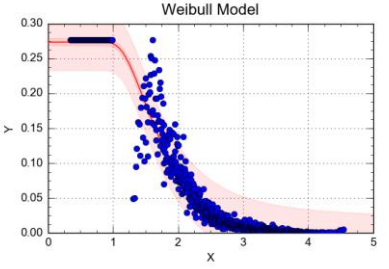

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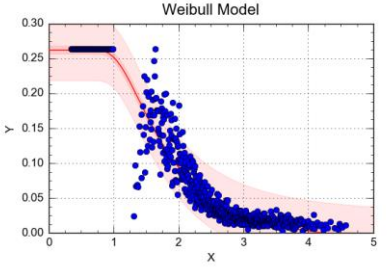

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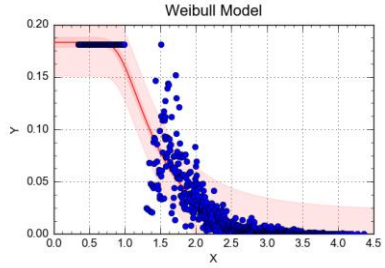

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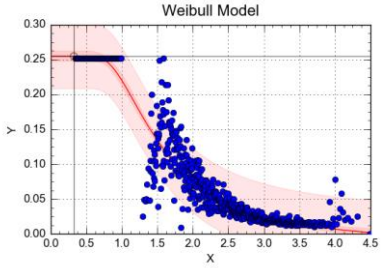

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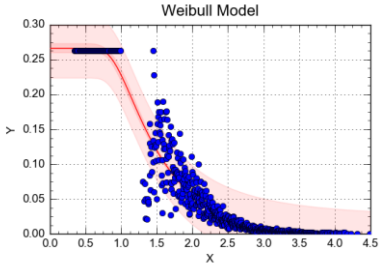

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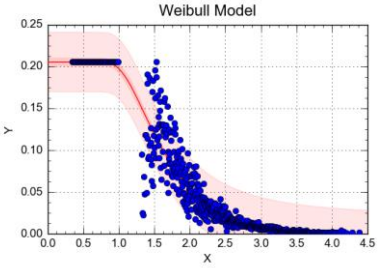

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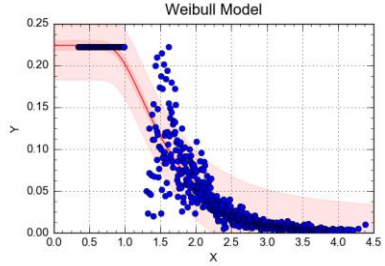

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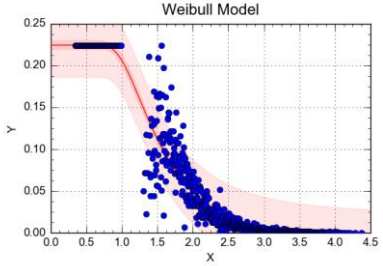

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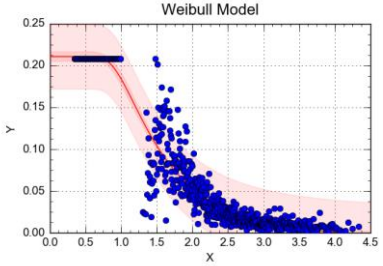

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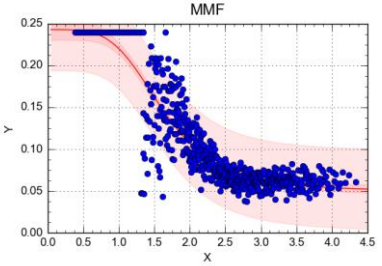

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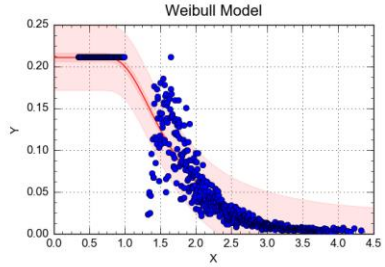

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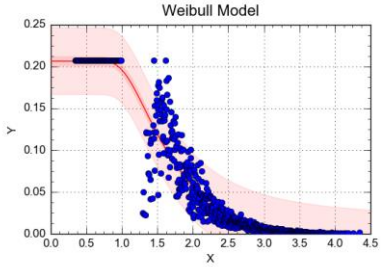

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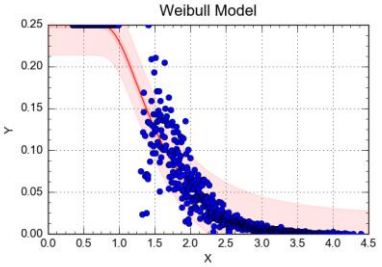

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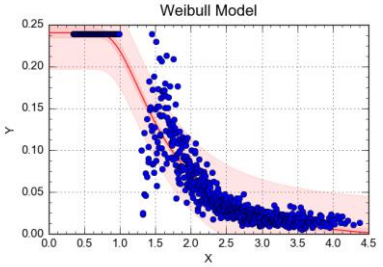

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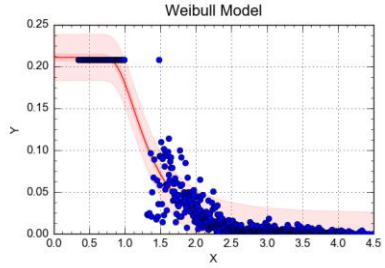

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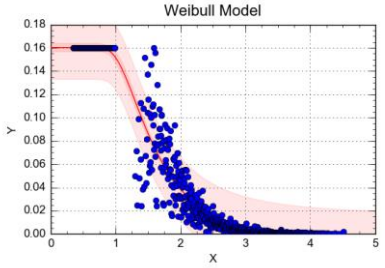

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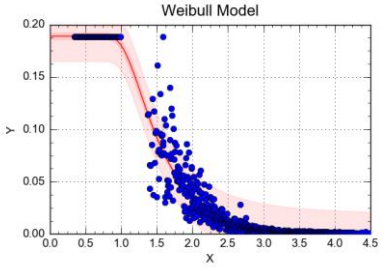

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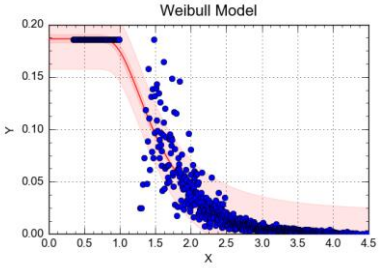

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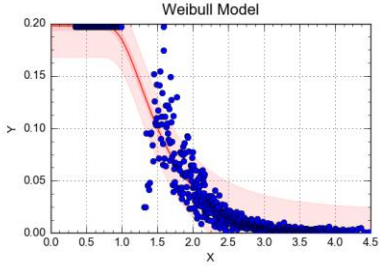

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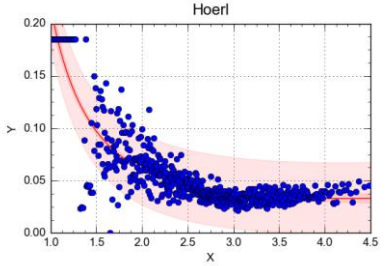

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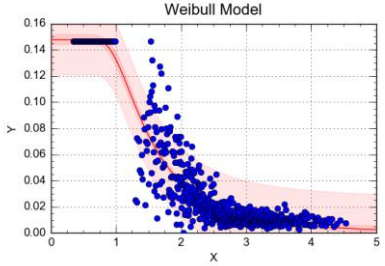

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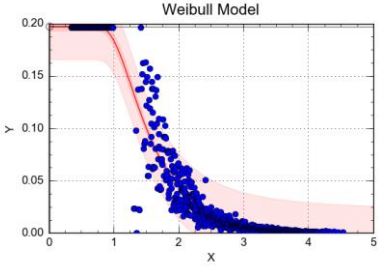

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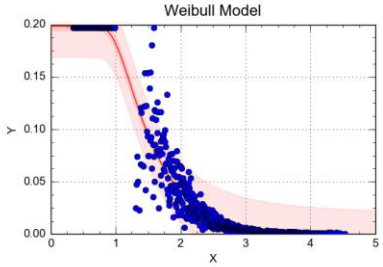

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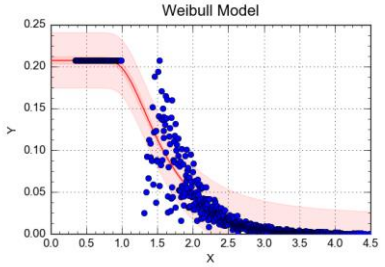

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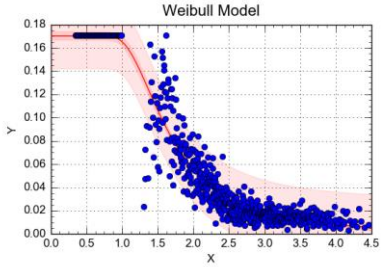

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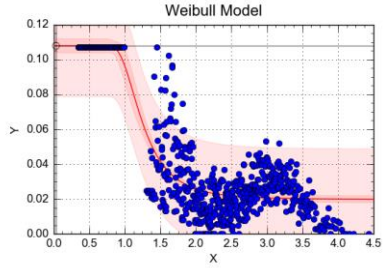

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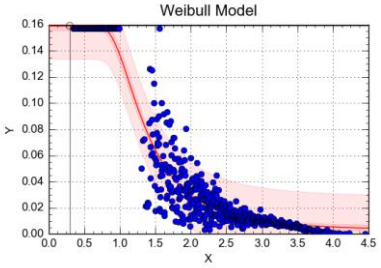

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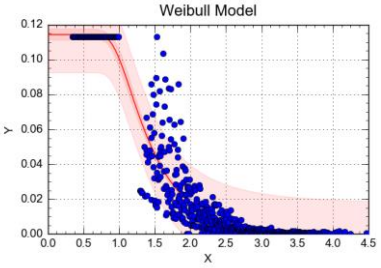

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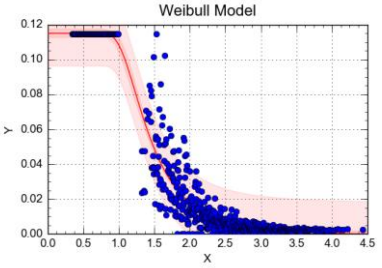

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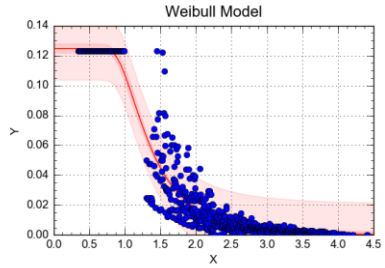

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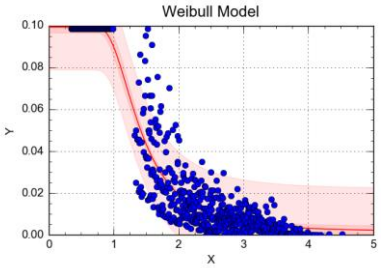

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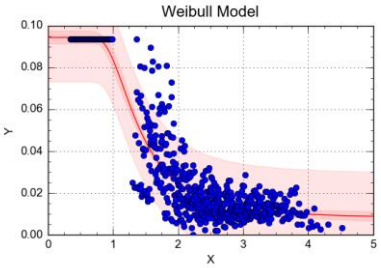

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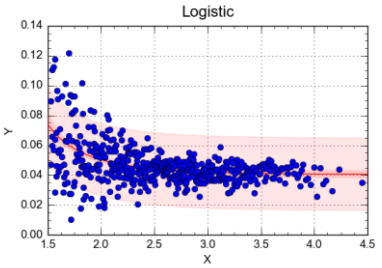

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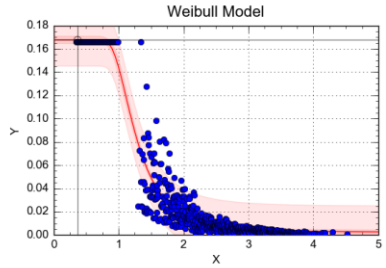

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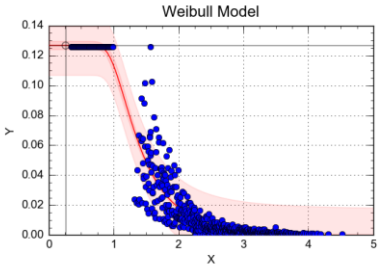

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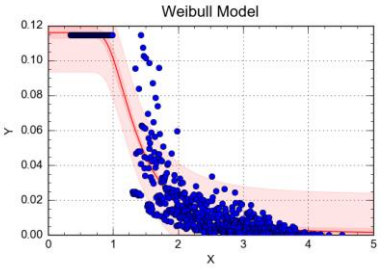

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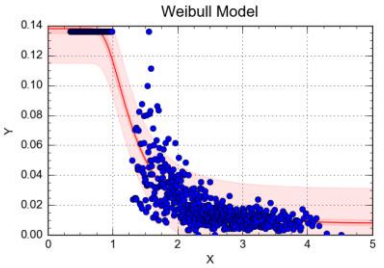

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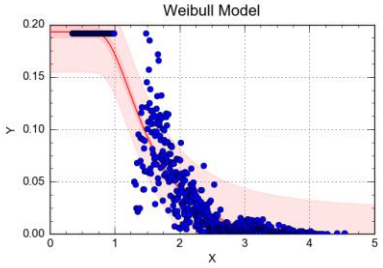

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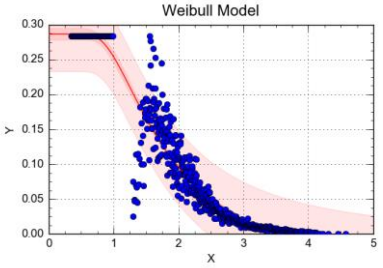

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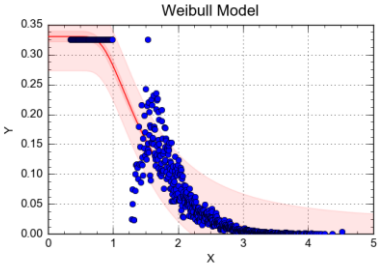

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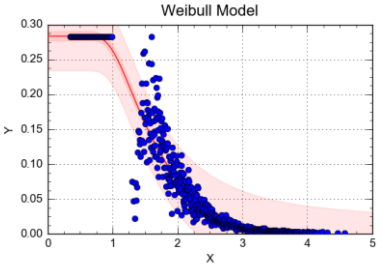

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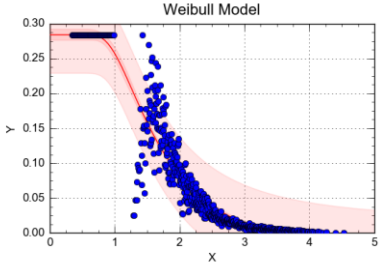

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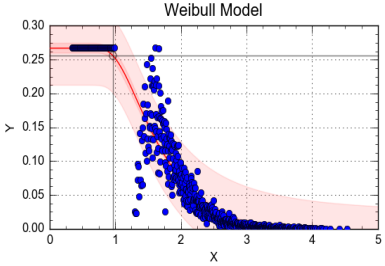

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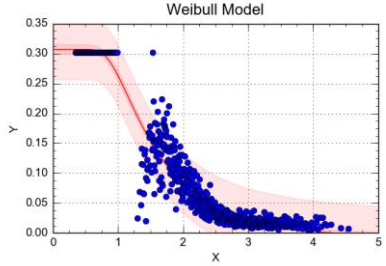

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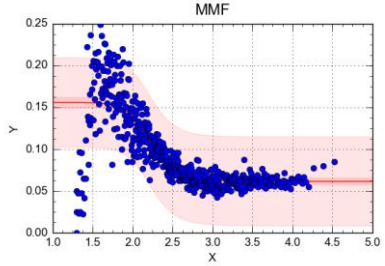

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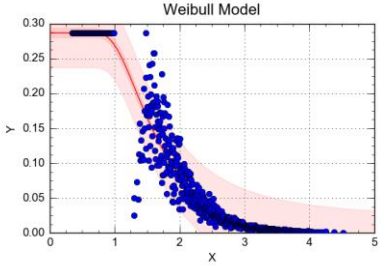

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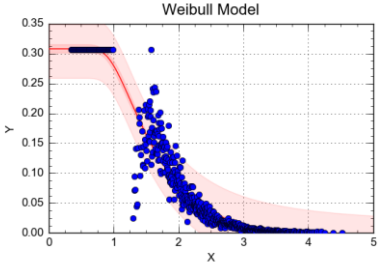

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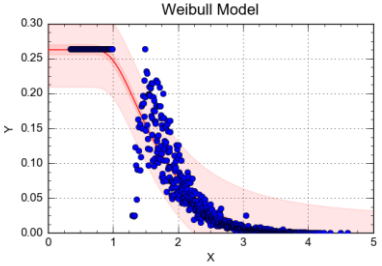

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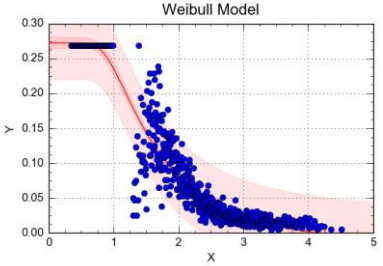

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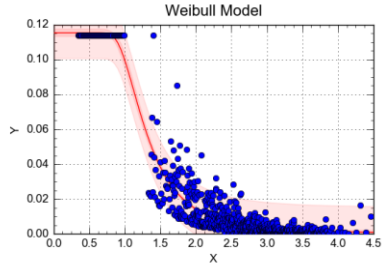

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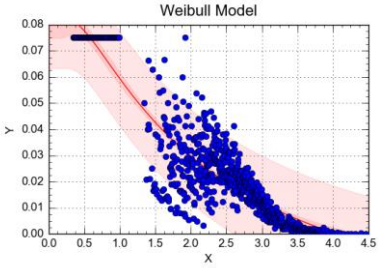

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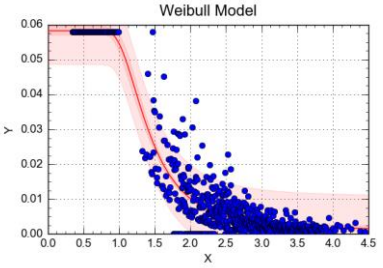

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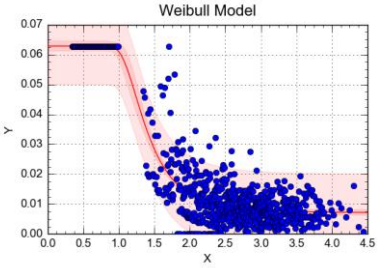

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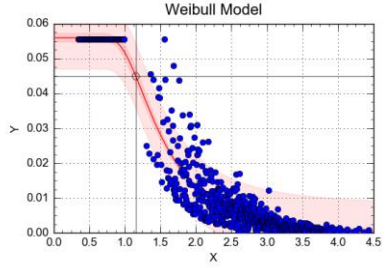

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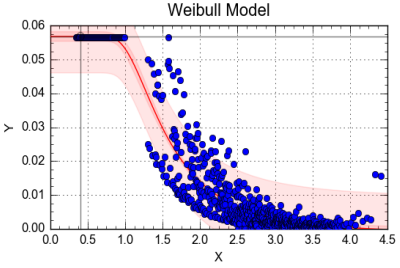

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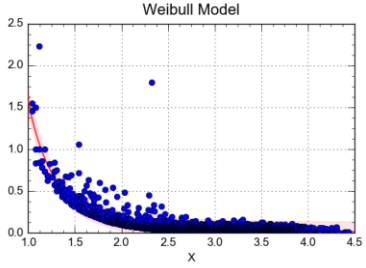

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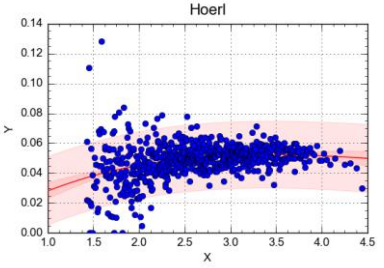

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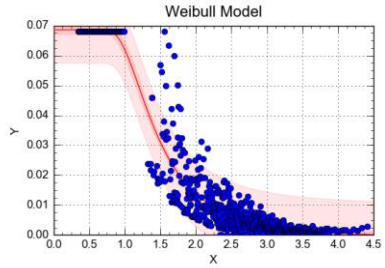

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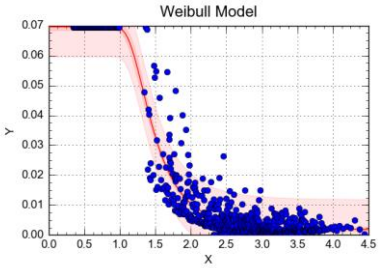

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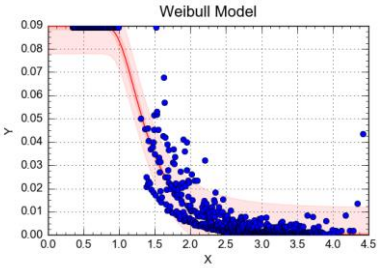

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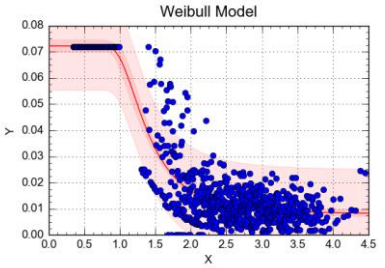

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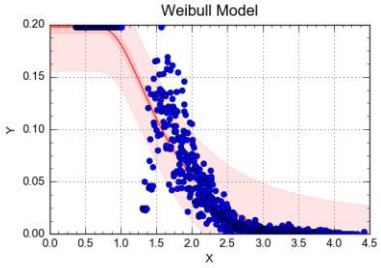

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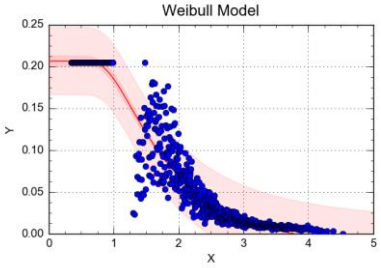

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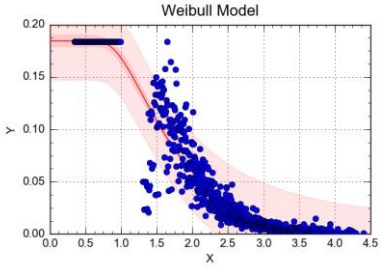

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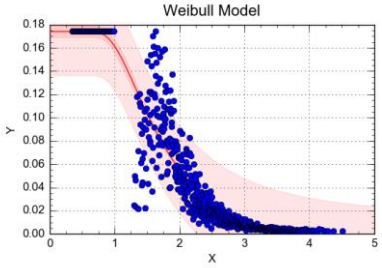

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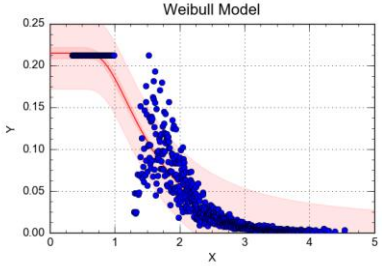

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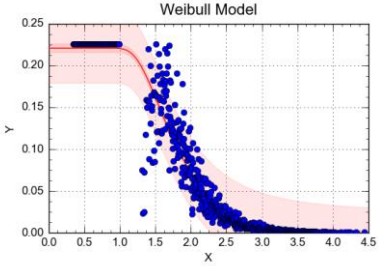

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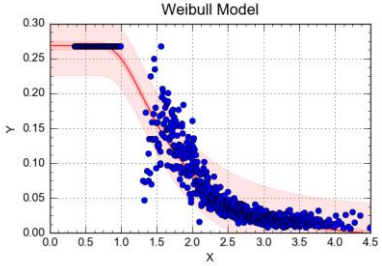

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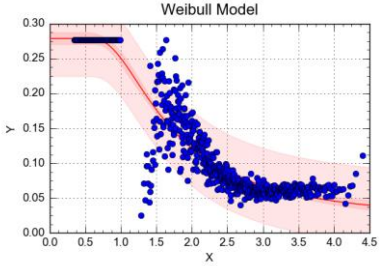

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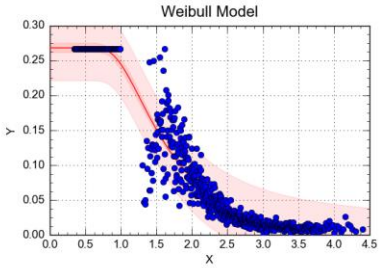

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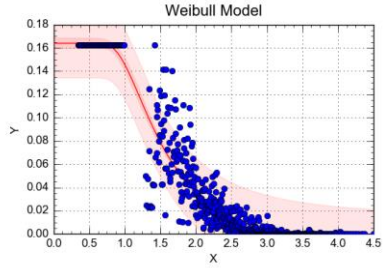

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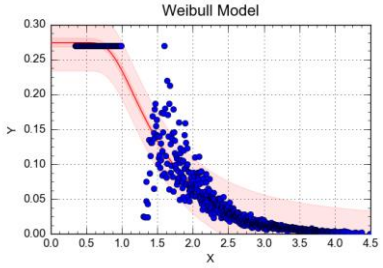

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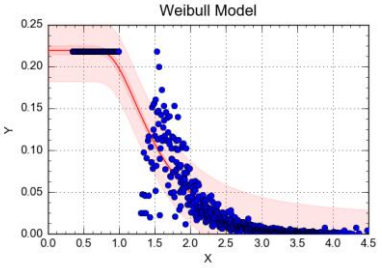

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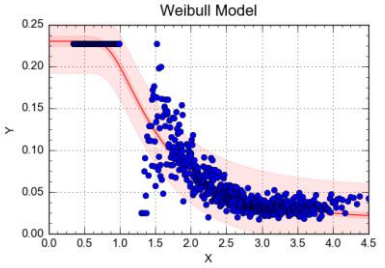

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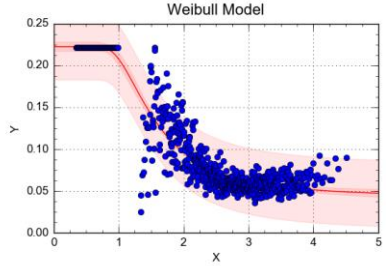

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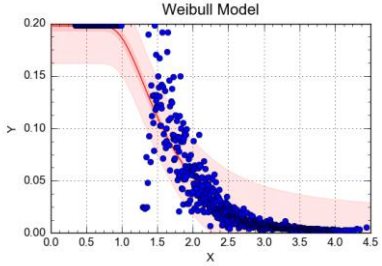

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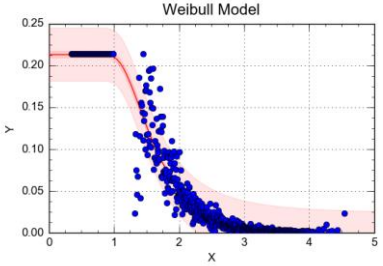

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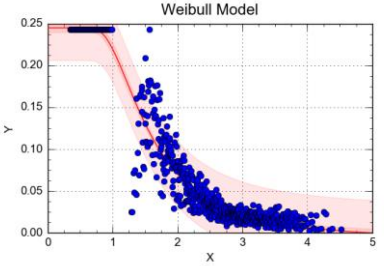

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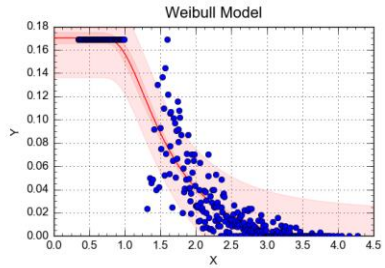

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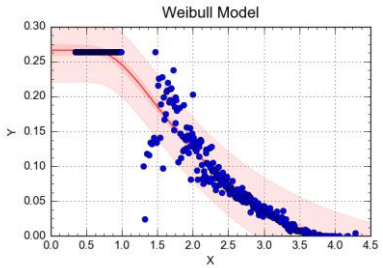

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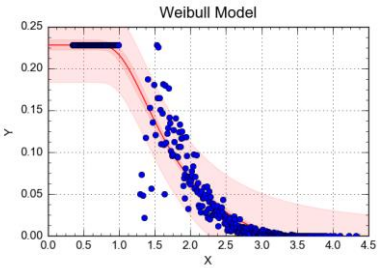

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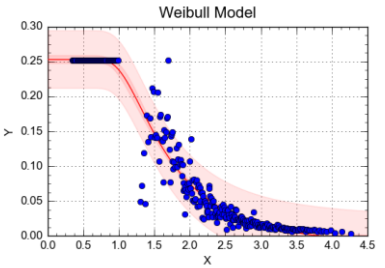

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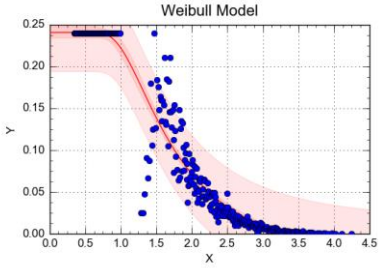

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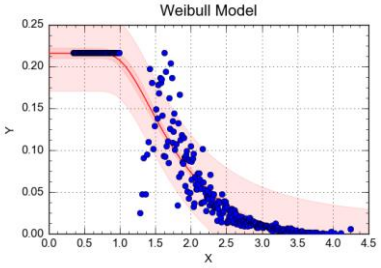

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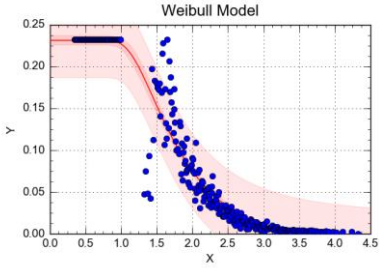

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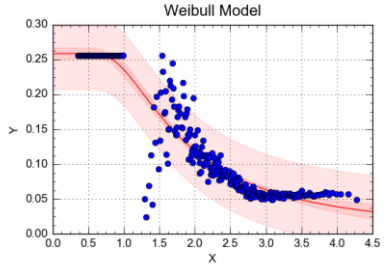

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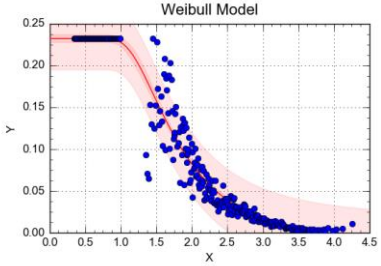

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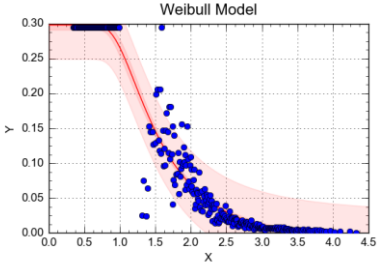

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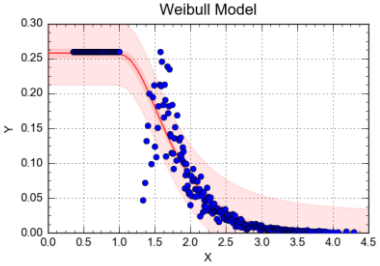

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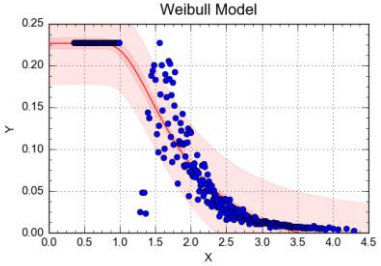

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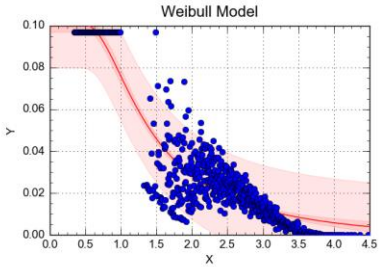

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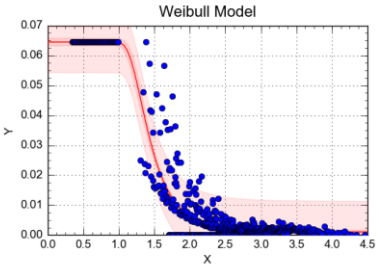

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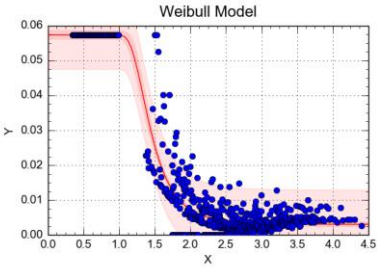

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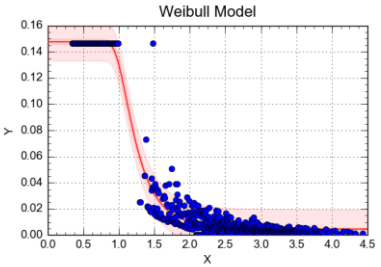

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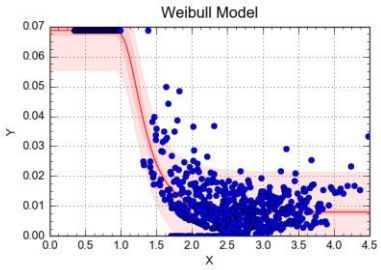

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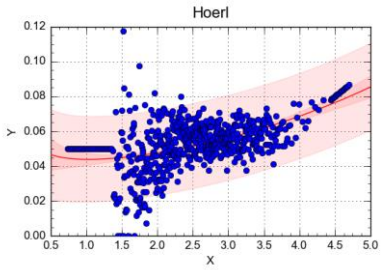

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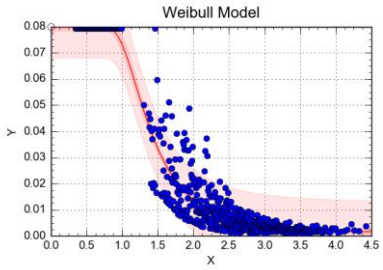

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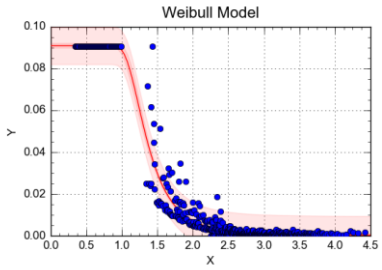

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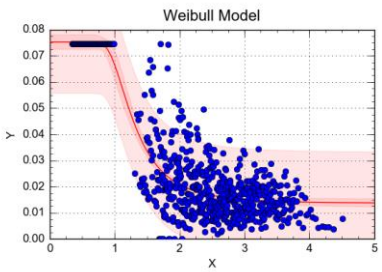

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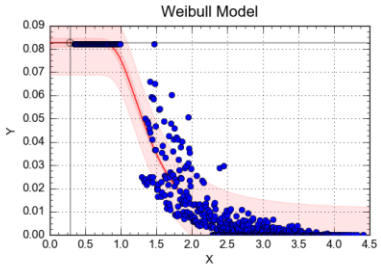

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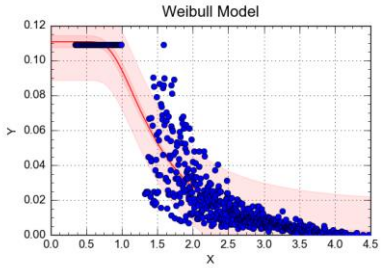

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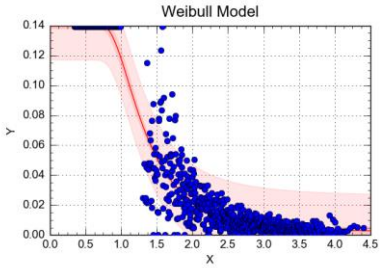

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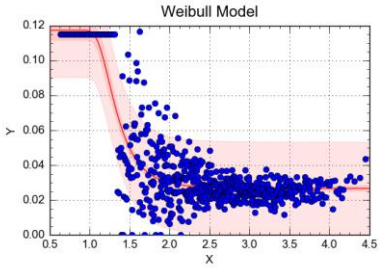

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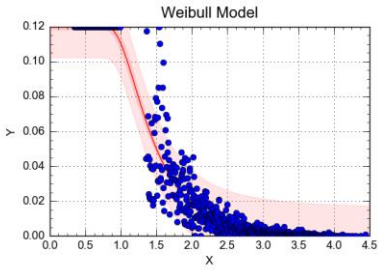

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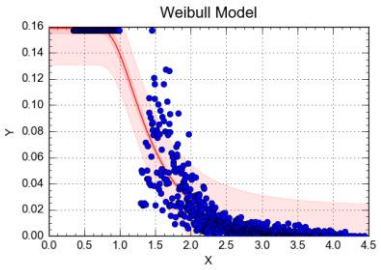

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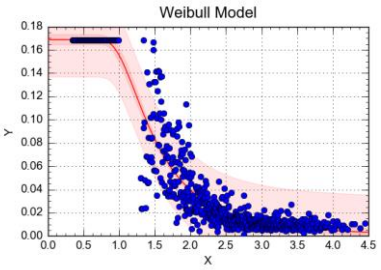

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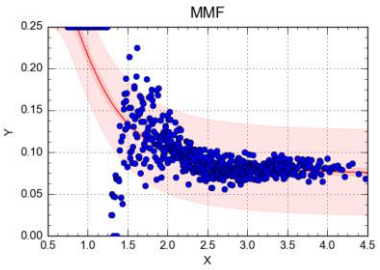

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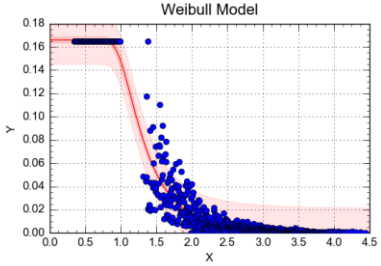

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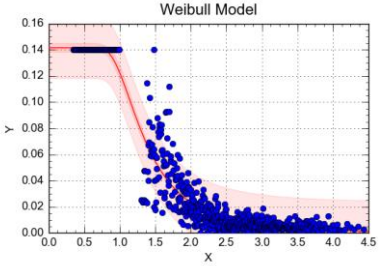

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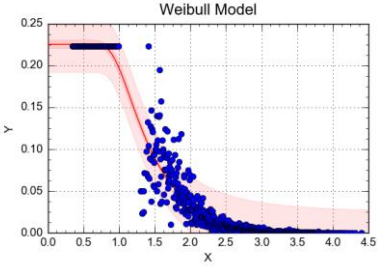

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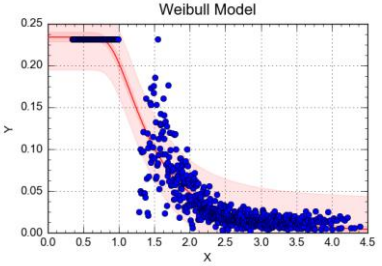

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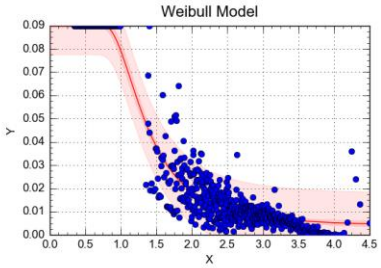

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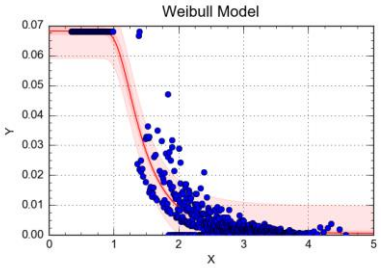

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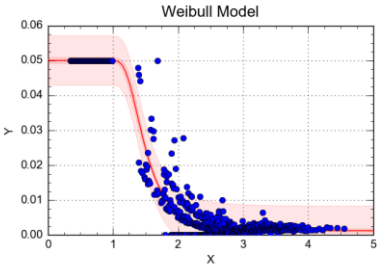

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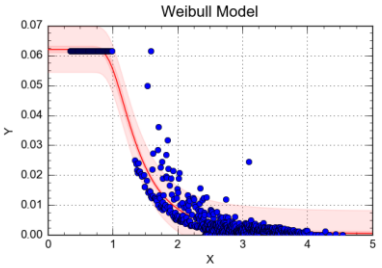

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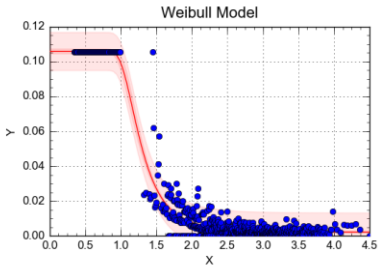

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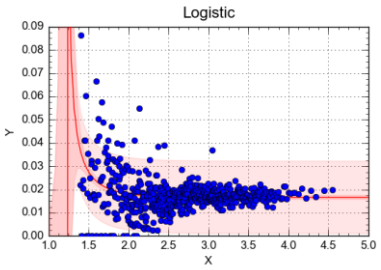

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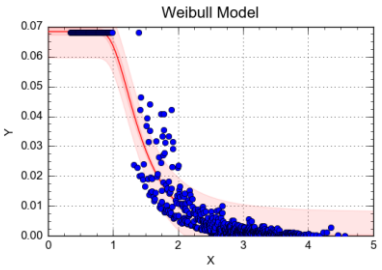

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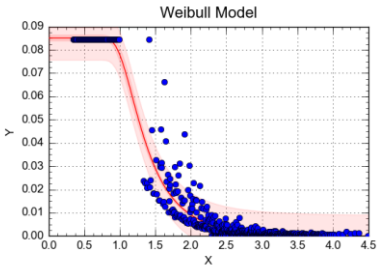

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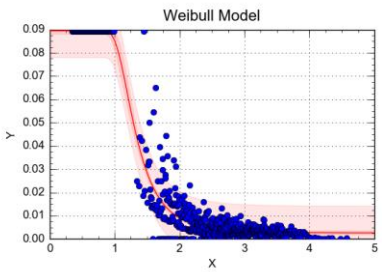

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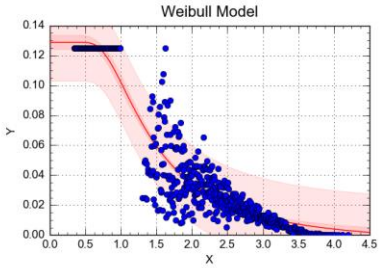

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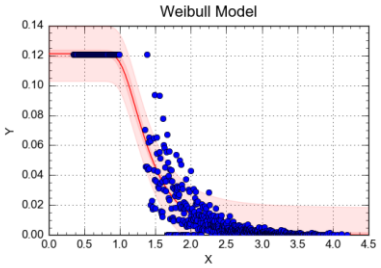

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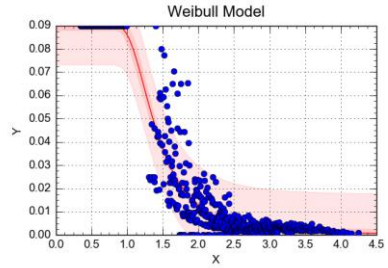

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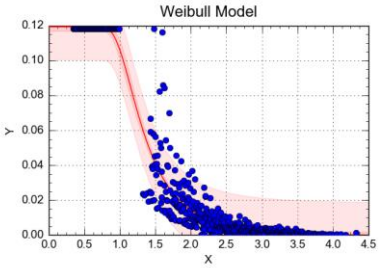

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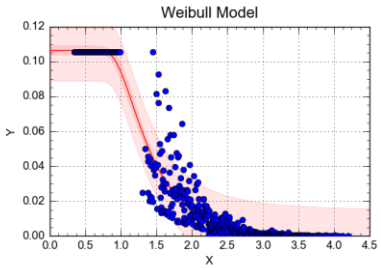

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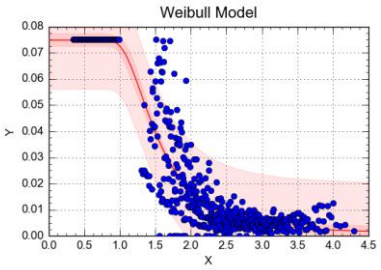

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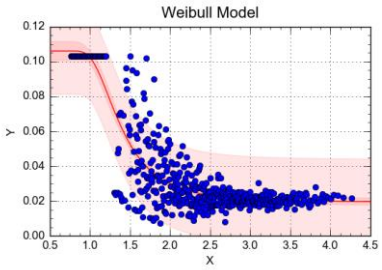

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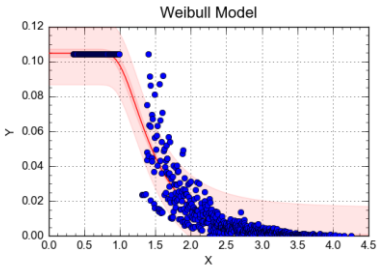

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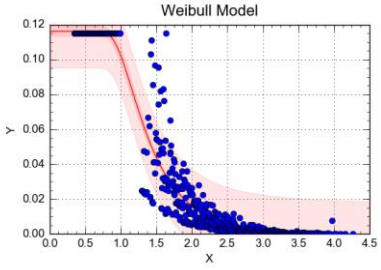

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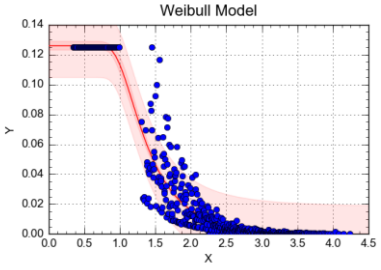

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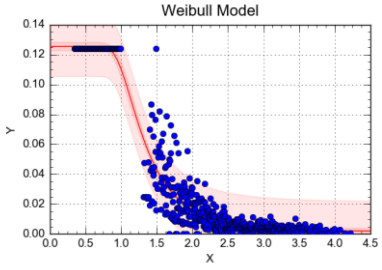

vWA

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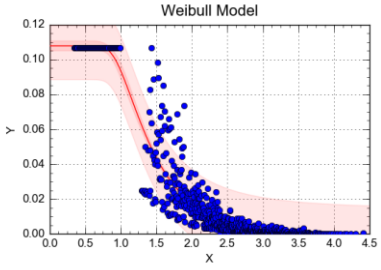

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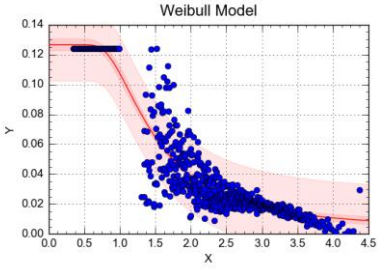

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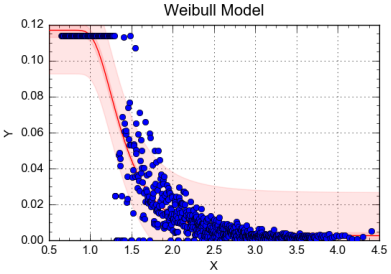

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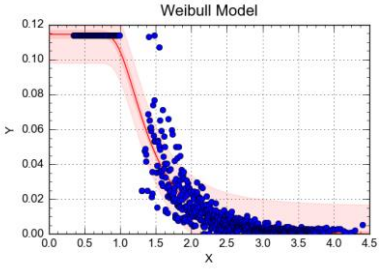

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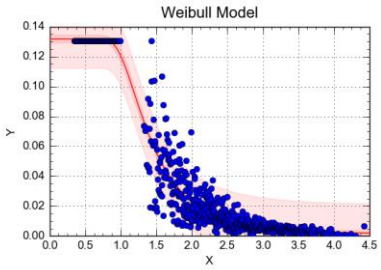
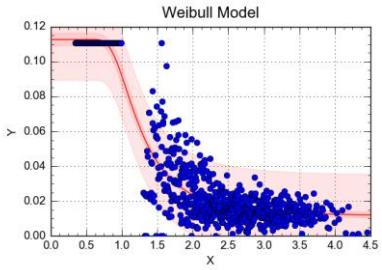
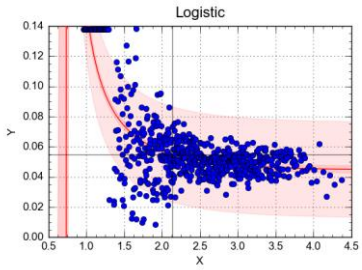

Weibull Model
Y
X

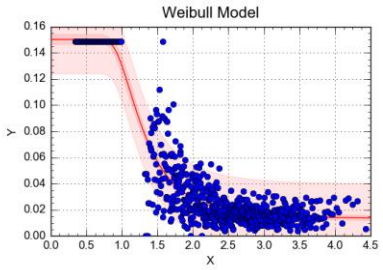
a+4


Weibull Model
Y
X

a-4


Logistic
Y
X

a-8


Weibull Model
Y
X

Appendix B

Locus	position	a	b	c	d	function
D3S1358	4	0.10904	0.101022	2.15836	-3.352077	Weibull
D3S1358	3	1.22E-01	1.27E-01	2.30E+00	-3.10E+00	Weibull
D3S1358	2	0.131093	0.135086	2.021164	-3.171803	Weibull
D3S1358	1	1.22E-01	1.25E-01	2.19E+00	-3.48E+00	Weibull
D3S1358	-1	1.14E-01	1.20E-01	2.41E+00	-2.76E+00	Weibull
D3S1358	-2	0.122	0.125025	2.4017	-3.418043	Weibull
D3S1358	-3	1.19E-01	1.23E-01	2.47E+00	-3.39E+00	Weibull
D3S1358	-4	5.22E-02	1.53E+00	-1.12E+00		Hoerl
D3S1358	-5	1.30E-01	1.33E-01	2.59E+00	-3.49E+00	Weibull
D3S1358	-6	1.25E-01	1.29E-01	2.35E+00	-3.39E+00	Weibull
D3S1358	-7	1.18E-01	1.21E-01	3.68E+00	-3.81E+00	Weibull
D3S1358	-8	0.141915	0.127402	2.245749	-3.120923	Weibull
vWA	4	0.112594	0.101162	1.589241	-3.627188	Weibull
vWA	3	1.32E-01	1.31E-01	2.46E+00	-3.71E+00	Weibull
vWA	2	1.17E-01	1.14E-01	3.73E+00	-5.15E+00	Weibull
vWA	1	1.08E-01	1.13E-01	2.08E+00	-3.20E+00	Weibull
vWA	-1	1.27E-01	1.23E-01	1.87E+00	-2.45E+00	Weibull
vWA	-2	0.114416	0.11527	2.484468	-3.884852	Weibull
vWA	-4	4.45E-02	-2.25E+00	1.15E+00		Logistic
vWA	-8	0.150203	0.137121	1.944399	-3.991064	Weibull
D16S539	4	0.094355	0.086338	2.109615	-3.287947	Weibull
D16S539	3	1.25E-01	1.25E-01	1.98E+00	-3.63E+00	Weibull
D16S539	2	0.11428	0.11893	2.166921	-3.371585	Weibull
D16S539	1	1.08E-01	8.80E-02	2.05E+00	-4.85E+00	Weibull
D16S539	-1	1.59E-01	1.57E-01	1.96E+00	-3.36E+00	Weibull
D16S539	-2	0.115038	0.115875	2.865368	-4.021901	Weibull
D16S539	-3	9.92E-02	9.77E-02	2.37E+00	-3.55E+00	Weibull
D16S539	-4	0.040551875	-5.631247536	1.679835543		Logistic
D16S539	-5	1.68E-01	1.65E-01	1.96E+00	-4.36E+00	Weibull
D16S539	-6	1.27E-01	1.29E-01	2.27E+00	-3.69E+00	Weibull
D16S539	-7	1.16E-01	1.15E-01	2.09E+00	-3.57E+00	Weibull
D16S539	-8	0.137946	0.130484	1.81859	-3.711573	Weibull
CSF1PO	4					Weibull
CSF1PO	3	1.14E-01	1.18E-01	2.15E+00	-3.42E+00	Weibull
CSF1PO	2	0.125242	0.12574	1.839376	-3.631295	Weibull
CSF1PO	1	9.20E-02	9.32E-02	2.81E+00	-4.64E+00	Weibull
CSF1PO	-1	1.17E-01	1.21E-01	1.72E+00	-2.34E+00	Weibull
CSF1PO	-2	0.094892	0.09534	2.791588	-3.871152	Weibull
CSF1PO	-3	1.14E-01	1.18E-01	2.15E+00	-3.42E+00	Weibull

CSF1PO	-4	1.28E-01	8.73E-02	2.23E+00	-7.59E+00	Weibull
CSF1PO	-5	1.58E-01	1.57E-01	2.00E+00	-3.77E+00	Weibull
CSF1PO	-6	1.09E-01	1.10E-01	2.61E+00	-4.08E+00	Weibull
CSF1PO	-7	1.10E-01	1.14E-01	2.44E+00	-3.57E+00	Weibull
CSF1PO	-8	1.26E-01	1.18E-01	1.98E+00	-3.43E+00	Weibull
TPOX	4	0.074827	0.073831	3.512512	-3.823742	Weibull
TPOX	3	1.19E-01	1.20E-01	2.23E+00	-4.06E+00	Weibull
TPOX	2	0.121199	0.121587	3.043685	-4.583819	Weibull
TPOX	-1	1.29E-01	1.35E-01	1.63E+00	-2.20E+00	Weibull
TPOX	-2	0.090119	0.089756	3.125433	-4.383090	Weibull
TPOX	-3	1.06E-01	1.09E-01	2.20E+00	-3.59E+00	Weibull
TPOX	-4	0.106009717	0.086514994	3.170748217	-4.636928466	Weibull
TPOX	-5	1.05E-01	1.07E-01	2.74E+00	-3.80E+00	Weibull
TPOX	-6	1.16E-01	1.20E-01	2.16E+00	-3.58E+00	Weibull
TPOX	-7	1.26E-01	1.29E-01	2.33E+00	-3.87E+00	Weibull
TPOX	-8	0.125334	0.123982	2.111157	-4.041954	Weibull
D8S1179	4	0.218731	0.233852	2.880192	-2.586920	Weibull
D8S1179	3	2.48E-01	2.75E-01	3.64E+00	-2.74E+00	Weibull
D8S1179	2	0.242506	0.273117	3.447824	-2.662456	Weibull
D8S1179	1	2.28E-01	2.50E-01	4.47E+00	-3.12E+00	Weibull
D8S1179	-1	2.80E-01	3.29E-01	2.46E+00	-1.95E+00	Weibull
D8S1179	-2	0.247035	0.270267	3.570523	-2.838123	Weibull
D8S1179	-3	2.78E-01	3.02E-01	2.80E+00	-2.82E+00	Weibull
D8S1179	-4	2.65E-01	2.42E-01	2.85E+00	-2.79E+00	Weibull
D8S1179	-5	1.99E-01	2.06E-01	1.17E+01	-4.23E+00	Weibull
D8S1179	-6	2.39E-01	2.49E-01	8.89E+00	-4.18E+00	Weibull
D8S1179	-7	2.74E-01	2.92E-01	4.85E+00	-3.45E+00	Weibull
D8S1179	-8	0.262089	0.280767	3.318994	-2.685717	Weibull
D21S11	4	0.268417	0.283135	2.733609	-2.647449	Weibull
D21S11	3	2.83E-01	2.44E-01	2.11E+00	-2.25E+00	Weibull
D21S11	2	2.733609	0.215565	2.578607	-2.241810	Weibull
D21S11	1	-2.647449	2.26E-01	2.63E+00	-2.50E+00	Weibull
D21S11	-1	2.06E-01	2.38E-01	2.43E+00	-2.13E+00	Weibull
D21S11	-2	0.17406	0.19946	2.770841	-2.413275	Weibull
D21S11	-3	2.21E-01	2.37E-01	6.54E+00	-3.79E+00	Weibull
D21S11	-4	0.278585	0.261515	2.237646	-2.132057	Weibull
D21S11	-8	0.268116	0.293883	2.541732	-2.491018	Weibull
D18S51	4	0.3069	0.325939	2.015228	-2.417222	Weibull
D18S51	3	2.84E-01	3.24E-01	2.50E+00	-2.40E+00	Weibull
D18S51	2	0.329988	0.368433	2.033858	-2.423039	Weibull
D18S51	1	1.93E-01	2.09E-01	2.31E+00	-2.79E+00	Weibull
D18S51	-1	2.86E-01	3.46E-01	2.37E+00	-2.00E+00	Weibull

D18S51	-2	0.019012	0.026178	-0.586603	0.288572	Weibull
D18S51	-4	0.056781152	0.002995675	0.195906488	-8.041574648	MMF
D18S51	-5	2.86E-01	3.16E-01	2.90E+00	-2.73E+00	Weibull
D18S51	-6	3.08E-01	3.42E-01	2.51E+00	-2.60E+00	Weibull
D18S51	-7	2.62E-01	2.96E-01	3.00E+00	-2.66E+00	Weibull
D18S51	-8	0.272258	0.297251	2.088728	-2.235164	Weibull
DYS391	4	0.231185	0.255286	4.091524	-3.049205	Weibull
DYS391	3	2.41E-01	2.77E-01	2.71E+00	-2.46E+00	Weibull
DYS391	2	0.228016	0.262502	3.1134	-2.648521	Weibull
DYS391	1	1.70E-01	1.85E-01	2.62E+00	-2.87E+00	Weibull
DYS391	-1	2.66E-01	3.97E-01	2.95E+00	-1.52E+00	Weibull
DYS391	-2	0.252858	0.270643	2.911723	-2.796531	Weibull
DYS391	-3	2.16E-01	2.49E-01	3.38E+00	-2.60E+00	Weibull
DYS391	-4	0.258374	0.255267	2.41777	-1.996210	Weibull
DYS391	-5	2.32E-01	2.54E-01	4.07E+00	-2.94E+00	Weibull
DYS391	-6	2.98E-01	3.21E-01	2.31E+00	-2.78E+00	Weibull
DYS391	-7	2.58E-01	2.76E-01	5.66E+00	-3.67E+00	Weibull
DYS391	-8	0.226405	0.258696	3.473083	-2.581154	Weibull
D2S441	4	0.076514	0.06832	3.466007	-4.293624	Weibull
D2S441	3	1.02E-01	1.01E-01	2.35E+00	-3.85E+00	Weibull
D2S441	2	0.074881	0.076935	2.778386	-3.517501	Weibull
D2S441	1	8.15E-02	8.49E-02	2.61E+00	-3.25E+00	Weibull
D2S441	-1	7.27E-02	6.99E-02	2.08E+00	-2.47E+00	Weibull
D2S441	-2	0.065105	0.066412	2.919396	-3.406730	Weibull
D2S441	-3	8.27E-02	8.36E-02	2.92E+00	-3.93E+00	Weibull
D2S441	-4	0.03199	2.3511	-2.263		Hoerl
D2S441	-5	9.37E-02	9.39E-02	2.93E+00	-4.04E+00	Weibull
D2S441	-6	1.16E-01	1.18E-01	2.26E+00	-3.92E+00	Weibull
D2S441	-7	7.69E-02	8.08E-02	3.19E+00	-3.33E+00	Weibull
D2S441	-8	0.164693	0.157717	1.962022	-4.368976	Weibull
D19S433	3	5.59E-02	5.69E-02	2.60E+00	-3.16E+00	Weibull
D19S433	2	0.058251	0.057081	2.759653	-4.005770	Weibull
D19S433	1	1.15E-01	1.15E-01	2.00E+00	-3.95E+00	Weibull
D19S433	-1	8.26E-02	1.35E-01	1.76E+00	-9.09E-01	Weibull
D19S433	-2	0.062829	0.055765	3.425809	-4.828021	Weibull
D19S433	-3	5.68E-02	5.85E-02	2.79E+00	-3.18E+00	Weibull
D19S433	-4	0.039788625	0.705265871	1.194767771		Hoerl
D19S433	-5	6.86E-02	6.97E-02	2.36E+00	-3.30E+00	Weibull
D19S433	-6	6.96E-02	6.79E-02	5.07E+00	-5.19E+00	Weibull
D19S433	-7	8.98E-02	9.01E-02	2.69E+00	-4.20E+00	Weibull
D19S433	-8	0.072235	0.06425	2.651044	-4.143398	Weibull
TH01	4	0.105749	0.103542	2.773808	-5.678340	Weibull

TH01	3	6.20E-02	6.17E-02	2.26E+00	-3.93E+00	Weibull
TH01	2	0.068155	0.067717	3.30159	-4.551369	Weibull
TH01	-1	9.12E-02	8.74E-02	2.00E+00	-3.42E+00	Weibull
TH01	-2	0.049997	0.048781	8.259133	-6.204598	Weibull
TH01	-4	0.016606868	-4.14184E+15	3.097030745		logistic
TH01	-5	6.83E-02	6.92E-02	2.72E+00	-3.88E+00	Weibull
TH01	-6	8.51E-02	8.59E-02	2.49E+00	-4.35E+00	Weibull
TH01	-8	0.089504	0.08693	3.051735	-5.312298	Weibull
FGA	4	0.015711	0.016116	-3.415328	1.280841	Weibull
FGA	3	1.48E-01	1.43E-01	2.13E+00	-5.71E+00	Weibull
FGA	2	0.064516	0.063527	6.249877	-6.146306	Weibull
FGA	-1	1.01E-01	1.04E-01	1.43E+00	-1.97E+00	Weibull
FGA	-2	0.057316	0.054288	7.603713	-6.527793	Weibull
FGA	-4	0.033038411	1.328844271	-0.292946117		Hoerl
FGA	-5	7.99E-02	7.89E-02	2.48E+00	-3.79E+00	Weibull
FGA	-6	9.08E-02	9.05E-02	3.78E+00	-5.56E+00	Weibull
FGA	-8	0.075235	0.061631	1.967741	-3.984451	Weibull
D22S1045	3	0.230134	0.217157	1.976339	-2.560402	Weibull
D22S1045	1	1.64E-01	1.79E-01	2.29E+00	-2.77E+00	Weibull
D22S1045	-1	2.74E-01	2.96E-01	2.01E+00	-2.45E+00	Weibull
D22S1045	-2	2.19E-01	2.36E-01	2.39E+00	-2.86E+00	Weibull
D22S1045	-3	0.222415	0.17962	2.514932	-2.831437	Weibull
D22S1045	-4	1.98E-01	2.12E-01	2.94E+00	-2.93E+00	Weibull
D22S1045	-5	2.13E-01	2.21E-01	4.36E+00	-3.74E+00	Weibull
D22S1045	-6	0.245014	0.253442	2.307143	-2.624974	Weibull
D5S818	4	0.168447	0.163793	2.071956	-2.984360	Weibull
D5S818	3	2.03E-01	2.13E-01	3.14E+00	-3.20E+00	Weibull
D5S818	2	0.18513	0.197648	3.208354	-3.228140	Weibull
D5S818	1	2.03E-01	2.10E-01	2.68E+00	-2.75E+00	Weibull
D5S818	-1	2.41E-01	2.60E-01	2.16E+00	-2.51E+00	Weibull
D5S818	-2	0.243404	0.25185	2.456482	-3.375890	Weibull
D5S818	-3	2.09E-01	2.21E-01	3.03E+00	-3.02E+00	Weibull
D5S818	-4	3.40E-02	3.66E-01	2.83E-01	-3.89E+00	MMF
D5S818	-5	2.22E-01	2.33E-01	2.67E+00	-3.06E+00	Weibull
D5S818	-6	0.206170709	0.220432874	2.514933719	-2.940748831	Weibull
D5S818	-7	2.39E-01	2.52E-01	2.24E+00	-2.92E+00	Weibull
D5S818	-8	0.218823	0.222193	2.43018	-2.649742	Weibull
D13S317	4	0.147764	0.148364	2.289961	-2.888975	Weibull
D13S317	3	1.86E-01	1.95E-01	2.81E+00	-3.23E+00	Weibull
D13S317	2	0.160236	0.171143	2.996908	-3.131713	Weibull
D13S317	1	2.11E-01	2.13E-01	1.95E+00	-3.74E+00	Weibull
D13S317	-2	0.188872	0.194479	3.130847	-3.682657	Weibull

D13S317	-3	1.98E-01	2.08E-01	2.78E+00	-3.18E+00	Weibull
D13S317	-4	0.119913189	1.926469	-2.77200927		Hoerl
D13S317	-5	1.97E-01	2.07E-01	2.78E+00	-3.19E+00	Weibull
D13S317	-6	1.98E-01	2.09E-01	2.55E+00	-3.18E+00	Weibull
D13S317	-7	2.07E-01	2.18E-01	3.22E+00	-3.30E+00	Weibull
D13S317	-8	0.17021	0.169495	3.553001	-3.179892	Weibull
D7S820	4	0.155313	0.154769	2.316722	-3.142274	Weibull
D7S820	3	1.85E-01	1.87E-01	2.69E+00	-3.29E+00	Weibull
D7S820	2	0.146832	0.157615	2.921523	-3.039619	Weibull
D7S820	1	1.54E-01	1.59E-01	2.67E+00	-3.76E+00	Weibull
D7S820	-1	2.02E-01	2.64E-01	2.00E+00	-1.16E+00	Weibull
D7S820	-2	0.169878	0.171216	2.172759	-3.271395	Weibull
D7S820	-4	0.187441388	0.157036763	3.065237832	-3.847854885	Weibull
D7S820	-5	2.04E-01	2.10E-01	1.97E+00	-2.72E+00	Weibull
D7S820	-6	2.05E-01	2.16E-01	2.27E+00	-3.08E+00	Weibull
D7S820	-7	1.54E-01	1.65E-01	3.99E+00	-3.41E+00	Weibull
D7S820	-8	0.178506	0.182071	2.977331	-3.284266	Weibull
SE33	4	0.168831	0.168777	2.542953	-3.250981	Weibull
SE33	3	1.21E-01	1.23E-01	2.49E+00	-3.69E+00	Weibull
SE33	2	0.141669	0.140327	1.783675	-3.429003	Weibull
SE33	1	8.26E-02	8.55E-02	2.47E+00	-3.55E+00	Weibull
SE33	-1	1.11E-01	1.16E-01	1.97E+00	-2.58E+00	Weibull
SE33	-2	0.117283093	0.090628747	5.349127555	-7.160661267	Weibull
SE33	-3	1.59E-01	1.65E-01	2.14E+00	-3.26E+00	Weibull
SE33	-4	0.073552599	1.120380943	0.376788303	-3.117074203	MMF
SE33	-5	1.66E-01	1.66E-01	2.21E+00	-4.41E+00	Weibull
SE33	-6	1.41E-01	1.42E-01	2.01E+00	-3.48E+00	Weibull
SE33	-7	2.25E-01	2.35E-01	2.11E+00	-3.32E+00	Weibull
SE33	-8	0.233863	0.233429	2.035275	-3.151305	Weibull
D10S1248	4	0.18588	0.190395	3.307292	-2.893146	Weibull
D10S1248	3	2.19E-01	2.34E-01	4.27E+00	-3.18E+00	Weibull
D10S1248	2	0.212486	0.235628	3.053601	-2.685646	Weibull
D10S1248	1	2.22E-01	2.40E-01	2.30E+00	-2.82E+00	Weibull
D10S1248	-1	2.47E-01	2.74E-01	2.66E+00	-2.35E+00	Weibull
D10S1248	-2	0.220912	0.232099	2.848206	-2.984682	Weibull
D10S1248	-3	2.07E-01	2.21E-01	4.44E+00	-3.37E+00	Weibull
D10S1248	-4	0.309409929	0.259147354	4.923633801	-4.527257779	Weibull
D10S1248	-5	2.37E-01	2.46E-01	5.00E+00	-3.67E+00	Weibull
D10S1248	-6	2.52E-01	2.62E-01	4.30E+00	-3.68E+00	Weibull
D10S1248	-7	2.40E-01	2.57E-01	3.46E+00	-3.16E+00	Weibull
D10S1248	-8	0.19759	0.198279	4.60685	-3.269988	Weibull
D1S1656	4	0.229049	0.233356	2.663429	-2.923579	Weibull

D1S1656	3	2.00E-01	2.09E-01	2.45E+00	-2.88E+00	Weibull
D1S1656	2	0.189336	0.204946	2.162613	-2.490432	Weibull
D1S1656	1	1.58E-01	1.68E-01	2.61E+00	-3.29E+00	Weibull
D1S1656	-1	2.19E-01	2.32E-01	1.99E+00	-2.42E+00	Weibull
D1S1656	-2	0.20012	0.199554	2.371973	-2.908198	Weibull
D1S1656	-3	1.88E-01	2.01E-01	2.97E+00	-3.06E+00	Weibull
D1S1656	-4	5.25E-02	2.78E-01	3.35E-01	-3.74E+00	MMF
D1S1656	-5	1.81E-01	1.93E-01	2.30E+00	-2.70E+00	Weibull
D1S1656	-6	2.08E-01	2.20E-01	2.44E+00	-2.87E+00	Weibull
D1S1656	-7	1.94E-01	2.07E-01	2.67E+00	-2.96E+00	Weibull
D1S1656	-8	0.223891	0.229496	3.341496	-3.068486	Weibull
D12S391	4	0.18588	0.190395	3.307292	-2.893146	Weibull
D12S391	3	2.19E-01	2.34E-01	4.27E+00	-3.18E+00	Weibull
D12S391	2	0.212486	0.235628	3.053601	-2.685646	Weibull
D12S391	1	2.22E-01	2.40E-01	2.30E+00	-2.82E+00	Weibull
D12S391	-1	2.47E-01	2.74E-01	2.66E+00	-2.35E+00	Weibull
D12S391	-2	0.220912	0.232099	2.848206	-2.984682	Weibull
D12S391	-3	2.07E-01	2.21E-01	4.44E+00	-3.37E+00	Weibull
D12S391	-4	0.049625142	0.132474224	0.242830941	-4.14930445	Weibull
D12S391	-5	2.37E-01	2.46E-01	5.00E+00	-3.67E+00	Weibull
D12S391	-6	2.52E-01	2.62E-01	4.30E+00	-3.68E+00	Weibull
D12S391	-7	2.40E-01	2.57E-01	3.46E+00	-3.16E+00	Weibull
D12S391	-8	0.19759	0.198279	4.60685	-3.269988	Weibull
D2S1338	4	0.201342	0.209306	3.211992	-3.119000	Weibull
D2S1338	3	2.01E-01	2.12E-01	3.32E+00	-3.26E+00	Weibull
D2S1338	2	0.19547	0.209318	3.285169	-3.175806	Weibull
D2S1338	1	1.68E-01	1.74E-01	2.37E+00	-3.61E+00	Weibull
D2S1338	-1	1.82E-01	2.10E-01	3.32E+00	-2.39E+00	Weibull
D2S1338	-2	0.178148	0.185404	4.621253	-3.662211	Weibull
D2S1338	-3	1.81E-01	1.97E-01	3.21E+00	-3.05E+00	Weibull
D2S1338	-4	0.060182426	0.065829639	0.283304452	-5.353147297	MMF
D2S1338	-5	2.01E-01	2.18E-01	2.36E+00	-2.66E+00	Weibull
D2S1338	-6	2.33E-01	2.48E-01	2.59E+00	-3.03E+00	Weibull
D2S1338	-7	2.18E-01	2.36E-01	2.65E+00	-2.88E+00	Weibull
D2S1338	-8	0.221543	0.230296	2.947623	-2.963718	Weibull

Appendix C

Sample identifier	Number of contributors	Expected mixture ratio	Injection time (s)	Injection voltage (kV)	Source laboratory	Template DNA amplified (ng)
1	1	1 : 0	15	1.2	A	0.0156
2	1	1 : 0	15	1.2	A	0.0156
3	1	1 : 0	25	1.2	A	0.25
4	1	1 : 0	25	1.2	A	0.25
5	1	1 : 0	25	1.2	A	0.0625
6	1	1 : 0	25	1.2	A	0.0625
7	1	1 : 0	25	1.2	A	0.0313
8	1	1 : 0	25	1.2	A	0.0313
9	1	1 : 0	25	1.2	A	0.5
10	1	1 : 0	25	1.2	A	0.5
11	1	1 : 0	25	1.2	A	0.5
12	1	1 : 0	25	1.2	A	0.5
13	1	1 : 0	25	1.2	A	0.125
14	1	1 : 0	25	1.2	A	0.125
15	1	1 : 0	25	1.2	A	0.0156
16	1	1 : 0	25	1.2	A	0.0156
17	1	1 : 0	25	1.2	A	0.25
18	1	1 : 0	25	1.2	A	0.25
19	1	1 : 0	25	1.2	A	0.25
20	1	1 : 0	25	1.2	A	0.0625
21	1	1 : 0	25	1.2	A	0.0625
22	1	1 : 0	25	1.2	A	0.0313
23	1	1 : 0	25	1.2	A	0.5
24	1	1 : 0	25	1.2	A	0.5
25	1	1 : 0	25	1.2	A	0.125
26	1	1 : 0	25	1.2	A	0.0313
27	1	1 : 0	25	1.2	A	0.0313
28	1	1 : 0	25	1.2	A	0.0156
29	1	1 : 0	25	1.2	A	0.0156
30	1	1 : 0	25	1.2	A	0.25
31	1	1 : 0	25	1.2	A	0.25
32	1	1 : 0	25	1.2	A	0.125
33	1	1 : 0	25	1.2	A	0.125
34	1	1 : 0	25	1.2	A	0.0625
35	1	1 : 0	25	1.2	A	0.0625
36	1	1 : 0	25	1.2	A	0.0156
37	1	1 : 0	25	1.2	A	0.5

38	1	1 : 0	25	1.2	A	0.5
39	1	1 : 0	25	1.2	A	0.125
40	1	1 : 0	25	1.2	A	0.125
41	1	1 : 0	25	1.2	A	0.0625
42	1	1 : 0	25	1.2	A	0.0625
43	1	1 : 0	25	1.2	A	0.0313
44	1	1 : 0	25	1.2	A	0.0313
45	1	1 : 0	25	1.2	A	0.5
46	1	1 : 0	25	1.2	A	0.5
47	1	1 : 0	25	1.2	A	0.25
48	1	1 : 0	25	1.2	A	0.25
49	1	1 : 0	25	1.2	A	0.0625
50	1	1 : 0	25	1.2	A	0.0625
51	1	1 : 0	25	1.2	A	0.0313
52	1	1 : 0	25	1.2	A	0.0313
53	1	1 : 0	25	1.2	A	0.0156
54	1	1 : 0	25	1.2	A	0.0156
55	1	1 : 0	25	1.2	A	0.0156
56	1	1 : 0	25	1.2	A	0.25
57	1	1 : 0	25	1.2	A	0.25
58	1	1 : 0	25	1.2	A	0.125
59	1	1 : 0	25	1.2	A	0.125
60	1	1 : 0	25	1.2	A	0.0313
61	1	1 : 0	25	1.2	A	0.0156
62	1	1 : 0	25	1.2	A	0.0156
63	1	1 : 0	25	1.2	A	0.5
64	1	1 : 0	25	1.2	A	0.5
65	1	1 : 0	25	1.2	A	0.125
66	1	1 : 0	25	1.2	A	0.125
67	1	1 : 0	25	1.2	A	0.0625
68	1	1 : 0	25	1.2	A	0.0625
69	1	1 : 0	25	1.2	A	0.0156
70	1	1 : 0	25	1.2	A	0.0156
71	1	1 : 0	25	1.2	A	0.07
72	1	1 : 0	25	1.2	A	0.02
73	1	1 : 0	25	1.2	A	0.08
74	1	1 : 0	25	1.2	A	0.02
75	1	1 : 0	25	1.2	A	0.0078
76	1	1 : 0	25	1.2	A	0.0078
77	1	1 : 0	25	1.2	A	0.0078
78	1	1 : 0	25	1.2	A	0.0078
79	1	1 : 0	25	1.2	A	0.0156

80	1	1 : 0	25	1.2	A	0.0156
81	1	1 : 0	25	1.2	A	0.0625
82	1	1 : 0	25	1.2	A	0.0625
83	1	1 : 0	25	1.2	A	0.125
84	1	1 : 0	25	1.2	A	0.125
85	1	1 : 0	25	1.2	A	0.125
86	1	1 : 0	25	1.2	A	0.125
87	1	1 : 0	25	1.2	A	0.25
88	1	1 : 0	25	1.2	A	0.25
89	1	1 : 0	25	1.2	A	0.25
90	1	1 : 0	25	1.2	A	0.25
91	1	1 : 0	25	1.2	A	0.5
92	1	1 : 0	25	1.2	A	0.5
93	1	1 : 0	25	1.2	A	0.5
94	1	1 : 0	25	1.2	A	0.5
95	1	1 : 0	25	1.2	A	0.03
96	1	1 : 0	25	1.2	A	0.04
97	1	1 : 0	25	1.2	A	0.02
98	1	1 : 0	25	1.2	A	0.06
99	1	1 : 0	25	1.2	A	0.0078
100	1	1 : 0	25	1.2	A	0.0078
101	1	1 : 0	25	1.2	A	0.03125
102	1	1 : 0	25	1.2	A	0.03125
103	1	1 : 0	25	1.2	A	0.0625
104	1	1 : 0	25	1.2	A	0.0625
105	1	1 : 0	25	1.2	A	0.0625
106	1	1 : 0	25	1.2	A	0.0625
107	1	1 : 0	25	1.2	A	0.125
108	1	1 : 0	25	1.2	A	0.125
109	1	1 : 0	25	1.2	A	0.125
110	1	1 : 0	25	1.2	A	0.125
111	1	1 : 0	25	1.2	A	0.25
112	1	1 : 0	25	1.2	A	0.25
113	1	1 : 0	25	1.2	A	0.25
114	1	1 : 0	25	1.2	A	0.25
115	1	1 : 0	25	1.2	A	0.5
116	1	1 : 0	25	1.2	A	0.5
117	1	1 : 0	25	1.2	A	0.5
118	1	1 : 0	25	1.2	A	0.5
119	1	1 : 0	25	1.2	A	0.041
120	1	1 : 0	25	1.2	A	0.03
121	1	1 : 0	25	1.2	A	0.0156

122	1	1 : 0	25	1.2	A	0.0156
123	1	1 : 0	25	1.2	A	0.03125
124	1	1 : 0	25	1.2	A	0.03125
125	1	1 : 0	25	1.2	A	0.03125
126	1	1 : 0	25	1.2	A	0.03125
127	1	1 : 0	25	1.2	A	0.0625
128	1	1 : 0	25	1.2	A	0.0625
129	1	1 : 0	25	1.2	A	0.0625
130	1	1 : 0	25	1.2	A	0.0625
131	1	1 : 0	25	1.2	A	0.125
132	1	1 : 0	25	1.2	A	0.125
133	1	1 : 0	25	1.2	A	0.125
134	1	1 : 0	25	1.2	A	0.25
135	1	1 : 0	25	1.2	A	0.25
136	1	1 : 0	25	1.2	A	0.25
137	1	1 : 0	25	1.2	A	0.25
138	1	1 : 0	25	1.2	A	0.5
139	1	1 : 0	25	1.2	A	0.5
140	1	1 : 0	25	1.2	A	0.0156
141	1	1 : 0	25	1.2	A	0.0156
142	1	1 : 0	25	1.2	A	0.0156
143	1	1 : 0	25	1.2	A	0.0156
144	1	1 : 0	25	1.2	A	0.03125
145	1	1 : 0	25	1.2	A	0.03125
146	1	1 : 0	25	1.2	A	0.03125
147	1	1 : 0	25	1.2	A	0.03125
148	1	1 : 0	25	1.2	A	0.0625
149	1	1 : 0	25	1.2	A	0.0625
150	1	1 : 0	25	1.2	A	0.0625
151	1	1 : 0	25	1.2	A	0.0625
152	1	1 : 0	25	1.2	A	0.125
153	1	1 : 0	25	1.2	A	0.125
154	1	1 : 0	25	1.2	A	0.125
155	1	1 : 0	25	1.2	A	0.125
156	1	1 : 0	15	1.2	A	0.12
157	1	1 : 0	15	1.2	A	0.11
158	1	1 : 0	15	1.2	A	0.5
159	1	1 : 0	15	1.2	A	0.5
160	1	1 : 0	15	1.2	A	0.25
161	1	1 : 0	15	1.2	A	0.25
162	1	1 : 0	15	1.2	A	0.125
163	1	1 : 0	15	1.2	A	0.125

164	1	1 : 0	15	1.2	A	0.0625
165	1	1 : 0	15	1.2	A	0.0625
166	1	1 : 0	15	1.2	A	0.03125
167	1	1 : 0	15	1.2	A	0.03125
168	1	1 : 0	15	1.2	A	0.0156
169	1	1 : 0	15	1.2	A	0.0156
170	1	1 : 0	15	1.2	A	0.0078
171	1	1 : 0	15	1.2	A	0.0078
172	1	1 : 0	25	1.2	A	0.12
173	1	1 : 0	25	1.2	A	0.11
174	1	1 : 0	25	1.2	A	0.5
175	1	1 : 0	25	1.2	A	0.5
176	1	1 : 0	25	1.2	A	0.25
177	1	1 : 0	25	1.2	A	0.25
178	1	1 : 0	25	1.2	A	0.125
179	1	1 : 0	25	1.2	A	0.125
180	1	1 : 0	25	1.2	A	0.0625
181	1	1 : 0	25	1.2	A	0.0625
182	1	1 : 0	25	1.2	A	0.03125
183	1	1 : 0	25	1.2	A	0.03125
184	1	1 : 0	25	1.2	A	0.0156
185	1	1 : 0	25	1.2	A	0.0156
186	1	1 : 0	25	1.2	A	0.0078
187	1	1 : 0	25	1.2	A	0.0078
188	1	1 : 0	5	1.2	A	0.12
189	1	1 : 0	5	1.2	A	0.11
190	1	1 : 0	5	1.2	A	0.5
191	1	1 : 0	5	1.2	A	0.5
192	1	1 : 0	5	1.2	A	0.25
193	1	1 : 0	5	1.2	A	0.25
194	1	1 : 0	5	1.2	A	0.125
195	1	1 : 0	5	1.2	A	0.125
196	1	1 : 0	5	1.2	A	0.0625
197	1	1 : 0	5	1.2	A	0.0625
198	1	1 : 0	5	1.2	A	0.03125
199	1	1 : 0	5	1.2	A	0.03125
200	1	1 : 0	5	1.2	A	0.0156
201	1	1 : 0	5	1.2	A	0.0156
202	1	1 : 0	5	1.2	A	0.0078
203	1	1 : 0	5	1.2	A	0.0078
204	1	1 : 0	15	1.2	A	0.42
205	1	1 : 0	15	1.2	A	0.02

206	1	1 : 0	15	1.2	A	0.0078
207	1	1 : 0	15	1.2	A	0.0078
208	1	1 : 0	15	1.2	A	0.0625
209	1	1 : 0	15	1.2	A	0.0625
210	1	1 : 0	15	1.2	A	0.125
211	1	1 : 0	15	1.2	A	0.125
212	1	1 : 0	15	1.2	A	0.5
213	1	1 : 0	15	1.2	A	0.5
214	1	1 : 0	15	1.2	A	0.01
215	1	1 : 0	15	1.2	A	0.1
216	1	1 : 0	15	1.2	A	0.03125
217	1	1 : 0	15	1.2	A	0.03125
218	1	1 : 0	15	1.2	A	0.0625
219	1	1 : 0	15	1.2	A	0.0625
220	1	1 : 0	15	1.2	A	0.25
221	1	1 : 0	15	1.2	A	0.25
222	1	1 : 0	15	1.2	A	0.5
223	1	1 : 0	15	1.2	A	0.5
224	1	1 : 0	15	1.2	A	0.0156
225	1	1 : 0	15	1.2	A	0.0156
226	1	1 : 0	15	1.2	A	0.03125
227	1	1 : 0	15	1.2	A	0.03125
228	1	1 : 0	15	1.2	A	0.125
229	1	1 : 0	15	1.2	A	0.125
230	1	1 : 0	15	1.2	A	0.25
231	1	1 : 0	15	1.2	A	0.0078
232	1	1 : 0	15	1.2	A	0.0156
233	1	1 : 0	15	1.2	A	0.0156
234	1	1 : 0	15	1.2	A	0.0625
235	1	1 : 0	15	1.2	A	0.0625
236	1	1 : 0	15	1.2	A	0.125
237	1	1 : 0	15	1.2	A	0.125
238	1	1 : 0	15	1.2	A	0.05
239	1	1 : 0	15	1.2	A	0.0078
240	1	1 : 0	15	1.2	A	0.0078
241	1	1 : 0	15	1.2	A	0.03125
242	1	1 : 0	15	1.2	A	0.03125
243	1	1 : 0	15	1.2	A	0.0625
244	1	1 : 0	15	1.2	A	0.0625
245	1	1 : 0	15	1.2	A	0.5
246	1	1 : 0	15	1.2	A	0.5
247	1	1 : 0	15	1.2	A	0.03

248	1	1 : 0	15	1.2	A	0.02
249	1	1 : 0	15	1.2	A	0.0078
250	1	1 : 0	15	1.2	A	0.0156
251	1	1 : 0	15	1.2	A	0.0156
252	1	1 : 0	15	1.2	A	0.03125
253	1	1 : 0	15	1.2	A	0.03125
254	1	1 : 0	15	1.2	A	0.25
255	1	1 : 0	15	1.2	A	0.25
256	1	1 : 0	15	1.2	A	0.5
257	1	1 : 0	15	1.2	A	0.5
258	1	1 : 0	15	1.2	A	0.02
259	1	1 : 0	15	1.2	A	0.0078
260	1	1 : 0	15	1.2	A	0.0078
261	1	1 : 0	15	1.2	A	0.0156
262	1	1 : 0	15	1.2	A	0.0156
263	1	1 : 0	15	1.2	A	0.125
264	1	1 : 0	15	1.2	A	0.125
265	1	1 : 0	15	1.2	A	0.25
266	1	1 : 0	15	1.2	A	0.25
267	1	1 : 0	5	1.2	A	0.42
268	1	1 : 0	5	1.2	A	0.02
269	1	1 : 0	5	1.2	A	0.0078
270	1	1 : 0	5	1.2	A	0.0078
271	1	1 : 0	5	1.2	A	0.0625
272	1	1 : 0	5	1.2	A	0.0625
273	1	1 : 0	5	1.2	A	0.125
274	1	1 : 0	5	1.2	A	0.125
275	1	1 : 0	5	1.2	A	0.5
276	1	1 : 0	5	1.2	A	0.5
277	1	1 : 0	5	1.2	A	0.01
278	1	1 : 0	5	1.2	A	0.1
279	1	1 : 0	5	1.2	A	0.03125
280	1	1 : 0	5	1.2	A	0.03125
281	1	1 : 0	5	1.2	A	0.0625
282	1	1 : 0	5	1.2	A	0.0625
283	1	1 : 0	5	1.2	A	0.25
284	1	1 : 0	5	1.2	A	0.25
285	1	1 : 0	5	1.2	A	0.5
286	1	1 : 0	5	1.2	A	0.5
287	1	1 : 0	5	1.2	A	0.0156
288	1	1 : 0	5	1.2	A	0.0156
289	1	1 : 0	5	1.2	A	0.03125

290	1	1 : 0	5	1.2	A	0.03125
291	1	1 : 0	5	1.2	A	0.125
292	1	1 : 0	5	1.2	A	0.125
293	1	1 : 0	5	1.2	A	0.25
294	1	1 : 0	5	1.2	A	0.0078
295	1	1 : 0	5	1.2	A	0.0156
296	1	1 : 0	5	1.2	A	0.0156
297	1	1 : 0	5	1.2	A	0.0625
298	1	1 : 0	5	1.2	A	0.0625
299	1	1 : 0	5	1.2	A	0.125
300	1	1 : 0	5	1.2	A	0.125
301	1	1 : 0	5	1.2	A	0.05
302	1	1 : 0	5	1.2	A	0.0078
303	1	1 : 0	5	1.2	A	0.0078
304	1	1 : 0	5	1.2	A	0.03125
305	1	1 : 0	5	1.2	A	0.03125
306	1	1 : 0	5	1.2	A	0.0625
307	1	1 : 0	5	1.2	A	0.0625
308	1	1 : 0	5	1.2	A	0.5
309	1	1 : 0	5	1.2	A	0.5
310	1	1 : 0	5	1.2	A	0.03
311	1	1 : 0	5	1.2	A	0.02
312	1	1 : 0	5	1.2	A	0.0078
313	1	1 : 0	5	1.2	A	0.0156
314	1	1 : 0	5	1.2	A	0.0156
315	1	1 : 0	5	1.2	A	0.03125
316	1	1 : 0	5	1.2	A	0.03125
317	1	1 : 0	5	1.2	A	0.25
318	1	1 : 0	5	1.2	A	0.25
319	1	1 : 0	5	1.2	A	0.5
320	1	1 : 0	5	1.2	A	0.5
321	1	1 : 0	5	1.2	A	0.02
322	1	1 : 0	5	1.2	A	0.0078
323	1	1 : 0	5	1.2	A	0.0078
324	1	1 : 0	5	1.2	A	0.0156
325	1	1 : 0	5	1.2	A	0.0156
326	1	1 : 0	5	1.2	A	0.125
327	1	1 : 0	5	1.2	A	0.125
328	1	1 : 0	5	1.2	A	0.25
329	1	1 : 0	5	1.2	A	0.25
330	1	1 : 0	25	1.2	A	0.42
331	1	1 : 0	25	1.2	A	0.02

332	1	1 : 0	25	1.2	A	0.0078
333	1	1 : 0	25	1.2	A	0.0078
334	1	1 : 0	25	1.2	A	0.0625
335	1	1 : 0	25	1.2	A	0.0625
336	1	1 : 0	25	1.2	A	0.125
337	1	1 : 0	25	1.2	A	0.125
338	1	1 : 0	25	1.2	A	0.5
339	1	1 : 0	25	1.2	A	0.5
340	1	1 : 0	25	1.2	A	0.01
341	1	1 : 0	25	1.2	A	0.1
342	1	1 : 0	25	1.2	A	0.03125
343	1	1 : 0	25	1.2	A	0.03125
344	1	1 : 0	25	1.2	A	0.0625
345	1	1 : 0	25	1.2	A	0.0625
346	1	1 : 0	25	1.2	A	0.25
347	1	1 : 0	25	1.2	A	0.25
348	1	1 : 0	25	1.2	A	0.5
349	1	1 : 0	25	1.2	A	0.5
350	1	1 : 0	25	1.2	A	0.0156
351	1	1 : 0	25	1.2	A	0.0156
352	1	1 : 0	25	1.2	A	0.03125
353	1	1 : 0	25	1.2	A	0.03125
354	1	1 : 0	25	1.2	A	0.125
355	1	1 : 0	25	1.2	A	0.125
356	1	1 : 0	25	1.2	A	0.25
357	1	1 : 0	25	1.2	A	0.0078
358	1	1 : 0	25	1.2	A	0.0156
359	1	1 : 0	25	1.2	A	0.0156
360	1	1 : 0	25	1.2	A	0.0625
361	1	1 : 0	25	1.2	A	0.0625
362	1	1 : 0	25	1.2	A	0.125
363	1	1 : 0	25	1.2	A	0.125
364	1	1 : 0	25	1.2	A	0.05
365	1	1 : 0	25	1.2	A	0.0078
366	1	1 : 0	25	1.2	A	0.0078
367	1	1 : 0	25	1.2	A	0.03125
368	1	1 : 0	25	1.2	A	0.03125
369	1	1 : 0	25	1.2	A	0.0625
370	1	1 : 0	25	1.2	A	0.0625
371	1	1 : 0	25	1.2	A	0.5
372	1	1 : 0	25	1.2	A	0.5
373	1	1 : 0	25	1.2	A	0.03

374	1	1 : 0	25	1.2	A	0.02
375	1	1 : 0	25	1.2	A	0.0078
376	1	1 : 0	25	1.2	A	0.0156
377	1	1 : 0	25	1.2	A	0.0156
378	1	1 : 0	25	1.2	A	0.03125
379	1	1 : 0	25	1.2	A	0.03125
380	1	1 : 0	25	1.2	A	0.25
381	1	1 : 0	25	1.2	A	0.25
382	1	1 : 0	25	1.2	A	0.5
383	1	1 : 0	25	1.2	A	0.5
384	1	1 : 0	25	1.2	A	0.02
385	1	1 : 0	25	1.2	A	0.0078
386	1	1 : 0	25	1.2	A	0.0078
387	1	1 : 0	25	1.2	A	0.0156
388	1	1 : 0	25	1.2	A	0.0156
389	1	1 : 0	25	1.2	A	0.125
390	1	1 : 0	25	1.2	A	0.125
391	1	1 : 0	25	1.2	A	0.25
392	1	1 : 0	25	1.2	A	0.25
393	1	1 : 0	15	1.2	A	0.63
394	1	1 : 0	15	1.2	A	0.5
395	1	1 : 0	15	1.2	A	0.13
396	1	1 : 0	15	1.2	A	0.5
397	1	1 : 0	15	1.2	A	0.0078
398	1	1 : 0	15	1.2	A	0.08
399	1	1 : 0	15	1.2	A	0.0078
400	1	1 : 0	15	1.2	A	0.21
401	1	1 : 0	15	1.2	A	0.0625
402	1	1 : 0	15	1.2	A	0.03125
403	1	1 : 0	15	1.2	A	0.0625
404	1	1 : 0	15	1.2	A	0.0156
405	1	1 : 0	15	1.2	A	0.125
406	1	1 : 0	15	1.2	A	0.03125
407	1	1 : 0	15	1.2	A	0.125
408	1	1 : 0	15	1.2	A	0.0078
409	1	1 : 0	15	1.2	A	0.5
410	1	1 : 0	15	1.2	A	0.5
411	1	1 : 0	15	1.2	A	0.5
412	1	1 : 0	15	1.2	A	0.25
413	1	1 : 0	15	1.2	A	0.16
414	1	1 : 0	15	1.2	A	0.5
415	1	1 : 0	15	1.2	A	0.25

416	1	1 : 0	15	1.2	A	0.03125
417	1	1 : 0	15	1.2	A	0.0156
418	1	1 : 0	15	1.2	A	0.03125
419	1	1 : 0	15	1.2	A	0.0078
420	1	1 : 0	15	1.2	A	0.0625
421	1	1 : 0	15	1.2	A	0.0156
422	1	1 : 0	15	1.2	A	0.0625
423	1	1 : 0	15	1.2	A	0.01
424	1	1 : 0	15	1.2	A	0.25
425	1	1 : 0	15	1.2	A	0.25
426	1	1 : 0	15	1.2	A	0.25
427	1	1 : 0	15	1.2	A	0.125
428	1	1 : 0	15	1.2	A	0.5
429	1	1 : 0	15	1.2	A	0.25
430	1	1 : 0	15	1.2	A	0.5
431	1	1 : 0	15	1.2	A	0.25
432	1	1 : 0	15	1.2	A	0.0156
433	1	1 : 0	15	1.2	A	0.0078
434	1	1 : 0	15	1.2	A	0.0156
435	1	1 : 0	15	1.2	A	0.2
436	1	1 : 0	15	1.2	A	0.03125
437	1	1 : 0	15	1.2	A	0.0078
438	1	1 : 0	15	1.2	A	0.03125
439	1	1 : 0	15	1.2	A	0.125
440	1	1 : 0	15	1.2	A	0.125
441	1	1 : 0	15	1.2	A	0.125
442	1	1 : 0	15	1.2	A	0.0156
443	1	1 : 0	15	1.2	A	0.25
444	1	1 : 0	15	1.2	A	0.125
445	1	1 : 0	15	1.2	A	0.25
446	1	1 : 0	15	1.2	A	0.125
447	1	1 : 0	15	1.2	A	0.0078
448	1	1 : 0	15	1.2	A	0.5
449	1	1 : 0	15	1.2	A	0.0156
450	1	1 : 0	15	1.2	A	0.25
451	1	1 : 0	15	1.2	A	0.0156
452	1	1 : 0	15	1.2	A	0.0625
453	1	1 : 0	15	1.2	A	0.0625
454	1	1 : 0	15	1.2	A	0.0625
455	1	1 : 0	15	1.2	A	0.03125
456	1	1 : 0	15	1.2	A	0.125
457	1	1 : 0	15	1.2	A	0.0625

458	1	1 : 0	15	1.2	A	0.125
459	1	1 : 0	15	1.2	A	0.0625
460	1	1 : 0	15	1.2	A	0.5
461	1	1 : 0	15	1.2	A	0.64
462	1	1 : 0	15	1.2	A	0.25
463	1	1 : 0	15	1.2	A	0.0078
464	1	1 : 0	15	1.2	A	0.5
465	1	1 : 0	15	1.2	A	0.0078
466	1	1 : 0	15	1.2	A	0.03125
467	1	1 : 0	15	1.2	A	0.03125
468	1	1 : 0	15	1.2	A	0.03125
469	1	1 : 0	15	1.2	A	0.0625
470	1	1 : 0	15	1.2	A	0.0625
471	1	1 : 0	15	1.2	A	0.03125
472	1	1 : 0	15	1.2	A	0.0625
473	1	1 : 0	15	1.2	A	0.03125
474	1	1 : 0	15	1.2	A	0.5
475	1	1 : 0	15	1.2	A	0.25
476	1	1 : 0	15	1.2	A	0.5
477	1	1 : 0	15	1.2	A	0.125
478	1	1 : 0	15	1.2	A	1.1
479	1	1 : 0	15	1.2	A	0.25
480	1	1 : 0	15	1.2	A	0.09
481	1	1 : 0	15	1.2	A	0.0625
482	1	1 : 0	15	1.2	A	0.0078
483	1	1 : 0	15	1.2	A	0.0156
484	1	1 : 0	15	1.2	A	0.0156
485	1	1 : 0	15	1.2	A	0.0156
486	1	1 : 0	15	1.2	A	0.0078
487	1	1 : 0	15	1.2	A	0.03125
488	1	1 : 0	15	1.2	A	0.0156
489	1	1 : 0	15	1.2	A	0.03125
490	1	1 : 0	15	1.2	A	0.0156
491	1	1 : 0	15	1.2	A	0.25
492	1	1 : 0	15	1.2	A	0.125
493	1	1 : 0	15	1.2	A	0.25
494	1	1 : 0	15	1.2	A	0.0625
495	1	1 : 0	15	1.2	A	0.5
496	1	1 : 0	15	1.2	A	0.125
497	1	1 : 0	15	1.2	A	0.5
498	1	1 : 0	15	1.2	A	0.03125
499	1	1 : 0	15	1.2	A	0.02

500	1	1 : 0	15	1.2	A	0.0078
501	1	1 : 0	15	1.2	A	0.0078
502	1	1 : 0	15	1.2	A	0.0078
503	1	1 : 0	15	1.2	A	0.19
504	1	1 : 0	15	1.2	A	0.0156
505	1	1 : 0	15	1.2	A	0.0078
506	1	1 : 0	15	1.2	A	0.0156
507	1	1 : 0	15	1.2	A	0.0078
508	1	1 : 0	15	1.2	A	0.125
509	1	1 : 0	15	1.2	A	0.0625
510	1	1 : 0	15	1.2	A	0.125
511	1	1 : 0	15	1.2	A	0.03125
512	1	1 : 0	15	1.2	A	0.25
513	1	1 : 0	15	1.2	A	0.0625
514	1	1 : 0	15	1.2	A	0.25
515	1	1 : 0	15	1.2	A	0.0156
516	1	1 : 0	25	1.2	A	0.63
517	1	1 : 0	25	1.2	A	0.5
518	1	1 : 0	25	1.2	A	0.13
519	1	1 : 0	25	1.2	A	0.5
520	1	1 : 0	25	1.2	A	0.0078
521	1	1 : 0	25	1.2	A	0.08
522	1	1 : 0	25	1.2	A	0.0078
523	1	1 : 0	25	1.2	A	0.21
524	1	1 : 0	25	1.2	A	0.0625
525	1	1 : 0	25	1.2	A	0.03125
526	1	1 : 0	25	1.2	A	0.0625
527	1	1 : 0	25	1.2	A	0.0156
528	1	1 : 0	25	1.2	A	0.125
529	1	1 : 0	25	1.2	A	0.03125
530	1	1 : 0	25	1.2	A	0.125
531	1	1 : 0	25	1.2	A	0.0078
532	1	1 : 0	25	1.2	A	0.5
533	1	1 : 0	25	1.2	A	0.5
534	1	1 : 0	25	1.2	A	0.5
535	1	1 : 0	25	1.2	A	0.25
536	1	1 : 0	25	1.2	A	0.16
537	1	1 : 0	25	1.2	A	0.5
538	1	1 : 0	25	1.2	A	0.25
539	1	1 : 0	25	1.2	A	0.03125
540	1	1 : 0	25	1.2	A	0.0156
541	1	1 : 0	5	1.2	A	0.07

542	1	1 : 0	15	1.2	A	0.25
543	1	1 : 0	15	1.2	A	0.0625
544	1	1 : 0	15	1.2	A	0.0313
545	1	1 : 0	15	1.2	A	0.5
546	1	1 : 0	15	1.2	A	0.25
547	1	1 : 0	15	1.2	A	0.5
548	1	1 : 0	15	1.2	A	0.5
549	1	1 : 0	15	1.2	A	0.004
550	1	1 : 0	15	1.2	A	0.03125
551	1	1 : 0	15	1.2	A	0.0625
552	1	1 : 0	15	1.2	A	0.0625
553	1	1 : 0	15	1.2	A	0.125
554	1	1 : 0	15	1.2	A	0.125
555	1	1 : 0	15	1.2	A	0.25
556	1	1 : 0	15	1.2	A	0.25
557	1	1 : 0	15	1.2	A	0.5
558	1	1 : 0	15	1.2	A	0.03125
559	1	1 : 0	15	1.2	A	0.03125
560	1	1 : 0	15	1.2	A	0.0625
561	1	1 : 0	15	1.2	A	0.0625
562	1	1 : 0	15	1.2	A	0.125
563	1	1 : 0	15	1.2	A	0.125
564	1	1 : 0	15	1.2	A	0.25
565	1	1 : 0	15	1.2	A	0.0156
566	1	1 : 0	15	1.2	A	0.0156
567	1	1 : 0	15	1.2	A	0.03125
568	1	1 : 0	15	1.2	A	0.03125
569	1	1 : 0	15	1.2	A	0.0625
570	1	1 : 0	15	1.2	A	0.0625
571	1	1 : 0	15	1.2	A	0.125
572	1	1 : 0	15	1.2	A	0.0078
573	1	1 : 0	15	1.2	A	0.0078
574	1	1 : 0	15	1.2	A	0.0156
575	1	1 : 0	15	1.2	A	0.0156
576	1	1 : 0	15	1.2	A	0.03125
577	1	1 : 0	15	1.2	A	0.0625
578	1	1 : 0	15	1.2	A	0.5
579	1	1 : 0	15	1.2	A	0.18
580	1	1 : 0	15	1.2	A	0.51
581	1	1 : 0	15	1.2	A	0.0078
582	1	1 : 0	15	1.2	A	0.0078
583	1	1 : 0	15	1.2	A	0.0156

584	1	1 : 0	15	1.2	A	0.0156
585	1	1 : 0	15	1.2	A	0.03125
586	1	1 : 0	15	1.2	A	0.25
587	1	1 : 0	15	1.2	A	0.5
588	1	1 : 0	15	1.2	A	0.5
589	1	1 : 0	15	1.2	A	0.19
590	1	1 : 0	15	1.2	A	0.03
591	1	1 : 0	15	1.2	A	0.0078
592	1	1 : 0	15	1.2	A	0.0078
593	1	1 : 0	15	1.2	A	0.0078
594	1	1 : 0	15	1.2	A	0.0156
595	1	1 : 0	15	1.2	A	0.125
596	1	1 : 0	15	1.2	A	0.25
597	1	1 : 0	15	1.2	A	0.25
598	1	1 : 0	15	1.2	A	0.5
599	1	1 : 0	15	1.2	A	0.5
600	1	1 : 0	15	1.2	A	0.003
601	1	1 : 0	25	1.2	A	0.5
602	1	1 : 0	25	1.2	A	0.0078
603	1	1 : 0	25	1.2	A	0.0625
604	1	1 : 0	25	1.2	A	0.125
605	1	1 : 0	25	1.2	A	0.125
606	1	1 : 0	25	1.2	A	0.25
607	1	1 : 0	25	1.2	A	0.25
608	1	1 : 0	25	1.2	A	0.5
609	1	1 : 0	25	1.2	A	0.5
610	1	1 : 0	25	1.2	A	0.004
611	1	1 : 0	25	1.2	A	0.03125
612	1	1 : 0	25	1.2	A	0.0625
613	1	1 : 0	25	1.2	A	0.0625
614	1	1 : 0	25	1.2	A	0.125
615	1	1 : 0	25	1.2	A	0.125
616	1	1 : 0	25	1.2	A	0.25
617	1	1 : 0	25	1.2	A	0.25
618	1	1 : 0	25	1.2	A	0.5
619	1	1 : 0	25	1.2	A	0.03125
620	1	1 : 0	25	1.2	A	0.03125
621	1	1 : 0	25	1.2	A	0.0625
622	1	1 : 0	25	1.2	A	0.0625
623	1	1 : 0	25	1.2	A	0.125
624	1	1 : 0	25	1.2	A	0.125
625	1	1 : 0	25	1.2	A	0.25

626	1	1 : 0	25	1.2	A	0.0156
627	1	1 : 0	25	1.2	A	0.0156
628	1	1 : 0	25	1.2	A	0.03125
629	1	1 : 0	25	1.2	A	0.03125
630	1	1 : 0	25	1.2	A	0.0625
631	1	1 : 0	25	1.2	A	0.0625
632	1	1 : 0	25	1.2	A	0.125
633	1	1 : 0	25	1.2	A	0.0078
634	1	1 : 0	25	1.2	A	0.0078
635	1	1 : 0	25	1.2	A	0.0156
636	1	1 : 0	25	1.2	A	0.0156
637	1	1 : 0	25	1.2	A	0.03125
638	1	1 : 0	25	1.2	A	0.0625
639	1	1 : 0	25	1.2	A	0.5
640	1	1 : 0	25	1.2	A	0.18
641	1	1 : 0	25	1.2	A	0.51
642	1	1 : 0	25	1.2	A	0.0078
643	1	1 : 0	25	1.2	A	0.0078
644	1	1 : 0	25	1.2	A	0.0156
645	1	1 : 0	25	1.2	A	0.0156
646	1	1 : 0	25	1.2	A	0.03125
647	1	1 : 0	25	1.2	A	0.25
648	1	1 : 0	25	1.2	A	0.5
649	1	1 : 0	25	1.2	A	0.5
650	1	1 : 0	25	1.2	A	0.19
651	1	1 : 0	25	1.2	A	0.03
652	1	1 : 0	25	1.2	A	0.0078
653	1	1 : 0	25	1.2	A	0.0078
654	1	1 : 0	25	1.2	A	0.0078
655	1	1 : 0	25	1.2	A	0.0156
656	1	1 : 0	25	1.2	A	0.125
657	1	1 : 0	25	1.2	A	0.25
658	1	1 : 0	25	1.2	A	0.25
659	1	1 : 0	25	1.2	A	0.5
660	1	1 : 0	25	1.2	A	0.5
661	1	1 : 0	25	1.2	A	0.003
662	1	1 : 0	5	1.2	A	0.5
663	1	1 : 0	5	1.2	A	0.0078
664	1	1 : 0	5	1.2	A	0.0625
665	1	1 : 0	5	1.2	A	0.125
666	1	1 : 0	5	1.2	A	0.125
667	1	1 : 0	5	1.2	A	0.25

668	1	1 : 0	5	1.2	A	0.25
669	1	1 : 0	5	1.2	A	0.5
670	1	1 : 0	5	1.2	A	0.5
671	1	1 : 0	5	1.2	A	0.004
672	1	1 : 0	5	1.2	A	0.03125
673	1	1 : 0	5	1.2	A	0.0625
674	1	1 : 0	5	1.2	A	0.0625
675	1	1 : 0	5	1.2	A	0.125
676	1	1 : 0	5	1.2	A	0.125
677	1	1 : 0	5	1.2	A	0.25
678	1	1 : 0	5	1.2	A	0.25
679	1	1 : 0	5	1.2	A	0.5
680	1	1 : 0	5	1.2	A	0.03125
681	1	1 : 0	5	1.2	A	0.03125
682	1	1 : 0	5	1.2	A	0.0625
683	1	1 : 0	5	1.2	A	0.0625
684	1	1 : 0	5	1.2	A	0.125
685	1	1 : 0	5	1.2	A	0.125
686	1	1 : 0	5	1.2	A	0.25
687	1	1 : 0	5	1.2	A	0.0156
688	1	1 : 0	5	1.2	A	0.0156
689	1	1 : 0	5	1.2	A	0.03125
690	1	1 : 0	5	1.2	A	0.03125
691	1	1 : 0	5	1.2	A	0.0625
692	1	1 : 0	5	1.2	A	0.0625
693	1	1 : 0	5	1.2	A	0.125
694	1	1 : 0	5	1.2	A	0.0078
695	1	1 : 0	5	1.2	A	0.0078
696	1	1 : 0	5	1.2	A	0.0156
697	1	1 : 0	5	1.2	A	0.0156
698	1	1 : 0	5	1.2	A	0.03125
699	1	1 : 0	5	1.2	A	0.0625
700	1	1 : 0	5	1.2	A	0.5
701	1	1 : 0	5	1.2	A	0.18
702	1	1 : 0	5	1.2	A	0.51
703	1	1 : 0	5	1.2	A	0.0078
704	1	1 : 0	5	1.2	A	0.0078
705	1	1 : 0	5	1.2	A	0.0156
706	1	1 : 0	5	1.2	A	0.0156
707	1	1 : 0	5	1.2	A	0.03125
708	1	1 : 0	5	1.2	A	0.25
709	1	1 : 0	5	1.2	A	0.5

710	1	1 : 0	5	1.2	A	0.5
711	1	1 : 0	5	1.2	A	0.19
712	1	1 : 0	5	1.2	A	0.03
713	1	1 : 0	5	1.2	A	0.0078
714	1	1 : 0	5	1.2	A	0.0078
715	1	1 : 0	5	1.2	A	0.0078
716	1	1 : 0	5	1.2	A	0.0156
717	1	1 : 0	5	1.2	A	0.125
718	1	1 : 0	5	1.2	A	0.25
719	1	1 : 0	5	1.2	A	0.25
720	1	1 : 0	5	1.2	A	0.5
721	1	1 : 0	5	1.2	A	0.5
722	1	1 : 0	5	1.2	A	0.003
723	1	1 : 0	15	1.2	A	0.1
724	1	1 : 0	15	1.2	A	0.25
725	1	1 : 0	15	1.2	A	0.0078
726	1	1 : 0	15	1.2	A	0.0078
727	1	1 : 0	15	1.2	A	0.0625
728	1	1 : 0	15	1.2	A	0.0625
729	1	1 : 0	15	1.2	A	0.125
730	1	1 : 0	15	1.2	A	0.125
731	1	1 : 0	15	1.2	A	0.5
732	1	1 : 0	15	1.2	A	0.5
733	1	1 : 0	15	1.2	A	0.27
734	1	1 : 0	15	1.2	A	0.16
735	1	1 : 0	15	1.2	A	0.03125
736	1	1 : 0	15	1.2	A	0.03125
737	1	1 : 0	15	1.2	A	0.0625
738	1	1 : 0	15	1.2	A	0.0625
739	1	1 : 0	15	1.2	A	0.25
740	1	1 : 0	15	1.2	A	0.25
741	1	1 : 0	15	1.2	A	0.5
742	1	1 : 0	15	1.2	A	0.5
743	1	1 : 0	15	1.2	A	0.0156
744	1	1 : 0	15	1.2	A	0.0156
745	1	1 : 0	15	1.2	A	0.03125
746	1	1 : 0	15	1.2	A	0.03125
747	1	1 : 0	15	1.2	A	0.125
748	1	1 : 0	15	1.2	A	0.125
749	1	1 : 0	15	1.2	A	0.25
750	1	1 : 0	15	1.2	A	0.25
751	1	1 : 0	15	1.2	A	0.0078

752	1	1 : 0	15	1.2	A	0.0156
753	1	1 : 0	15	1.2	A	0.0156
754	1	1 : 0	15	1.2	A	0.0625
755	1	1 : 0	15	1.2	A	0.0625
756	1	1 : 0	15	1.2	A	0.125
757	1	1 : 0	15	1.2	A	0.125
758	1	1 : 0	15	1.2	A	0.62
759	1	1 : 0	15	1.2	A	0.0078
760	1	1 : 0	15	1.2	A	0.0078
761	1	1 : 0	15	1.2	A	0.03125
762	1	1 : 0	15	1.2	A	0.03125
763	1	1 : 0	15	1.2	A	0.0625
764	1	1 : 0	15	1.2	A	0.0625
765	1	1 : 0	15	1.2	A	0.5
766	1	1 : 0	15	1.2	A	0.5
767	1	1 : 0	15	1.2	A	0.18
768	1	1 : 0	15	1.2	A	0.22
769	1	1 : 0	15	1.2	A	0.0078
770	1	1 : 0	15	1.2	A	0.0156
771	1	1 : 0	15	1.2	A	0.0156
772	1	1 : 0	15	1.2	A	0.03125
773	1	1 : 0	15	1.2	A	0.03125
774	1	1 : 0	15	1.2	A	0.25
775	1	1 : 0	15	1.2	A	0.25
776	1	1 : 0	15	1.2	A	0.5
777	1	1 : 0	15	1.2	A	0.5
778	1	1 : 0	15	1.2	A	0.14
779	1	1 : 0	15	1.2	A	0.0078
780	1	1 : 0	15	1.2	A	0.0078
781	1	1 : 0	15	1.2	A	0.0156
782	1	1 : 0	15	1.2	A	0.0156
783	1	1 : 0	15	1.2	A	0.125
784	1	1 : 0	15	1.2	A	0.125
785	1	1 : 0	15	1.2	A	0.25
786	1	1 : 0	15	1.2	A	0.25
787	1	1 : 0	25	1.2	A	0.1
788	1	1 : 0	25	1.2	A	0.25
789	1	1 : 0	25	1.2	A	0.0078
790	1	1 : 0	25	1.2	A	0.0078
791	1	1 : 0	25	1.2	A	0.0625
792	1	1 : 0	25	1.2	A	0.0625
793	1	1 : 0	25	1.2	A	0.125

794	1	1 : 0	25	1.2	A	0.125
795	1	1 : 0	25	1.2	A	0.5
796	1	1 : 0	25	1.2	A	0.5
797	1	1 : 0	25	1.2	A	0.27
798	1	1 : 0	25	1.2	A	0.16
799	1	1 : 0	25	1.2	A	0.03125
800	1	1 : 0	25	1.2	A	0.03125
801	1	1 : 0	25	1.2	A	0.0625
802	1	1 : 0	25	1.2	A	0.0625
803	1	1 : 0	25	1.2	A	0.25
804	1	1 : 0	25	1.2	A	0.25
805	1	1 : 0	25	1.2	A	0.5
806	1	1 : 0	25	1.2	A	0.5
807	1	1 : 0	25	1.2	A	0.0156
808	1	1 : 0	25	1.2	A	0.0156
809	1	1 : 0	25	1.2	A	0.03125
810	1	1 : 0	25	1.2	A	0.03125
811	1	1 : 0	25	1.2	A	0.125
812	1	1 : 0	25	1.2	A	0.125
813	1	1 : 0	25	1.2	A	0.25
814	1	1 : 0	25	1.2	A	0.25
815	1	1 : 0	25	1.2	A	0.0078
816	1	1 : 0	25	1.2	A	0.0156
817	1	1 : 0	25	1.2	A	0.0156
818	1	1 : 0	25	1.2	A	0.0625
819	1	1 : 0	25	1.2	A	0.0625
820	1	1 : 0	25	1.2	A	0.125
821	1	1 : 0	25	1.2	A	0.125
822	1	1 : 0	25	1.2	A	0.62
823	1	1 : 0	25	1.2	A	0.0078
824	1	1 : 0	25	1.2	A	0.0078
825	1	1 : 0	25	1.2	A	0.03125
826	1	1 : 0	25	1.2	A	0.03125
827	1	1 : 0	25	1.2	A	0.0625
828	1	1 : 0	25	1.2	A	0.0625
829	1	1 : 0	25	1.2	A	0.5
830	1	1 : 0	25	1.2	A	0.5
831	1	1 : 0	25	1.2	A	0.18
832	1	1 : 0	25	1.2	A	0.22
833	1	1 : 0	25	1.2	A	0.0078
834	1	1 : 0	25	1.2	A	0.0156
835	1	1 : 0	25	1.2	A	0.0156

836	1	1 : 0	25	1.2	A	0.03125
837	1	1 : 0	25	1.2	A	0.03125
838	1	1 : 0	25	1.2	A	0.25
839	1	1 : 0	25	1.2	A	0.25
840	1	1 : 0	25	1.2	A	0.5
841	1	1 : 0	25	1.2	A	0.5
842	1	1 : 0	25	1.2	A	0.14
843	1	1 : 0	25	1.2	A	0.0078
844	1	1 : 0	25	1.2	A	0.0078
845	1	1 : 0	25	1.2	A	0.0156
846	1	1 : 0	25	1.2	A	0.0156
847	1	1 : 0	25	1.2	A	0.125
848	1	1 : 0	25	1.2	A	0.125
849	1	1 : 0	25	1.2	A	0.25
850	1	1 : 0	25	1.2	A	0.25
851	1	1 : 0	5	1.2	A	0.1
852	1	1 : 0	5	1.2	A	0.25
853	1	1 : 0	5	1.2	A	0.0078
854	1	1 : 0	5	1.2	A	0.0078
855	1	1 : 0	5	1.2	A	0.0625
856	1	1 : 0	5	1.2	A	0.0625
857	1	1 : 0	5	1.2	A	0.125
858	1	1 : 0	5	1.2	A	0.125
859	1	1 : 0	5	1.2	A	0.5
860	1	1 : 0	5	1.2	A	0.5
861	1	1 : 0	5	1.2	A	0.27
862	1	1 : 0	5	1.2	A	0.16
863	1	1 : 0	5	1.2	A	0.03125
864	1	1 : 0	5	1.2	A	0.03125
865	1	1 : 0	5	1.2	A	0.0625
866	1	1 : 0	5	1.2	A	0.0625
867	1	1 : 0	5	1.2	A	0.25
868	1	1 : 0	5	1.2	A	0.25
869	1	1 : 0	5	1.2	A	0.5
870	1	1 : 0	5	1.2	A	0.5
871	1	1 : 0	5	1.2	A	0.0156
872	1	1 : 0	5	1.2	A	0.0156
873	1	1 : 0	5	1.2	A	0.03125
874	1	1 : 0	5	1.2	A	0.03125
875	1	1 : 0	5	1.2	A	0.125
876	1	1 : 0	5	1.2	A	0.125
877	1	1 : 0	5	1.2	A	0.25

878	1	1 : 0	5	1.2	A	0.25
879	1	1 : 0	5	1.2	A	0.0078
880	1	1 : 0	5	1.2	A	0.0156
881	1	1 : 0	5	1.2	A	0.0156
882	1	1 : 0	5	1.2	A	0.0625
883	1	1 : 0	5	1.2	A	0.125
884	1	1 : 0	5	1.2	A	0.125
885	1	1 : 0	5	1.2	A	0.62
886	1	1 : 0	5	1.2	A	0.0078
887	1	1 : 0	5	1.2	A	0.0078
888	1	1 : 0	5	1.2	A	0.03125
889	1	1 : 0	5	1.2	A	0.03125
890	1	1 : 0	5	1.2	A	0.0625
891	1	1 : 0	5	1.2	A	0.0625
892	1	1 : 0	5	1.2	A	0.5
893	1	1 : 0	5	1.2	A	0.5
894	1	1 : 0	5	1.2	A	0.18
895	1	1 : 0	5	1.2	A	0.22
896	1	1 : 0	5	1.2	A	0.0078
897	1	1 : 0	5	1.2	A	0.0156
898	1	1 : 0	5	1.2	A	0.0156
899	1	1 : 0	5	1.2	A	0.03125
900	1	1 : 0	5	1.2	A	0.03125
901	1	1 : 0	5	1.2	A	0.25
902	1	1 : 0	5	1.2	A	0.25
903	1	1 : 0	5	1.2	A	0.5
904	1	1 : 0	5	1.2	A	0.5
905	1	1 : 0	5	1.2	A	0.14
906	1	1 : 0	5	1.2	A	0.0078
907	1	1 : 0	5	1.2	A	0.0078
908	1	1 : 0	5	1.2	A	0.0156
909	1	1 : 0	5	1.2	A	0.0156
910	1	1 : 0	5	1.2	A	0.125
911	1	1 : 0	5	1.2	A	0.125
912	1	1 : 0	5	1.2	A	0.25
913	1	1 : 0	15	1.2	A	0.25
914	1	1 : 0	15	1.2	A	0.0625
915	1	1 : 0	15	1.2	A	0.0313
916	1	1 : 0	15	1.2	A	0.5
917	1	1 : 0	15	1.2	A	0.5
918	1	1 : 0	15	1.2	A	0.125
919	1	1 : 0	15	1.2	A	0.0156

920	1	1 : 0	15	1.2	A	0.25
921	1	1 : 0	15	1.2	A	0.25
922	1	1 : 0	15	1.2	A	0.0625
923	1	1 : 0	15	1.2	A	0.0313
924	1	1 : 0	15	1.2	A	0.5
925	1	1 : 0	15	1.2	A	0.125
926	1	1 : 0	15	1.2	A	0.0313
927	1	1 : 0	15	1.2	A	0.0156
928	1	1 : 0	15	1.2	A	0.25
929	1	1 : 0	15	1.2	A	0.125
930	1	1 : 0	15	1.2	A	0.0625
931	1	1 : 0	15	1.2	A	0.0156
932	1	1 : 0	15	1.2	A	0.5
933	1	1 : 0	15	1.2	A	0.125
934	1	1 : 0	15	1.2	A	0.0625
935	1	1 : 0	15	1.2	A	0.0313
936	1	1 : 0	15	1.2	A	0.5
937	1	1 : 0	15	1.2	A	0.25
938	1	1 : 0	15	1.2	A	0.0625
939	1	1 : 0	15	1.2	A	0.0313
940	1	1 : 0	15	1.2	A	0.03125
941	1	1 : 0	15	1.2	A	0.0156
942	1	1 : 0	15	1.2	A	0.25
943	1	1 : 0	15	1.2	A	0.125
944	1	1 : 0	15	1.2	A	0.0313
945	1	1 : 0	15	1.2	A	0.0156
946	1	1 : 0	15	1.2	A	0.0156
947	1	1 : 0	15	1.2	A	0.5
948	1	1 : 0	15	1.2	A	0.125
949	1	1 : 0	15	1.2	A	0.0625
950	1	1 : 0	15	1.2	A	0.0156
951	1	1 : 0	15	1.2	A	0.15
952	1	1 : 0	25	1.2	A	0.25
953	1	1 : 0	25	1.2	A	0.0625
954	1	1 : 0	25	1.2	A	0.0313
955	1	1 : 0	25	1.2	A	0.5
956	1	1 : 0	25	1.2	A	0.5
957	1	1 : 0	25	1.2	A	0.125
958	1	1 : 0	25	1.2	A	0.0156
959	1	1 : 0	25	1.2	A	0.25
960	1	1 : 0	25	1.2	A	0.25
961	1	1 : 0	25	1.2	A	0.0625

962	1	1 : 0	25	1.2	A	0.0313
963	1	1 : 0	25	1.2	A	0.5
964	1	1 : 0	25	1.2	A	0.125
965	1	1 : 0	25	1.2	A	0.0313
966	1	1 : 0	25	1.2	A	0.0156
967	1	1 : 0	25	1.2	A	0.25
968	1	1 : 0	25	1.2	A	0.125
969	1	1 : 0	25	1.2	A	0.0625
970	1	1 : 0	25	1.2	A	0.0156
971	1	1 : 0	25	1.2	A	0.5
972	1	1 : 0	25	1.2	A	0.125
973	1	1 : 0	25	1.2	A	0.0625
974	1	1 : 0	25	1.2	A	0.0313
975	1	1 : 0	25	1.2	A	0.5
976	1	1 : 0	25	1.2	A	0.25
977	1	1 : 0	25	1.2	A	0.0625
978	1	1 : 0	25	1.2	A	0.0313
979	1	1 : 0	25	1.2	A	0.03125
980	1	1 : 0	25	1.2	A	0.0156
981	1	1 : 0	25	1.2	A	0.25
982	1	1 : 0	25	1.2	A	0.125
983	1	1 : 0	25	1.2	A	0.0313
984	1	1 : 0	25	1.2	A	0.0156
985	1	1 : 0	25	1.2	A	0.0156
986	1	1 : 0	25	1.2	A	0.5
987	1	1 : 0	25	1.2	A	0.125
988	1	1 : 0	25	1.2	A	0.0625
989	1	1 : 0	25	1.2	A	0.0156
990	1	1 : 0	25	1.2	A	0.15
991	1	1 : 0	5	1.2	A	0.25
992	1	1 : 0	5	1.2	A	0.0625
993	1	1 : 0	5	1.2	A	0.0313
994	1	1 : 0	5	1.2	A	0.5
995	1	1 : 0	5	1.2	A	0.5
996	1	1 : 0	5	1.2	A	0.125
997	1	1 : 0	5	1.2	A	0.0156
998	1	1 : 0	5	1.2	A	0.25
999	1	1 : 0	5	1.2	A	0.25
1000	1	1 : 0	5	1.2	A	0.0625
1001	1	1 : 0	5	1.2	A	0.0313
1002	1	1 : 0	5	1.2	A	0.5
1003	1	1 : 0	5	1.2	A	0.125

1004	1	1 : 0	5	1.2	A	0.0313
1005	1	1 : 0	5	1.2	A	0.0156
1006	1	1 : 0	5	1.2	A	0.25
1007	1	1 : 0	5	1.2	A	0.125
1008	1	1 : 0	5	1.2	A	0.0625
1009	1	1 : 0	5	1.2	A	0.0156
1010	1	1 : 0	5	1.2	A	0.5
1011	1	1 : 0	5	1.2	A	0.125
1012	1	1 : 0	5	1.2	A	0.0625
1013	1	1 : 0	5	1.2	A	0.0313
1014	1	1 : 0	5	1.2	A	0.5
1015	1	1 : 0	5	1.2	A	0.25
1016	1	1 : 0	5	1.2	A	0.0625
1017	1	1 : 0	5	1.2	A	0.0313
1018	1	1 : 0	5	1.2	A	0.03125
1019	1	1 : 0	5	1.2	A	0.0156
1020	1	1 : 0	5	1.2	A	0.25
1021	1	1 : 0	5	1.2	A	0.125
1022	1	1 : 0	5	1.2	A	0.0313
1023	1	1 : 0	5	1.2	A	0.0156
1024	1	1 : 0	5	1.2	A	0.0156
1025	1	1 : 0	5	1.2	A	0.5
1026	1	1 : 0	5	1.2	A	0.125
1027	1	1 : 0	5	1.2	A	0.0625
1028	1	1 : 0	5	1.2	A	0.0156
1029	1	1 : 0	5	1.2	A	0.15
1030	1	1 : 0	15	1.2	A	0.36
1031	1	1 : 0	15	1.2	A	0.5
1032	1	1 : 0	15	1.2	A	0.16
1033	1	1 : 0	15	1.2	A	0.25
1034	1	1 : 0	15	1.2	A	0.0078
1035	1	1 : 0	15	1.2	A	0.125
1036	1	1 : 0	15	1.2	A	0.5
1037	1	1 : 0	15	1.2	A	0.0156
1038	1	1 : 0	15	1.2	A	0.73
1039	1	1 : 0	15	1.2	A	0.0156
1040	1	1 : 0	15	1.2	A	0.14
1041	1	1 : 0	15	1.2	A	0.03125
1042	1	1 : 0	15	1.2	A	0.03
1043	1	1 : 0	15	1.2	A	0.009
1044	1	1 : 0	15	1.2	A	0.5
1045	1	1 : 0	15	1.2	A	0.5

1046	1	1 : 0	15	1.2	A	0.5
1047	1	1 : 0	15	1.2	A	0.25
1048	1	1 : 0	15	1.2	A	0.05
1049	1	1 : 0	15	1.2	A	0.0625
1050	1	1 : 0	15	1.2	A	0.25
1051	1	1 : 0	15	1.2	A	0.0078
1052	1	1 : 0	15	1.2	A	0.5
1053	1	1 : 0	15	1.2	A	0.0078
1054	1	1 : 0	15	1.2	A	0.5
1055	1	1 : 0	15	1.2	A	0.0156
1056	1	1 : 0	15	1.2	A	0.004
1057	1	1 : 0	15	1.2	A	0.25
1058	1	1 : 0	15	1.2	A	0.25
1059	1	1 : 0	15	1.2	A	0.25
1060	1	1 : 0	15	1.2	A	0.125
1061	1	1 : 0	15	1.2	A	0.5
1062	1	1 : 0	15	1.2	A	0.125
1063	1	1 : 0	15	1.2	A	0.125
1064	1	1 : 0	15	1.2	A	0.03125
1065	1	1 : 0	15	1.2	A	0.54
1066	1	1 : 0	15	1.2	A	0.25
1067	1	1 : 0	15	1.2	A	0.13
1068	1	1 : 0	15	1.2	A	0.25
1069	1	1 : 0	15	1.2	A	0.0078
1070	1	1 : 0	15	1.2	A	0.125
1071	1	1 : 0	15	1.2	A	0.125
1072	1	1 : 0	15	1.2	A	0.125
1073	1	1 : 0	15	1.2	A	0.125
1074	1	1 : 0	15	1.2	A	0.0625
1075	1	1 : 0	15	1.2	A	0.25
1076	1	1 : 0	15	1.2	A	0.0625
1077	1	1 : 0	15	1.2	A	0.0625
1078	1	1 : 0	15	1.2	A	0.0156
1079	1	1 : 0	15	1.2	A	0.5
1080	1	1 : 0	15	1.2	A	0.125
1081	1	1 : 0	15	1.2	A	0.5
1082	1	1 : 0	15	1.2	A	0.125
1083	1	1 : 0	15	1.2	A	0.125
1084	1	1 : 0	15	1.2	A	0.0625
1085	1	1 : 0	15	1.2	A	0.0625
1086	1	1 : 0	15	1.2	A	0.0625
1087	1	1 : 0	15	1.2	A	0.0625

1088	1	1 : 0	15	1.2	A	0.03125
1089	1	1 : 0	15	1.2	A	0.125
1090	1	1 : 0	15	1.2	A	0.03125
1091	1	1 : 0	15	1.2	A	0.03125
1092	1	1 : 0	15	1.2	A	0.0078
1093	1	1 : 0	15	1.2	A	0.25
1094	1	1 : 0	15	1.2	A	0.0625
1095	1	1 : 0	15	1.2	A	0.25
1096	1	1 : 0	15	1.2	A	0.0625
1097	1	1 : 0	15	1.2	A	0.5
1098	1	1 : 0	15	1.2	A	0.125
1099	1	1 : 0	15	1.2	A	0.0625
1100	1	1 : 0	15	1.2	A	0.03125
1101	1	1 : 0	15	1.2	A	0.03125
1102	1	1 : 0	15	1.2	A	0.03125
1103	1	1 : 0	15	1.2	A	0.03125
1104	1	1 : 0	15	1.2	A	0.0156
1105	1	1 : 0	15	1.2	A	0.0625
1106	1	1 : 0	15	1.2	A	0.0156
1107	1	1 : 0	15	1.2	A	0.0156
1108	1	1 : 0	15	1.2	A	0.04
1109	1	1 : 0	15	1.2	A	0.125
1110	1	1 : 0	15	1.2	A	0.03125
1111	1	1 : 0	15	1.2	A	0.125
1112	1	1 : 0	15	1.2	A	0.03125
1113	1	1 : 0	15	1.2	A	0.25
1114	1	1 : 0	15	1.2	A	0.0625
1115	1	1 : 0	15	1.2	A	0.03125
1116	1	1 : 0	15	1.2	A	0.0156
1117	1	1 : 0	15	1.2	A	0.0156
1118	1	1 : 0	15	1.2	A	0.0156
1119	1	1 : 0	15	1.2	A	0.0078
1120	1	1 : 0	15	1.2	A	0.03125
1121	1	1 : 0	15	1.2	A	0.0078
1122	1	1 : 0	15	1.2	A	0.0078
1123	1	1 : 0	15	1.2	A	0.0625
1124	1	1 : 0	15	1.2	A	0.0156
1125	1	1 : 0	15	1.2	A	0.0625
1126	1	1 : 0	15	1.2	A	0.0156
1127	1	1 : 0	15	1.2	A	0.125
1128	1	1 : 0	15	1.2	A	0.0156
1129	1	1 : 0	15	1.2	A	0.03

1130	1	1 : 0	15	1.2	A	0.0078
1131	1	1 : 0	15	1.2	A	0.0078
1132	1	1 : 0	15	1.2	A	0.0078
1133	1	1 : 0	15	1.2	A	0.0156
1134	1	1 : 0	15	1.2	A	0.28
1135	1	1 : 0	15	1.2	A	0.005
1136	1	1 : 0	15	1.2	A	0.03125
1137	1	1 : 0	15	1.2	A	0.0078
1138	1	1 : 0	15	1.2	A	0.03125
1139	1	1 : 0	15	1.2	A	0.0078
1140	1	1 : 0	15	1.2	A	0.0625
1141	1	1 : 0	15	1.2	A	0.0078
1142	1	1 : 0	15	1.2	A	0.0078
1143	1	1 : 0	25	1.2	A	0.36
1144	1	1 : 0	25	1.2	A	0.5
1145	1	1 : 0	25	1.2	A	0.16
1146	1	1 : 0	25	1.2	A	0.25
1147	1	1 : 0	25	1.2	A	0.0078
1148	1	1 : 0	25	1.2	A	0.125
1149	1	1 : 0	25	1.2	A	0.5
1150	1	1 : 0	25	1.2	A	0.0156
1151	1	1 : 0	25	1.2	A	0.73
1152	1	1 : 0	25	1.2	A	0.0156
1153	1	1 : 0	25	1.2	A	0.14
1154	1	1 : 0	25	1.2	A	0.03125
1155	1	1 : 0	25	1.2	A	0.03
1156	1	1 : 0	25	1.2	A	0.009
1157	1	1 : 0	25	1.2	A	0.5
1158	1	1 : 0	25	1.2	A	0.5
1159	1	1 : 0	25	1.2	A	0.5
1160	1	1 : 0	25	1.2	A	0.25
1161	1	1 : 0	5	1.2	A	0.25
1162	1	1 : 0	5	1.2	A	0.25
1163	1	1 : 0	5	1.2	A	0.125
1164	1	1 : 0	5	1.2	A	0.5
1165	1	1 : 0	5	1.2	A	0.125
1166	1	1 : 0	5	1.2	A	0.125
1167	1	1 : 0	5	1.2	A	0.03125
1168	1	1 : 0	5	1.2	A	0.54
1169	1	1 : 0	5	1.2	A	0.25
1170	1	1 : 0	5	1.2	A	0.13
1171	1	1 : 0	5	1.2	A	0.25

1172	1	1 : 0	5	1.2	A	0.0078
1173	1	1 : 0	5	1.2	A	0.125
1174	1	1 : 0	5	1.2	A	0.125
1175	1	1 : 0	5	1.2	A	0.125
1176	1	1 : 0	5	1.2	A	0.0625
1177	1	1 : 0	5	1.2	A	0.25
1178	1	1 : 0	5	1.2	A	0.0625
1179	1	1 : 0	5	1.2	A	0.0625
1180	1	1 : 0	5	1.2	A	0.0156
1181	1	1 : 0	5	1.2	A	0.5
1182	1	1 : 0	5	1.2	A	0.125
1183	1	1 : 0	5	1.2	A	0.125
1184	1	1 : 0	5	1.2	A	0.125
1185	1	1 : 0	5	1.2	A	0.0625
1186	1	1 : 0	5	1.2	A	0.0625
1187	1	1 : 0	5	1.2	A	0.0625
1188	1	1 : 0	5	1.2	A	0.0625
1189	1	1 : 0	5	1.2	A	0.03125
1190	1	1 : 0	5	1.2	A	0.125
1191	1	1 : 0	5	1.2	A	0.03125
1192	1	1 : 0	5	1.2	A	0.03125
1193	1	1 : 0	5	1.2	A	0.0078
1194	1	1 : 0	5	1.2	A	0.25
1195	1	1 : 0	5	1.2	A	0.0625
1196	1	1 : 0	5	1.2	A	0.25
1197	1	1 : 0	5	1.2	A	0.0625
1198	1	1 : 0	5	1.2	A	0.5
1199	1	1 : 0	5	1.2	A	0.125
1200	1	1 : 0	5	1.2	A	0.0625
1201	1	1 : 0	5	1.2	A	0.03125
1202	1	1 : 0	5	1.2	A	0.03125
1203	1	1 : 0	5	1.2	A	0.03125
1204	1	1 : 0	5	1.2	A	0.03125
1205	1	1 : 0	5	1.2	A	0.0156
1206	1	1 : 0	5	1.2	A	0.0625
1207	1	1 : 0	5	1.2	A	0.0156
1208	1	1 : 0	5	1.2	A	0.0156
1209	1	1 : 0	5	1.2	A	0.04
1210	1	1 : 0	5	1.2	A	0.125
1211	1	1 : 0	5	1.2	A	0.03125
1212	1	1 : 0	5	1.2	A	0.125
1213	1	1 : 0	5	1.2	A	0.03125

1214	1	1 : 0	5	1.2	A	0.25
1215	1	1 : 0	5	1.2	A	0.0625
1216	1	1 : 0	5	1.2	A	0.03125
1217	1	1 : 0	5	1.2	A	0.0156
1218	1	1 : 0	5	1.2	A	0.0156
1219	1	1 : 0	5	1.2	A	0.0156
1220	1	1 : 0	5	1.2	A	0.0078
1221	1	1 : 0	5	1.2	A	0.03125
1222	1	1 : 0	5	1.2	A	0.0078
1223	1	1 : 0	5	1.2	A	0.0078
1224	1	1 : 0	5	1.2	A	0.0625
1225	1	1 : 0	5	1.2	A	0.0156
1226	1	1 : 0	5	1.2	A	0.0625
1227	1	1 : 0	5	1.2	A	0.0156
1228	1	1 : 0	5	1.2	A	0.125
1229	1	1 : 0	5	1.2	A	0.0156
1230	1	1 : 0	5	1.2	A	0.03
1231	1	1 : 0	5	1.2	A	0.0078
1232	1	1 : 0	5	1.2	A	0.0078
1233	1	1 : 0	5	1.2	A	0.0078
1234	1	1 : 0	5	1.2	A	0.0156
1235	1	1 : 0	5	1.2	A	0.28
1236	1	1 : 0	5	1.2	A	0.005
1237	1	1 : 0	5	1.2	A	0.03125
1238	1	1 : 0	5	1.2	A	0.0078
1239	1	1 : 0	5	1.2	A	0.03125
1240	1	1 : 0	5	1.2	A	0.0078
1241	1	1 : 0	5	1.2	A	0.0625
1242	1	1 : 0	5	1.2	A	0.0078
1243	1	1 : 0	5	1.2	A	0.0078
1665	1	1 : 0	15	1.2	A	0.25
1666	1	1 : 0	15	1.2	A	0.0625
1667	1	1 : 0	15	1.2	A	0.03125
1668	1	1 : 0	15	1.2	A	0.5
1669	1	1 : 0	15	1.2	A	0.25
1670	1	1 : 0	15	1.2	A	0.0625
1671	1	1 : 0	15	1.2	A	0.03125
1672	1	1 : 0	15	1.2	A	0.5
1673	1	1 : 0	15	1.2	A	0.125
1674	1	1 : 0	15	1.2	A	0.0156
1675	1	1 : 0	15	1.2	A	0.25
1676	1	1 : 0	15	1.2	A	0.125

1677	1	1 : 0	15	1.2	A	0.0156
1678	1	1 : 0	15	1.2	A	0.25
1679	1	1 : 0	15	1.2	A	0.0625
1680	1	1 : 0	15	1.2	A	0.03125
1681	1	1 : 0	15	1.2	A	0.5
1682	1	1 : 0	15	1.2	A	0.0625
1683	1	1 : 0	15	1.2	A	0.0156
1684	1	1 : 0	15	1.2	A	0.125
1685	1	1 : 0	15	1.2	A	0.03125
1686	1	1 : 0	15	1.2	A	0.0156
1687	1	1 : 0	15	1.2	A	0.25
1688	1	1 : 0	15	1.2	A	0.125
1689	1	1 : 0	15	1.2	A	0.03125
1690	1	1 : 0	15	1.2	A	0.0625
1691	1	1 : 0	15	1.2	A	0.0156
1692	1	1 : 0	15	1.2	A	0.5
1693	1	1 : 0	15	1.2	A	0.125
1694	1	1 : 0	15	1.2	A	0.0625
1695	1	1 : 0	15	1.2	A	0.0156
1696	1	1 : 0	15	1.2	A	0.5
1697	1	1 : 0	15	1.2	A	0.03125
1698	1	1 : 0	15	1.2	A	0.5
1699	1	1 : 0	15	1.2	A	0.25
1700	1	1 : 0	15	1.2	A	0.0625
1701	1	1 : 0	15	1.2	A	0.03125
1702	1	1 : 0	15	1.2	A	0.5
1703	1	1 : 0	15	1.2	A	0.25
1704	1	1 : 0	15	1.2	A	0.0156
1705	1	1 : 0	15	1.2	A	0.25
1706	1	1 : 0	15	1.2	A	0.125
1707	1	1 : 0	15	1.2	A	0.0156
1708	1	1 : 0	15	1.2	A	0.25
1709	1	1 : 0	15	1.2	A	0.125
1710	1	1 : 0	15	1.2	A	0.5
1711	1	1 : 0	15	1.2	A	0.125
1712	1	1 : 0	15	1.2	A	0.0625
1713	1	1 : 0	15	1.2	A	0.0156
1714	1	1 : 0	15	1.2	A	0.5
1715	1	1 : 0	15	1.2	A	0.125
1716	1	1 : 0	15	1.2	A	0.0625
1753	1	1 : 0	25	1.2	A	0.5
1784	1	1 : 0	5	1.2	A	0.03125

1965	1	1 : 0	15	1.2	A	0.25
1966	1	1 : 0	15	1.2	A	0.0625
1967	1	1 : 0	15	1.2	A	0.03125
1968	1	1 : 0	15	1.2	A	0.5
1969	1	1 : 0	15	1.2	A	0.25
1970	1	1 : 0	15	1.2	A	0.125
1971	1	1 : 0	15	1.2	A	0.5
1972	1	1 : 0	15	1.2	A	0.125
1973	1	1 : 0	15	1.2	A	0.0156
1974	1	1 : 0	15	1.2	A	0.25
1975	1	1 : 0	15	1.2	A	0.5
1976	1	1 : 0	15	1.2	A	0.125
1977	1	1 : 0	15	1.2	A	0.0625
1978	1	1 : 0	15	1.2	A	0.25
1979	1	1 : 0	15	1.2	A	0.0625
1980	1	1 : 0	15	1.2	A	0.03125
1981	1	1 : 0	15	1.2	A	0.5
1982	1	1 : 0	15	1.2	A	0.25
1983	1	1 : 0	15	1.2	A	0.0625
1984	1	1 : 0	15	1.2	A	0.03125
1985	1	1 : 0	15	1.2	A	0.125
1986	1	1 : 0	15	1.2	A	0.03125
1987	1	1 : 0	15	1.2	A	0.0156
1988	1	1 : 0	15	1.2	A	0.25
1989	1	1 : 0	15	1.2	A	0.125
1990	1	1 : 0	15	1.2	A	0.125
1991	1	1 : 0	15	1.2	A	0.0156
1992	1	1 : 0	15	1.2	A	0.0625
1993	1	1 : 0	15	1.2	A	0.0156
1994	1	1 : 0	15	1.2	A	0.5
1995	1	1 : 0	15	1.2	A	0.125
1996	1	1 : 0	15	1.2	A	0.0625
1997	1	1 : 0	15	1.2	A	0.0625
1998	1	1 : 0	15	1.2	A	0.03125
1999	1	1 : 0	15	1.2	A	0.03125
2000	1	1 : 0	15	1.2	A	0.5
2001	1	1 : 0	15	1.2	A	0.25
2002	1	1 : 0	15	1.2	A	0.0625
2003	1	1 : 0	15	1.2	A	0.03125
2004	1	1 : 0	15	1.2	A	0.03125
2005	1	1 : 0	15	1.2	A	0.0156
2006	1	1 : 0	15	1.2	A	0.0156

2007	1	1 : 0	15	1.2	A	0.25
2008	1	1 : 0	15	1.2	A	0.125
2009	1	1 : 0	15	1.2	A	0.03125
2010	1	1 : 0	15	1.2	A	0.0156
2011	1	1 : 0	15	1.2	A	0.0156
2012	1	1 : 0	15	1.2	A	0.5
2013	1	1 : 0	15	1.2	A	0.5
2014	1	1 : 0	15	1.2	A	0.125
2015	1	1 : 0	15	1.2	A	0.0625
2016	1	1 : 0	15	1.2	A	0.0156
2017	1	1 : 0	15	1.2	A	0.25
2225	1	1 : 0	5	1.2	A	0.125
3323	1	1 : 0	24	15	B	0.005859375
3324	1	1 : 0	24	15	B	0.005859375
3325	1	1 : 0	24	15	B	0.005859375
3326	1	1 : 0	24	15	B	0.0078125
3855	1	1 : 0	15	1.2	C	0.05
3856	1	1 : 0	15	1.2	C	0.1
3857	1	1 : 0	15	1.2	C	0.5
3858	1	1 : 0	15	1.2	C	2.5
3859	1	1 : 0	15	1.2	C	1
3901	1	1 : 0	15	1.2	C	3.5
3902	1	1 : 0	15	1.2	C	3.5
1244	2	1 : 1	15	1.2	A	0.03
1245	2	1 : 2	15	1.2	A	0.375
1246	2	1 : 2	15	1.2	A	0.045
1247	2	1 : 2	15	1.2	A	0.045
1248	2	1 : 4	15	1.2	A	0.155
1249	2	1 : 4	15	1.2	A	0.155
1250	2	1 : 9	15	1.2	A	0.15
1251	2	1 : 9	15	1.2	A	0.15
1252	2	1 : 2	15	1.2	A	0.093
1253	2	1 : 2	15	1.2	A	0.093
1254	2	1 : 1	15	1.2	A	0.25
1255	2	1 : 1	15	1.2	A	0.25
1256	2	1 : 2	15	1.2	A	0.375
1257	2	1 : 4	15	1.2	A	0.625
1258	2	1 : 4	15	1.2	A	0.075
1259	2	1 : 4	15	1.2	A	0.075
1260	2	1 : 9	15	1.2	A	0.75

1261	2	1 : 9	15	1.2	A	0.75
1262	2	1 : 2	15	1.2	A	0.045
1263	2	1 : 2	15	1.2	A	0.045
1264	2	1 : 1	15	1.2	A	0.126
1265	2	1 : 1	15	1.2	A	0.126
1266	2	1 : 2	15	1.2	A	0.189
1267	2	1 : 2	15	1.2	A	0.189
1268	2	1 : 4	15	1.2	A	0.625
1269	2	1 : 9	15	1.2	A	0.63
1270	2	1 : 9	15	1.2	A	0.63
1271	2	1 : 2	15	1.2	A	0.375
1272	2	1 : 2	15	1.2	A	0.375
1273	2	1 : 1	15	1.2	A	0.062
1274	2	1 : 1	15	1.2	A	0.062
1275	2	1 : 2	15	1.2	A	0.093
1276	2	1 : 2	15	1.2	A	0.093
1277	2	1 : 4	15	1.2	A	0.315
1278	2	1 : 4	15	1.2	A	0.315
1279	2	1 : 9	15	1.2	A	0.31
1280	2	1 : 9	15	1.2	A	0.31
1281	2	1 : 2	15	1.2	A	0.189
1282	2	1 : 2	15	1.2	A	0.189
1283	2	1 : 1	15	1.2	A	0.03
1284	2	1 : 1	15	1.2	A	0.03
1285	2	1 : 2	15	1.2	A	0.045
1286	2	1 : 2	15	1.2	A	0.045
1287	2	1 : 4	15	1.2	A	0.155
1288	2	1 : 4	15	1.2	A	0.155
1289	2	1 : 9	15	1.2	A	0.15
1290	2	1 : 2	15	1.2	A	0.093
1291	2	1 : 1	15	1.2	A	0.25
1292	2	1 : 1	15	1.2	A	0.126
1293	2	1 : 2	15	1.2	A	0.375
1294	2	1 : 4	15	1.2	A	0.075
1295	2	1 : 4	15	1.2	A	0.075
1296	2	1 : 9	15	1.2	A	0.75
1297	2	1 : 9	15	1.2	A	0.75
1298	2	1 : 9	15	1.2	A	0.15
1299	2	1 : 2	15	1.2	A	0.045
1300	2	1 : 1	15	1.2	A	0.126
1301	2	1 : 1	15	1.2	A	0.062
1302	2	1 : 2	15	1.2	A	0.189

1303	2	1 : 2	15	1.2	A	0.189
1304	2	1 : 4	15	1.2	A	0.625
1305	2	1 : 4	15	1.2	A	0.625
1306	2	1 : 9	15	1.2	A	0.63
1307	2	1 : 9	15	1.2	A	0.63
1308	2	1 : 2	15	1.2	A	0.375
1309	2	1 : 2	15	1.2	A	0.375
1310	2	1 : 2	15	1.2	A	0.045
1311	2	1 : 1	15	1.2	A	0.062
1312	2	1 : 1	15	1.2	A	0.03
1313	2	1 : 2	15	1.2	A	0.093
1314	2	1 : 2	15	1.2	A	0.093
1315	2	1 : 4	15	1.2	A	0.315
1316	2	1 : 4	15	1.2	A	0.315
1317	2	1 : 9	15	1.2	A	0.31
1318	2	1 : 9	15	1.2	A	0.31
1319	2	1 : 2	15	1.2	A	0.189
1320	2	1 : 2	15	1.2	A	0.189
1321	2	1 : 1	25	1.2	A	0.03
1322	2	1 : 2	25	1.2	A	0.375
1323	2	1 : 2	25	1.2	A	0.045
1324	2	1 : 2	25	1.2	A	0.045
1325	2	1 : 4	25	1.2	A	0.155
1326	2	1 : 4	25	1.2	A	0.155
1327	2	1 : 9	25	1.2	A	0.15
1328	2	1 : 9	25	1.2	A	0.15
1329	2	1 : 2	25	1.2	A	0.093
1330	2	1 : 2	25	1.2	A	0.093
1331	2	1 : 1	25	1.2	A	0.25
1332	2	1 : 1	25	1.2	A	0.25
1333	2	1 : 2	25	1.2	A	0.375
1334	2	1 : 4	25	1.2	A	0.625
1335	2	1 : 4	25	1.2	A	0.075
1336	2	1 : 4	25	1.2	A	0.075
1337	2	1 : 9	25	1.2	A	0.75
1338	2	1 : 9	25	1.2	A	0.75
1339	2	1 : 2	25	1.2	A	0.045
1340	2	1 : 2	25	1.2	A	0.045
1341	2	1 : 1	25	1.2	A	0.126
1342	2	1 : 1	25	1.2	A	0.126
1343	2	1 : 2	25	1.2	A	0.189
1344	2	1 : 2	25	1.2	A	0.189

1345	2	1 : 4	25	1.2	A	0.625
1346	2	1 : 9	25	1.2	A	0.63
1347	2	1 : 9	25	1.2	A	0.63
1348	2	1 : 2	25	1.2	A	0.375
1349	2	1 : 2	25	1.2	A	0.375
1350	2	1 : 1	25	1.2	A	0.062
1351	2	1 : 1	25	1.2	A	0.062
1352	2	1 : 2	25	1.2	A	0.093
1353	2	1 : 2	25	1.2	A	0.093
1354	2	1 : 4	25	1.2	A	0.315
1355	2	1 : 4	25	1.2	A	0.315
1356	2	1 : 9	25	1.2	A	0.31
1357	2	1 : 9	25	1.2	A	0.31
1358	2	1 : 2	25	1.2	A	0.189
1359	2	1 : 2	25	1.2	A	0.189
1360	2	1 : 1	25	1.2	A	0.03
1361	2	1 : 1	25	1.2	A	0.03
1362	2	1 : 2	25	1.2	A	0.045
1363	2	1 : 2	25	1.2	A	0.045
1364	2	1 : 4	25	1.2	A	0.155
1365	2	1 : 4	25	1.2	A	0.155
1366	2	1 : 9	25	1.2	A	0.15
1367	2	1 : 2	25	1.2	A	0.093
1368	2	1 : 1	25	1.2	A	0.25
1369	2	1 : 1	25	1.2	A	0.126
1370	2	1 : 2	25	1.2	A	0.375
1371	2	1 : 4	25	1.2	A	0.075
1372	2	1 : 4	25	1.2	A	0.075
1373	2	1 : 9	25	1.2	A	0.75
1374	2	1 : 9	25	1.2	A	0.75
1375	2	1 : 9	25	1.2	A	0.15
1376	2	1 : 2	25	1.2	A	0.045
1377	2	1 : 1	25	1.2	A	0.126
1378	2	1 : 1	25	1.2	A	0.062
1379	2	1 : 2	25	1.2	A	0.189
1380	2	1 : 2	25	1.2	A	0.189
1381	2	1 : 4	25	1.2	A	0.625
1382	2	1 : 4	25	1.2	A	0.625
1383	2	1 : 9	25	1.2	A	0.63
1384	2	1 : 9	25	1.2	A	0.63
1385	2	1 : 2	25	1.2	A	0.375
1386	2	1 : 2	25	1.2	A	0.375

1387	2	1 : 2	25	1.2	A	0.045
1388	2	1 : 1	25	1.2	A	0.062
1389	2	1 : 1	25	1.2	A	0.03
1390	2	1 : 2	25	1.2	A	0.093
1391	2	1 : 2	25	1.2	A	0.093
1392	2	1 : 4	25	1.2	A	0.315
1393	2	1 : 4	25	1.2	A	0.315
1394	2	1 : 9	25	1.2	A	0.31
1395	2	1 : 9	25	1.2	A	0.31
1396	2	1 : 2	25	1.2	A	0.189
1397	2	1 : 2	25	1.2	A	0.189
1398	2	1 : 1	5	1.2	A	0.03
1399	2	1 : 2	5	1.2	A	0.375
1400	2	1 : 2	5	1.2	A	0.045
1401	2	1 : 2	5	1.2	A	0.045
1402	2	1 : 4	5	1.2	A	0.155
1403	2	1 : 4	5	1.2	A	0.155
1404	2	1 : 9	5	1.2	A	0.15
1405	2	1 : 9	5	1.2	A	0.15
1406	2	1 : 2	5	1.2	A	0.093
1407	2	1 : 2	5	1.2	A	0.093
1408	2	1 : 1	5	1.2	A	0.25
1409	2	1 : 1	5	1.2	A	0.25
1410	2	1 : 2	5	1.2	A	0.375
1411	2	1 : 4	5	1.2	A	0.625
1412	2	1 : 4	5	1.2	A	0.075
1413	2	1 : 4	5	1.2	A	0.075
1414	2	1 : 9	5	1.2	A	0.75
1415	2	1 : 9	5	1.2	A	0.75
1416	2	1 : 2	5	1.2	A	0.045
1417	2	1 : 2	5	1.2	A	0.045
1418	2	1 : 1	5	1.2	A	0.126
1419	2	1 : 1	5	1.2	A	0.126
1420	2	1 : 2	5	1.2	A	0.189
1421	2	1 : 2	5	1.2	A	0.189
1422	2	1 : 4	5	1.2	A	0.625
1423	2	1 : 9	5	1.2	A	0.63
1424	2	1 : 9	5	1.2	A	0.63
1425	2	1 : 2	5	1.2	A	0.375
1426	2	1 : 2	5	1.2	A	0.375
1427	2	1 : 1	5	1.2	A	0.062
1428	2	1 : 2	5	1.2	A	0.093

1429	2	1 : 2	5	1.2	A	0.093
1430	2	1 : 4	5	1.2	A	0.315
1431	2	1 : 4	5	1.2	A	0.315
1432	2	1 : 9	5	1.2	A	0.31
1433	2	1 : 9	5	1.2	A	0.31
1434	2	1 : 2	5	1.2	A	0.189
1435	2	1 : 2	5	1.2	A	0.189
1436	2	1 : 1	5	1.2	A	0.03
1437	2	1 : 1	5	1.2	A	0.03
1438	2	1 : 2	5	1.2	A	0.045
1439	2	1 : 2	5	1.2	A	0.045
1440	2	1 : 4	5	1.2	A	0.155
1441	2	1 : 4	5	1.2	A	0.155
1442	2	1 : 9	5	1.2	A	0.15
1443	2	1 : 2	5	1.2	A	0.093
1444	2	1 : 1	5	1.2	A	0.25
1445	2	1 : 1	5	1.2	A	0.126
1446	2	1 : 2	5	1.2	A	0.375
1447	2	1 : 4	5	1.2	A	0.075
1448	2	1 : 4	5	1.2	A	0.075
1449	2	1 : 9	5	1.2	A	0.75
1450	2	1 : 9	5	1.2	A	0.75
1451	2	1 : 9	5	1.2	A	0.15
1452	2	1 : 2	5	1.2	A	0.045
1453	2	1 : 1	5	1.2	A	0.126
1454	2	1 : 1	5	1.2	A	0.062
1455	2	1 : 2	5	1.2	A	0.189
1456	2	1 : 2	5	1.2	A	0.189
1457	2	1 : 4	5	1.2	A	0.625
1458	2	1 : 4	5	1.2	A	0.625
1459	2	1 : 9	5	1.2	A	0.63
1460	2	1 : 9	5	1.2	A	0.63
1461	2	1 : 2	5	1.2	A	0.375
1462	2	1 : 2	5	1.2	A	0.375
1463	2	1 : 2	5	1.2	A	0.045
1464	2	1 : 1	5	1.2	A	0.062
1465	2	1 : 1	5	1.2	A	0.03
1466	2	1 : 2	5	1.2	A	0.093
1467	2	1 : 2	5	1.2	A	0.093
1468	2	1 : 4	5	1.2	A	0.315
1469	2	1 : 4	5	1.2	A	0.315
1470	2	1 : 9	5	1.2	A	0.31

1471	2	1 : 9	5	1.2	A	0.31
1472	2	1 : 2	5	1.2	A	0.189
1473	2	1 : 2	5	1.2	A	0.189
1717	2	1 : 4	25	1.2	A	0.075
1723	2	1 : 1	25	1.2	A	0.25
1724	2	1 : 9	25	1.2	A	0.75
1729	2	1 : 1	25	1.2	A	0.126
1730	2	1 : 9	25	1.2	A	0.63
1735	2	1 : 1	25	1.2	A	0.062
1736	2	1 : 9	25	1.2	A	0.31
1741	2	1 : 1	25	1.2	A	0.03
1742	2	1 : 9	25	1.2	A	0.15
1747	2	1 : 4	25	1.2	A	0.625
1754	2	1 : 4	25	1.2	A	0.315
1765	2	1 : 4	5	1.2	A	0.075
1771	2	1 : 1	5	1.2	A	0.25
1772	2	1 : 9	5	1.2	A	0.75
1777	2	1 : 1	5	1.2	A	0.126
1778	2	1 : 9	5	1.2	A	0.63
1783	2	1 : 1	5	1.2	A	0.062
1785	2	1 : 9	5	1.2	A	0.31
1790	2	1 : 1	5	1.2	A	0.03
1791	2	1 : 9	5	1.2	A	0.15
1796	2	1 : 4	5	1.2	A	0.625
1802	2	1 : 4	5	1.2	A	0.315
1813	2	1 : 1	15	1.2	A	0.062
1814	2	1 : 4	15	1.2	A	0.315
1815	2	1 : 9	15	1.2	A	0.31
1819	2	1 : 1	15	1.2	A	0.126
1820	2	1 : 1	15	1.2	A	0.03
1821	2	1 : 9	15	1.2	A	0.15
1826	2	1 : 1	15	1.2	A	0.062
1827	2	1 : 4	15	1.2	A	0.315
1828	2	1 : 4	15	1.2	A	0.155
1829	2	1 : 9	15	1.2	A	0.54
1832	2	1 : 1	15	1.2	A	0.03
1833	2	1 : 4	15	1.2	A	0.155
1834	2	1 : 4	15	1.2	A	0.075
1835	2	1 : 9	15	1.2	A	0.31
1839	2	1 : 1	15	1.2	A	0.126
1840	2	1 : 4	15	1.2	A	0.075
1841	2	1 : 9	15	1.2	A	0.63

1842	2	1 : 9	15	1.2	A	0.15
1846	2	1 : 1	15	1.2	A	0.062
1847	2	1 : 4	15	1.2	A	0.315
1848	2	1 : 9	15	1.2	A	0.31
1852	2	1 : 1	15	1.2	A	0.03
1853	2	1 : 4	15	1.2	A	0.155
1854	2	1 : 9	15	1.2	A	0.15
1858	2	1 : 1	15	1.2	A	0.126
1859	2	1 : 4	15	1.2	A	0.075
1864	2	1 : 1	25	1.2	A	0.062
1865	2	1 : 4	25	1.2	A	0.315
1866	2	1 : 9	25	1.2	A	0.31
1870	2	1 : 1	25	1.2	A	0.126
1871	2	1 : 1	25	1.2	A	0.03
1872	2	1 : 9	25	1.2	A	0.15
1877	2	1 : 1	25	1.2	A	0.062
1878	2	1 : 4	25	1.2	A	0.315
1879	2	1 : 4	25	1.2	A	0.155
1880	2	1 : 9	25	1.2	A	0.54
1883	2	1 : 1	25	1.2	A	0.03
1884	2	1 : 4	25	1.2	A	0.155
1885	2	1 : 4	25	1.2	A	0.075
1886	2	1 : 9	25	1.2	A	0.31
1890	2	1 : 1	25	1.2	A	0.126
1891	2	1 : 4	25	1.2	A	0.075
1892	2	1 : 9	25	1.2	A	0.63
1893	2	1 : 9	25	1.2	A	0.15
1897	2	1 : 1	25	1.2	A	0.062
1898	2	1 : 4	25	1.2	A	0.315
1899	2	1 : 9	25	1.2	A	0.31
1903	2	1 : 1	25	1.2	A	0.03
1904	2	1 : 4	25	1.2	A	0.155
1905	2	1 : 9	25	1.2	A	0.15
1909	2	1 : 1	25	1.2	A	0.126
1910	2	1 : 4	25	1.2	A	0.075
1915	2	1 : 1	5	1.2	A	0.062
1916	2	1 : 4	5	1.2	A	0.315
1917	2	1 : 9	5	1.2	A	0.31
1921	2	1 : 1	5	1.2	A	0.126
1922	2	1 : 1	5	1.2	A	0.03
1923	2	1 : 9	5	1.2	A	0.15
1928	2	1 : 1	5	1.2	A	0.062

1929	2	1 : 4	5	1.2	A	0.315
1930	2	1 : 4	5	1.2	A	0.155
1931	2	1 : 9	5	1.2	A	0.54
1934	2	1 : 1	5	1.2	A	0.03
1935	2	1 : 4	5	1.2	A	0.155
1936	2	1 : 4	5	1.2	A	0.075
1937	2	1 : 9	5	1.2	A	0.31
1941	2	1 : 1	5	1.2	A	0.126
1942	2	1 : 4	5	1.2	A	0.075
1943	2	1 : 9	5	1.2	A	0.63
1944	2	1 : 9	5	1.2	A	0.15
1948	2	1 : 1	5	1.2	A	0.062
1949	2	1 : 4	5	1.2	A	0.315
1950	2	1 : 9	5	1.2	A	0.31
1954	2	1 : 4	5	1.2	A	0.155
1955	2	1 : 9	5	1.2	A	0.15
1959	2	1 : 1	5	1.2	A	0.126
1960	2	1 : 4	5	1.2	A	0.075
2018	2	1 : 1	15	1.2	A	0.031
2019	2	1 : 4	15	1.2	A	0.075
2020	2	1 : 4	15	1.2	A	0.155
2021	2	1 : 9	15	1.2	A	0.31
2026	2	1 : 1	15	1.2	A	0.25
2027	2	1 : 1	15	1.2	A	0.25
2028	2	1 : 4	15	1.2	A	0.075
2029	2	1 : 9	15	1.2	A	0.15
2035	2	1 : 1	15	1.2	A	0.126
2036	2	1 : 1	15	1.2	A	0.126
2037	2	1 : 4	15	1.2	A	0.625
2038	2	1 : 9	15	1.2	A	0.75
2044	2	1 : 1	15	1.2	A	0.062
2045	2	1 : 4	15	1.2	A	0.315
2046	2	1 : 9	15	1.2	A	0.63
2047	2	1 : 9	15	1.2	A	0.75
2052	2	1 : 1	15	1.2	A	0.031
2053	2	1 : 1	15	1.2	A	0.031
2054	2	1 : 4	15	1.2	A	0.155
2055	2	1 : 9	15	1.2	A	0.31
2056	2	1 : 9	15	1.2	A	0.63
2061	2	1 : 1	15	1.2	A	0.25
2062	2	1 : 4	15	1.2	A	0.625
2063	2	1 : 4	15	1.2	A	0.075

2064	2	1 : 9	15	1.2	A	0.15
2065	2	1 : 9	15	1.2	A	0.31
2071	2	1 : 1	15	1.2	A	0.126
2072	2	1 : 4	15	1.2	A	0.315
2073	2	1 : 4	15	1.2	A	0.625
2074	2	1 : 9	15	1.2	A	0.75
2075	2	1 : 9	15	1.2	A	0.15
2081	2	1 : 1	15	1.2	A	0.062
2082	2	1 : 4	15	1.2	A	0.155
2083	2	1 : 4	15	1.2	A	0.315
2084	2	1 : 9	15	1.2	A	0.63
2089	2	1 : 1	25	1.2	A	0.031
2090	2	1 : 4	25	1.2	A	0.075
2091	2	1 : 4	25	1.2	A	0.155
2092	2	1 : 9	25	1.2	A	0.31
2097	2	1 : 1	25	1.2	A	0.25
2098	2	1 : 1	25	1.2	A	0.25
2099	2	1 : 4	25	1.2	A	0.075
2100	2	1 : 9	25	1.2	A	0.15
2106	2	1 : 1	25	1.2	A	0.126
2107	2	1 : 1	25	1.2	A	0.126
2108	2	1 : 4	25	1.2	A	0.625
2109	2	1 : 9	25	1.2	A	0.75
2115	2	1 : 1	25	1.2	A	0.062
2116	2	1 : 4	25	1.2	A	0.315
2117	2	1 : 9	25	1.2	A	0.63
2118	2	1 : 9	25	1.2	A	0.75
2123	2	1 : 1	25	1.2	A	0.031
2124	2	1 : 1	25	1.2	A	0.031
2125	2	1 : 4	25	1.2	A	0.155
2126	2	1 : 9	25	1.2	A	0.31
2127	2	1 : 9	25	1.2	A	0.63
2132	2	1 : 1	25	1.2	A	0.25
2133	2	1 : 4	25	1.2	A	0.625
2134	2	1 : 4	25	1.2	A	0.075
2135	2	1 : 9	25	1.2	A	0.15
2136	2	1 : 9	25	1.2	A	0.31
2142	2	1 : 1	25	1.2	A	0.126
2143	2	1 : 4	25	1.2	A	0.315
2144	2	1 : 4	25	1.2	A	0.625
2145	2	1 : 9	25	1.2	A	0.75
2146	2	1 : 9	25	1.2	A	0.15

2152	2	1 : 1	25	1.2	A	0.062
2153	2	1 : 4	25	1.2	A	0.155
2154	2	1 : 4	25	1.2	A	0.315
2155	2	1 : 9	25	1.2	A	0.63
2160	2	1 : 1	5	1.2	A	0.031
2161	2	1 : 4	5	1.2	A	0.075
2162	2	1 : 4	5	1.2	A	0.155
2163	2	1 : 9	5	1.2	A	0.31
2168	2	1 : 1	5	1.2	A	0.25
2169	2	1 : 1	5	1.2	A	0.25
2170	2	1 : 4	5	1.2	A	0.075
2171	2	1 : 9	5	1.2	A	0.15
2177	2	1 : 1	5	1.2	A	0.126
2178	2	1 : 1	5	1.2	A	0.126
2179	2	1 : 4	5	1.2	A	0.625
2180	2	1 : 9	5	1.2	A	0.75
2186	2	1 : 1	5	1.2	A	0.062
2187	2	1 : 4	5	1.2	A	0.315
2188	2	1 : 9	5	1.2	A	0.63
2189	2	1 : 9	5	1.2	A	0.75
2194	2	1 : 1	5	1.2	A	0.031
2195	2	1 : 1	5	1.2	A	0.031
2196	2	1 : 4	5	1.2	A	0.155
2197	2	1 : 9	5	1.2	A	0.31
2198	2	1 : 9	5	1.2	A	0.63
2203	2	1 : 1	5	1.2	A	0.25
2204	2	1 : 4	5	1.2	A	0.625
2205	2	1 : 4	5	1.2	A	0.075
2206	2	1 : 9	5	1.2	A	0.15
2207	2	1 : 9	5	1.2	A	0.31
2213	2	1 : 1	5	1.2	A	0.126
2214	2	1 : 4	5	1.2	A	0.315
2215	2	1 : 4	5	1.2	A	0.625
2216	2	1 : 9	5	1.2	A	0.75
2217	2	1 : 9	5	1.2	A	0.15
2223	2	1 : 1	5	1.2	A	0.062
2224	2	1 : 4	5	1.2	A	0.155
2226	2	1 : 4	5	1.2	A	0.315
2227	2	1 : 9	5	1.2	A	0.63
2809	2	1 : 1	15	1.2	A	0.062
2810	2	1 : 4	15	1.2	A	0.315
2811	2	1 : 9	15	1.2	A	0.31

2816	2	1 : 1	15	1.2	A	0.126
2817	2	1 : 1	15	1.2	A	0.03
2818	2	1 : 9	15	1.2	A	0.15
2823	2	1 : 1	15	1.2	A	0.062
2824	2	1 : 4	15	1.2	A	0.315
2825	2	1 : 4	15	1.2	A	0.155
2826	2	1 : 9	15	1.2	A	0.63
2829	2	1 : 1	15	1.2	A	0.03
2830	2	1 : 4	15	1.2	A	0.155
2831	2	1 : 4	15	1.2	A	0.075
2832	2	1 : 9	15	1.2	A	0.31
2835	2	1 : 1	15	1.2	A	0.126
2836	2	1 : 4	15	1.2	A	0.075
2837	2	1 : 9	15	1.2	A	0.63
2838	2	1 : 9	15	1.2	A	0.15
2842	2	1 : 1	15	1.2	A	0.062
2843	2	1 : 4	15	1.2	A	0.315
2844	2	1 : 9	15	1.2	A	0.31
2849	2	1 : 1	15	1.2	A	0.03
2850	2	1 : 4	15	1.2	A	0.155
2851	2	1 : 9	15	1.2	A	0.15
2856	2	1 : 1	15	1.2	A	0.126
2857	2	1 : 4	15	1.2	A	0.075
2858	2	1 : 9	15	1.2	A	0.63
2863	2	1 : 1	25	1.2	A	0.062
2864	2	1 : 4	25	1.2	A	0.315
2865	2	1 : 9	25	1.2	A	0.31
2870	2	1 : 1	25	1.2	A	0.126
2871	2	1 : 1	25	1.2	A	0.03
2872	2	1 : 9	25	1.2	A	0.15
2877	2	1 : 1	25	1.2	A	0.062
2878	2	1 : 4	25	1.2	A	0.315
2879	2	1 : 4	25	1.2	A	0.155
2880	2	1 : 9	25	1.2	A	0.63
2883	2	1 : 1	25	1.2	A	0.03
2884	2	1 : 4	25	1.2	A	0.155
2885	2	1 : 4	25	1.2	A	0.075
2886	2	1 : 9	25	1.2	A	0.31
2889	2	1 : 1	25	1.2	A	0.126
2890	2	1 : 4	25	1.2	A	0.075
2891	2	1 : 9	25	1.2	A	0.63
2892	2	1 : 9	25	1.2	A	0.15

2896	2	1 : 1	25	1.2	A	0.062
2897	2	1 : 4	25	1.2	A	0.315
2898	2	1 : 9	25	1.2	A	0.31
2903	2	1 : 1	25	1.2	A	0.03
2904	2	1 : 4	25	1.2	A	0.155
2905	2	1 : 9	25	1.2	A	0.15
2910	2	1 : 1	25	1.2	A	0.126
2911	2	1 : 4	25	1.2	A	0.075
2912	2	1 : 9	25	1.2	A	0.63
2917	2	1 : 1	5	1.2	A	0.062
2918	2	1 : 4	5	1.2	A	0.315
2919	2	1 : 9	5	1.2	A	0.31
2924	2	1 : 1	5	1.2	A	0.126
2925	2	1 : 1	5	1.2	A	0.03
2926	2	1 : 9	5	1.2	A	0.15
2931	2	1 : 1	5	1.2	A	0.062
2932	2	1 : 4	5	1.2	A	0.315
2933	2	1 : 4	5	1.2	A	0.155
2934	2	1 : 9	5	1.2	A	0.63
2937	2	1 : 1	5	1.2	A	0.03
2938	2	1 : 4	5	1.2	A	0.155
2939	2	1 : 4	5	1.2	A	0.075
2940	2	1 : 9	5	1.2	A	0.31
2943	2	1 : 1	5	1.2	A	0.126
2944	2	1 : 4	5	1.2	A	0.075
2945	2	1 : 9	5	1.2	A	0.63
2946	2	1 : 9	5	1.2	A	0.15
2950	2	1 : 1	5	1.2	A	0.062
2951	2	1 : 4	5	1.2	A	0.315
2952	2	1 : 9	5	1.2	A	0.31
2957	2	1 : 1	5	1.2	A	0.03
2958	2	1 : 4	5	1.2	A	0.155
2959	2	1 : 9	5	1.2	A	0.15
2964	2	1 : 1	5	1.2	A	0.126
2965	2	1 : 4	5	1.2	A	0.075
2966	2	1 : 9	5	1.2	A	0.63
3327	2	1 : 1	24	15	B	0.3
3328	2	1 : 1	24	15	B	0.3
3329	2	1 : 1	24	15	B	0.3
3330	2	1 : 1	24	15	B	0.6
3331	2	1 : 1	24	15	B	0.6
3332	2	1 : 1	24	15	B	0.6

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3335	2	1 : 2	24	15	B	0.6
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3817	2	10 : 1	15	1.2	C	0.17
3818	2	10 : 1	15	1.2	C	0.5
3819	2	10 : 1	15	1.2	C	1.5
3820	2	1 : 1	15	1.2	C	0.17
3821	2	1 : 1	15	1.2	C	0.5
3822	2	1 : 1	15	1.2	C	1.5
3823	2	1 : 1	15	1.2	C	2.5
3824	2	2 : 1	15	1.2	C	0.17
3825	2	2 : 1	15	1.2	C	0.5
3826	2	2 : 1	15	1.2	C	1.5
3827	2	3 : 1	15	1.2	C	0.17
3828	2	3 : 1	15	1.2	C	0.17
3829	2	3 : 1	15	1.2	C	0.5
3830	2	3 : 1	15	1.2	C	1.5
3831	2	3 : 1	15	1.2	C	2.5
3832	2	5 : 1	15	1.2	C	0.17
3833	2	5 : 1	15	1.2	C	0.17
3834	2	5 : 1	15	1.2	C	0.5
3835	2	5 : 1	15	1.2	C	1.5
3836	2	5 : 1	15	1.2	C	2.5
3860	2	3 : 1	15	1.2	C	0.17

3861	2	3 : 1	15	1.2	C	0.17
3862	2	3 : 1	15	1.2	C	0.5
3863	2	3 : 1	15	1.2	C	1.5
3873	2	20 : 1	15	1.2	C	1.5
3874	2	20 : 1	15	1.2	C	1.5
3875	2	2 : 1	15	1.2	C	3
3876	2	10 : 1	15	1.2	C	3
3903	2	2 : 1	15	1.2	C	3
3904	2	2 : 1	15	1.2	C	3
3905	2	2 : 1	15	1.2	C	3
3906	2	2 : 1	15	1.2	C	3
3907	2	1 : 1	15	1.2	C	1.5
3908	2	1 : 1	15	1.2	C	1.5
3909	2	1 : 1	15	1.2	C	1.5
3913	2	10 : 1	15	1.2	C	1
3914	2	10 : 1	15	1.2	C	1
3915	2	10 : 1	15	1.2	C	1
3916	2	50 : 1	15	1.2	C	1
3917	2	50 : 1	15	1.2	C	1
3918	2	50 : 1	15	1.2	C	1
3919	2	5 : 1	15	1.2	C	1
3920	2	5 : 1	15	1.2	C	1
3921	2	5 : 1	15	1.2	C	1
1474	3	1 : 2 : 1	15	1.2	A	0.06
1475	3	1 : 2 : 1	15	1.2	A	0.06
1476	3	1 : 9 : 1	15	1.2	A	0.341
1477	3	1 : 9 : 1	15	1.2	A	0.341
1478	3	1 : 2 : 2	15	1.2	A	0.075
1479	3	1 : 2 : 2	15	1.2	A	0.075
1480	3	1 : 9 : 9	15	1.2	A	0.5
1481	3	1 : 9 : 9	15	1.2	A	0.5
1482	3	1 : 2 : 1	15	1.2	A	0.5
1483	3	1 : 2 : 1	15	1.2	A	0.5
1484	3	1 : 9 : 1	15	1.2	A	0.165
1485	3	1 : 9 : 1	15	1.2	A	0.165
1486	3	1 : 2 : 2	15	1.2	A	0.625
1487	3	1 : 2 : 2	15	1.2	A	0.625
1488	3	1 : 9 : 9	15	1.2	A	0.285
1489	3	1 : 9 : 9	15	1.2	A	0.285
1490	3	1 : 2 : 1	15	1.2	A	0.252
1491	3	1 : 2 : 1	15	1.2	A	0.252
1492	3	1 : 9 : 1	15	1.2	A	0.693

1493	3	1 : 9 : 1	15	1.2	A	0.693
1494	3	1 : 2 : 2	15	1.2	A	0.315
1495	3	1 : 2 : 2	15	1.2	A	0.305
1496	3	1 : 9 : 9	15	1.2	A	0.75
1497	3	1 : 9 : 9	15	1.2	A	0.75
1498	3	1 : 2 : 1	15	1.2	A	0.124
1499	3	1 : 2 : 1	15	1.2	A	0.124
1500	3	1 : 9 : 1	15	1.2	A	0.5
1501	3	1 : 9 : 1	15	1.2	A	0.5
1502	3	1 : 2 : 2	15	1.2	A	0.155
1503	3	1 : 9 : 9	15	1.2	A	0.589
1504	3	1 : 9 : 9	15	1.2	A	0.589
1505	3	1 : 2 : 1	15	1.2	A	0.06
1506	3	1 : 2 : 1	15	1.2	A	0.06
1507	3	1 : 9 : 1	15	1.2	A	0.341
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1509	3	1 : 2 : 2	15	1.2	A	0.075
1510	3	1 : 2 : 2	15	1.2	A	0.155
1511	3	1 : 9 : 9	15	1.2	A	0.5
1512	3	1 : 2 : 1	15	1.2	A	0.5
1513	3	1 : 2 : 1	15	1.2	A	0.5
1514	3	1 : 9 : 1	15	1.2	A	0.165
1515	3	1 : 9 : 1	15	1.2	A	0.165
1516	3	1 : 2 : 2	15	1.2	A	0.625
1517	3	1 : 2 : 2	15	1.2	A	0.625
1518	3	1 : 2 : 2	15	1.2	A	0.075
1519	3	1 : 9 : 9	15	1.2	A	0.285
1520	3	1 : 9 : 9	15	1.2	A	0.5
1521	3	1 : 2 : 1	15	1.2	A	0.124
1522	3	1 : 2 : 1	15	1.2	A	0.252
1523	3	1 : 2 : 1	15	1.2	A	0.252
1524	3	1 : 9 : 1	15	1.2	A	0.693
1525	3	1 : 9 : 1	15	1.2	A	0.693
1526	3	1 : 2 : 2	15	1.2	A	0.315
1527	3	1 : 2 : 2	15	1.2	A	0.315
1528	3	1 : 9 : 9	15	1.2	A	0.75
1529	3	1 : 9 : 9	15	1.2	A	0.75
1530	3	1 : 9 : 9	15	1.2	A	0.285
1531	3	1 : 2 : 1	15	1.2	A	0.124
1532	3	1 : 9 : 1	15	1.2	A	0.5
1533	3	1 : 9 : 1	15	1.2	A	0.52
1534	3	1 : 2 : 2	15	1.2	A	0.155

1535	3	1 : 2 : 2	15	1.2	A	0.155
1536	3	1 : 9 : 9	15	1.2	A	0.589
1537	3	1 : 9 : 9	15	1.2	A	0.589
1538	3	1 : 2 : 1	25	1.2	A	0.06
1539	3	1 : 2 : 1	25	1.2	A	0.06
1540	3	1 : 9 : 1	25	1.2	A	0.341
1541	3	1 : 9 : 1	25	1.2	A	0.341
1542	3	1 : 2 : 2	25	1.2	A	0.075
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1546	3	1 : 2 : 1	25	1.2	A	0.5
1547	3	1 : 2 : 1	25	1.2	A	0.5
1548	3	1 : 9 : 1	25	1.2	A	0.165
1549	3	1 : 9 : 1	25	1.2	A	0.165
1550	3	1 : 2 : 2	25	1.2	A	0.625
1551	3	1 : 2 : 2	25	1.2	A	0.625
1552	3	1 : 9 : 9	25	1.2	A	0.285
1553	3	1 : 9 : 9	25	1.2	A	0.285
1554	3	1 : 2 : 1	25	1.2	A	0.252
1555	3	1 : 2 : 1	25	1.2	A	0.252
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1557	3	1 : 9 : 1	25	1.2	A	0.693
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1559	3	1 : 2 : 2	25	1.2	A	0.305
1560	3	1 : 9 : 9	25	1.2	A	0.75
1561	3	1 : 9 : 9	25	1.2	A	0.75
1562	3	1 : 2 : 1	25	1.2	A	0.124
1563	3	1 : 2 : 1	25	1.2	A	0.124
1564	3	1 : 9 : 1	25	1.2	A	0.5
1565	3	1 : 9 : 1	25	1.2	A	0.5
1566	3	1 : 2 : 2	25	1.2	A	0.155
1567	3	1 : 9 : 9	25	1.2	A	0.589
1568	3	1 : 9 : 9	25	1.2	A	0.589
1569	3	1 : 2 : 1	25	1.2	A	0.06
1570	3	1 : 2 : 1	25	1.2	A	0.06
1571	3	1 : 9 : 1	25	1.2	A	0.341
1572	3	1 : 9 : 1	25	1.2	A	0.341
1573	3	1 : 2 : 2	25	1.2	A	0.075
1574	3	1 : 2 : 2	25	1.2	A	0.155
1575	3	1 : 9 : 9	25	1.2	A	0.5
1576	3	1 : 2 : 1	25	1.2	A	0.5

1577	3	1 : 2 : 1	25	1.2	A	0.5
1578	3	1 : 9 : 1	25	1.2	A	0.165
1579	3	1 : 9 : 1	25	1.2	A	0.165
1580	3	1 : 2 : 2	25	1.2	A	0.625
1581	3	1 : 2 : 2	25	1.2	A	0.625
1582	3	1 : 2 : 2	25	1.2	A	0.075
1583	3	1 : 9 : 9	25	1.2	A	0.285
1584	3	1 : 9 : 9	25	1.2	A	0.5
1585	3	1 : 2 : 1	25	1.2	A	0.124
1586	3	1 : 2 : 1	25	1.2	A	0.252
1587	3	1 : 2 : 1	25	1.2	A	0.252
1588	3	1 : 9 : 1	25	1.2	A	0.693
1589	3	1 : 9 : 1	25	1.2	A	0.693
1590	3	1 : 2 : 2	25	1.2	A	0.315
1591	3	1 : 2 : 2	25	1.2	A	0.315
1592	3	1 : 9 : 9	25	1.2	A	0.75
1593	3	1 : 9 : 9	25	1.2	A	0.75
1594	3	1 : 9 : 9	25	1.2	A	0.285
1595	3	1 : 2 : 1	25	1.2	A	0.124
1596	3	1 : 9 : 1	25	1.2	A	0.5
1597	3	1 : 9 : 1	25	1.2	A	0.52
1598	3	1 : 2 : 2	25	1.2	A	0.155
1599	3	1 : 2 : 2	25	1.2	A	0.155
1600	3	1 : 9 : 9	25	1.2	A	0.589
1601	3	1 : 9 : 9	25	1.2	A	0.589
1602	3	1 : 2 : 1	5	1.2	A	0.06
1603	3	1 : 2 : 1	5	1.2	A	0.06
1604	3	1 : 9 : 1	5	1.2	A	0.341
1605	3	1 : 9 : 1	5	1.2	A	0.341
1606	3	1 : 2 : 2	5	1.2	A	0.075
1607	3	1 : 2 : 2	5	1.2	A	0.075
1608	3	1 : 9 : 9	5	1.2	A	0.5
1609	3	1 : 9 : 9	5	1.2	A	0.5
1610	3	1 : 2 : 1	5	1.2	A	0.5
1611	3	1 : 2 : 1	5	1.2	A	0.5
1612	3	1 : 9 : 1	5	1.2	A	0.165
1613	3	1 : 9 : 1	5	1.2	A	0.165
1614	3	1 : 2 : 2	5	1.2	A	0.625
1615	3	1 : 2 : 2	5	1.2	A	0.625
1616	3	1 : 9 : 9	5	1.2	A	0.285
1617	3	1 : 9 : 9	5	1.2	A	0.285
1618	3	1 : 2 : 1	5	1.2	A	0.252

1619	3	1 : 2 : 1	5	1.2	A	0.252
1620	3	1 : 9 : 1	5	1.2	A	0.693
1621	3	1 : 9 : 1	5	1.2	A	0.693
1622	3	1 : 2 : 2	5	1.2	A	0.315
1623	3	1 : 2 : 2	5	1.2	A	0.305
1624	3	1 : 9 : 9	5	1.2	A	0.75
1625	3	1 : 9 : 9	5	1.2	A	0.75
1626	3	1 : 2 : 1	5	1.2	A	0.124
1627	3	1 : 2 : 1	5	1.2	A	0.124
1628	3	1 : 9 : 1	5	1.2	A	0.5
1629	3	1 : 9 : 1	5	1.2	A	0.5
1630	3	1 : 2 : 2	5	1.2	A	0.155
1631	3	1 : 9 : 9	5	1.2	A	0.589
1632	3	1 : 9 : 9	5	1.2	A	0.589
1633	3	1 : 2 : 1	5	1.2	A	0.06
1634	3	1 : 2 : 1	5	1.2	A	0.06
1635	3	1 : 9 : 1	5	1.2	A	0.341
1636	3	1 : 9 : 1	5	1.2	A	0.341
1637	3	1 : 2 : 2	5	1.2	A	0.075
1638	3	1 : 2 : 2	5	1.2	A	0.155
1639	3	1 : 9 : 9	5	1.2	A	0.5
1640	3	1 : 2 : 1	5	1.2	A	0.5
1641	3	1 : 2 : 1	5	1.2	A	0.5
1642	3	1 : 9 : 1	5	1.2	A	0.165
1643	3	1 : 9 : 1	5	1.2	A	0.165
1644	3	1 : 2 : 2	5	1.2	A	0.625
1645	3	1 : 2 : 2	5	1.2	A	0.625
1646	3	1 : 2 : 2	5	1.2	A	0.075
1647	3	1 : 9 : 9	5	1.2	A	0.285
1648	3	1 : 9 : 9	5	1.2	A	0.5
1649	3	1 : 2 : 1	5	1.2	A	0.252
1650	3	1 : 2 : 1	5	1.2	A	0.252
1651	3	1 : 9 : 1	5	1.2	A	0.693
1652	3	1 : 9 : 1	5	1.2	A	0.693
1653	3	1 : 2 : 2	5	1.2	A	0.315
1654	3	1 : 2 : 2	5	1.2	A	0.315
1655	3	1 : 9 : 9	5	1.2	A	0.75
1656	3	1 : 9 : 9	5	1.2	A	0.75
1657	3	1 : 9 : 9	5	1.2	A	0.285
1658	3	1 : 2 : 1	5	1.2	A	0.124
1659	3	1 : 9 : 1	5	1.2	A	0.5
1660	3	1 : 9 : 1	5	1.2	A	0.52

1661	3	1 : 2 : 2	5	1.2	A	0.155
1662	3	1 : 2 : 2	5	1.2	A	0.155
1663	3	1 : 9 : 9	5	1.2	A	0.589
1664	3	1 : 9 : 9	5	1.2	A	0.589
1718	3	1 : 1 : 1	25	1.2	A	0.045
1719	3	1 : 4 : 4	25	1.2	A	0.279
1725	3	1 : 4 : 4	25	1.2	A	0.135
1731	3	1 : 4 : 1	25	1.2	A	0.75
1737	3	1 : 4 : 1	25	1.2	A	0.378
1743	3	1 : 4 : 1	25	1.2	A	0.186
1748	3	1 : 1 : 1	25	1.2	A	0.375
1749	3	1 : 4 : 1	25	1.2	A	0.09
1755	3	1 : 1 : 1	25	1.2	A	0.189
1756	3	1 : 4 : 4	25	1.2	A	0.75
1760	3	1 : 1 : 1	25	1.2	A	0.093
1761	3	1 : 4 : 4	25	1.2	A	0.567
1766	3	1 : 1 : 1	5	1.2	A	0.045
1767	3	1 : 4 : 4	5	1.2	A	0.279
1773	3	1 : 4 : 4	5	1.2	A	0.135
1779	3	1 : 4 : 1	5	1.2	A	0.75
1786	3	1 : 4 : 1	5	1.2	A	0.378
1792	3	1 : 4 : 1	5	1.2	A	0.186
1797	3	1 : 1 : 1	5	1.2	A	0.375
1798	3	1 : 4 : 1	5	1.2	A	0.09
1803	3	1 : 1 : 1	5	1.2	A	0.189
1804	3	1 : 4 : 4	5	1.2	A	0.75
1808	3	1 : 1 : 1	5	1.2	A	0.093
1809	3	1 : 4 : 4	5	1.2	A	0.567
1816	3	1 : 1 : 1	15	1.2	A	0.093
1817	3	1 : 4 : 1	15	1.2	A	0.186
1818	3	1 : 4 : 4	15	1.2	A	0.135
1822	3	1 : 1 : 1	15	1.2	A	0.045
1823	3	1 : 4 : 1	15	1.2	A	0.378
1824	3	1 : 4 : 1	15	1.2	A	0.09
1825	3	1 : 4 : 4	15	1.2	A	0.567
1830	3	1 : 4 : 1	15	1.2	A	0.186
1831	3	1 : 4 : 4	15	1.2	A	0.567
1836	3	1 : 1 : 1	15	1.2	A	0.189
1837	3	1 : 4 : 1	15	1.2	A	0.09
1838	3	1 : 4 : 4	15	1.2	A	0.135
1843	3	1 : 1 : 1	15	1.2	A	0.093
1844	3	1 : 4 : 1	15	1.2	A	0.378

1845	3	1 : 4 : 4	15	1.2	A	0.279
1849	3	1 : 1 : 1	15	1.2	A	0.045
1850	3	1 : 4 : 1	15	1.2	A	0.186
1851	3	1 : 4 : 4	15	1.2	A	0.135
1855	3	1 : 1 : 1	15	1.2	A	0.189
1856	3	1 : 4 : 1	15	1.2	A	0.09
1857	3	1 : 4 : 4	15	1.2	A	0.567
1860	3	1 : 1 : 1	15	1.2	A	0.189
1861	3	1 : 1 : 1	15	1.2	A	0.093
1862	3	1 : 4 : 1	15	1.2	A	0.378
1863	3	1 : 4 : 4	15	1.2	A	0.279
1867	3	1 : 1 : 1	25	1.2	A	0.093
1868	3	1 : 4 : 1	25	1.2	A	0.186
1869	3	1 : 4 : 4	25	1.2	A	0.135
1873	3	1 : 1 : 1	25	1.2	A	0.045
1874	3	1 : 4 : 1	25	1.2	A	0.378
1875	3	1 : 4 : 1	25	1.2	A	0.09
1876	3	1 : 4 : 4	25	1.2	A	0.567
1881	3	1 : 4 : 1	25	1.2	A	0.186
1882	3	1 : 4 : 4	25	1.2	A	0.567
1887	3	1 : 1 : 1	25	1.2	A	0.189
1888	3	1 : 4 : 1	25	1.2	A	0.09
1889	3	1 : 4 : 4	25	1.2	A	0.135
1894	3	1 : 1 : 1	25	1.2	A	0.093
1895	3	1 : 4 : 1	25	1.2	A	0.378
1896	3	1 : 4 : 4	25	1.2	A	0.279
1900	3	1 : 1 : 1	25	1.2	A	0.045
1901	3	1 : 4 : 1	25	1.2	A	0.186
1902	3	1 : 4 : 4	25	1.2	A	0.135
1906	3	1 : 1 : 1	25	1.2	A	0.189
1907	3	1 : 4 : 1	25	1.2	A	0.09
1908	3	1 : 4 : 4	25	1.2	A	0.567
1911	3	1 : 1 : 1	25	1.2	A	0.189
1912	3	1 : 1 : 1	25	1.2	A	0.093
1913	3	1 : 4 : 1	25	1.2	A	0.378
1914	3	1 : 4 : 4	25	1.2	A	0.279
1918	3	1 : 1 : 1	5	1.2	A	0.093
1919	3	1 : 4 : 1	5	1.2	A	0.186
1920	3	1 : 4 : 4	5	1.2	A	0.135
1924	3	1 : 1 : 1	5	1.2	A	0.045
1925	3	1 : 4 : 1	5	1.2	A	0.378
1926	3	1 : 4 : 1	5	1.2	A	0.09

1927	3	1 : 4 : 4	5	1.2	A	0.567
1932	3	1 : 4 : 1	5	1.2	A	0.186
1933	3	1 : 4 : 4	5	1.2	A	0.567
1938	3	1 : 1 : 1	5	1.2	A	0.189
1939	3	1 : 4 : 1	5	1.2	A	0.09
1940	3	1 : 4 : 4	5	1.2	A	0.135
1945	3	1 : 1 : 1	5	1.2	A	0.093
1946	3	1 : 4 : 1	5	1.2	A	0.378
1947	3	1 : 4 : 4	5	1.2	A	0.279
1951	3	1 : 1 : 1	5	1.2	A	0.045
1952	3	1 : 4 : 1	5	1.2	A	0.186
1953	3	1 : 4 : 4	5	1.2	A	0.135
1956	3	1 : 1 : 1	5	1.2	A	0.189
1957	3	1 : 4 : 1	5	1.2	A	0.09
1958	3	1 : 4 : 4	5	1.2	A	0.567
1961	3	1 : 1 : 1	5	1.2	A	0.189
1962	3	1 : 1 : 1	5	1.2	A	0.093
1963	3	1 : 4 : 1	5	1.2	A	0.378
1964	3	1 : 4 : 4	5	1.2	A	0.279
2022	3	1 : 1 : 1	15	1.2	A	0.045
2023	3	1 : 4 : 1	15	1.2	A	0.186
2024	3	1 : 4 : 1	15	1.2	A	0.186
2025	3	1 : 4 : 4	15	1.2	A	0.567
2030	3	1 : 1 : 1	15	1.2	A	0.375
2031	3	1 : 1 : 1	15	1.2	A	0.375
2032	3	1 : 4 : 1	15	1.2	A	0.09
2033	3	1 : 4 : 1	15	1.2	A	0.09
2034	3	1 : 4 : 4	15	1.2	A	0.279
2039	3	1 : 1 : 1	15	1.2	A	0.189
2040	3	1 : 1 : 1	15	1.2	A	0.189
2041	3	1 : 4 : 1	15	1.2	A	0.75
2042	3	1 : 4 : 4	15	1.2	A	0.75
2043	3	1 : 4 : 4	15	1.2	A	0.135
2048	3	1 : 1 : 1	15	1.2	A	0.093
2049	3	1 : 4 : 1	15	1.2	A	0.378
2050	3	1 : 4 : 4	15	1.2	A	0.567
2051	3	1 : 4 : 4	15	1.2	A	0.75
2057	3	1 : 1 : 1	15	1.2	A	0.045
2058	3	1 : 1 : 1	15	1.2	A	0.093
2059	3	1 : 4 : 1	15	1.2	A	0.186
2060	3	1 : 4 : 4	15	1.2	A	0.567
2066	3	1 : 1 : 1	15	1.2	A	0.375

2067	3	1 : 1 : 1	15	1.2	A	0.045
2068	3	1 : 4 : 1	15	1.2	A	0.09
2069	3	1 : 4 : 4	15	1.2	A	0.279
2070	3	1 : 4 : 4	15	1.2	A	0.279
2076	3	1 : 1 : 1	15	1.2	A	0.189
2077	3	1 : 4 : 1	15	1.2	A	0.75
2078	3	1 : 4 : 1	15	1.2	A	0.568
2079	3	1 : 4 : 4	15	1.2	A	0.135
2080	3	1 : 4 : 4	15	1.2	A	0.135
2085	3	1 : 1 : 1	15	1.2	A	0.093
2086	3	1 : 4 : 1	15	1.2	A	0.378
2087	3	1 : 4 : 1	15	1.2	A	0.378
2088	3	1 : 4 : 4	15	1.2	A	0.75
2093	3	1 : 1 : 1	25	1.2	A	0.045
2094	3	1 : 4 : 1	25	1.2	A	0.186
2095	3	1 : 4 : 1	25	1.2	A	0.186
2096	3	1 : 4 : 4	25	1.2	A	0.567
2101	3	1 : 1 : 1	25	1.2	A	0.375
2102	3	1 : 1 : 1	25	1.2	A	0.375
2103	3	1 : 4 : 1	25	1.2	A	0.09
2104	3	1 : 4 : 1	25	1.2	A	0.09
2105	3	1 : 4 : 4	25	1.2	A	0.279
2110	3	1 : 1 : 1	25	1.2	A	0.189
2111	3	1 : 1 : 1	25	1.2	A	0.189
2112	3	1 : 4 : 1	25	1.2	A	0.75
2113	3	1 : 4 : 4	25	1.2	A	0.75
2114	3	1 : 4 : 4	25	1.2	A	0.135
2119	3	1 : 1 : 1	25	1.2	A	0.093
2120	3	1 : 4 : 1	25	1.2	A	0.378
2121	3	1 : 4 : 4	25	1.2	A	0.567
2122	3	1 : 4 : 4	25	1.2	A	0.75
2128	3	1 : 1 : 1	25	1.2	A	0.045
2129	3	1 : 1 : 1	25	1.2	A	0.093
2130	3	1 : 4 : 1	25	1.2	A	0.186
2131	3	1 : 4 : 4	25	1.2	A	0.567
2137	3	1 : 1 : 1	25	1.2	A	0.375
2138	3	1 : 1 : 1	25	1.2	A	0.045
2139	3	1 : 4 : 1	25	1.2	A	0.09
2140	3	1 : 4 : 4	25	1.2	A	0.279
2141	3	1 : 4 : 4	25	1.2	A	0.279
2147	3	1 : 1 : 1	25	1.2	A	0.189
2148	3	1 : 4 : 1	25	1.2	A	0.75

2149	3	1 : 4 : 1	25	1.2	A	0.568
2150	3	1 : 4 : 4	25	1.2	A	0.135
2151	3	1 : 4 : 4	25	1.2	A	0.135
2156	3	1 : 1 : 1	25	1.2	A	0.093
2157	3	1 : 4 : 1	25	1.2	A	0.378
2158	3	1 : 4 : 1	25	1.2	A	0.378
2159	3	1 : 4 : 4	25	1.2	A	0.75
2164	3	1 : 1 : 1	5	1.2	A	0.045
2165	3	1 : 4 : 1	5	1.2	A	0.186
2166	3	1 : 4 : 1	5	1.2	A	0.186
2167	3	1 : 4 : 4	5	1.2	A	0.567
2172	3	1 : 1 : 1	5	1.2	A	0.375
2173	3	1 : 1 : 1	5	1.2	A	0.375
2174	3	1 : 4 : 1	5	1.2	A	0.09
2175	3	1 : 4 : 1	5	1.2	A	0.09
2176	3	1 : 4 : 4	5	1.2	A	0.279
2181	3	1 : 1 : 1	5	1.2	A	0.189
2182	3	1 : 1 : 1	5	1.2	A	0.189
2183	3	1 : 4 : 1	5	1.2	A	0.75
2184	3	1 : 4 : 4	5	1.2	A	0.75
2185	3	1 : 4 : 4	5	1.2	A	0.135
2190	3	1 : 1 : 1	5	1.2	A	0.093
2191	3	1 : 4 : 1	5	1.2	A	0.378
2192	3	1 : 4 : 4	5	1.2	A	0.567
2193	3	1 : 4 : 4	5	1.2	A	0.75
2199	3	1 : 1 : 1	5	1.2	A	0.045
2200	3	1 : 1 : 1	5	1.2	A	0.093
2201	3	1 : 4 : 1	5	1.2	A	0.186
2202	3	1 : 4 : 4	5	1.2	A	0.567
2208	3	1 : 1 : 1	5	1.2	A	0.375
2209	3	1 : 1 : 1	5	1.2	A	0.045
2210	3	1 : 4 : 1	5	1.2	A	0.09
2211	3	1 : 4 : 4	5	1.2	A	0.279
2212	3	1 : 4 : 4	5	1.2	A	0.279
2218	3	1 : 1 : 1	5	1.2	A	0.189
2219	3	1 : 4 : 1	5	1.2	A	0.75
2220	3	1 : 4 : 1	5	1.2	A	0.568
2221	3	1 : 4 : 4	5	1.2	A	0.135
2222	3	1 : 4 : 4	5	1.2	A	0.135
2228	3	1 : 1 : 1	5	1.2	A	0.093
2229	3	1 : 4 : 1	5	1.2	A	0.378
2230	3	1 : 4 : 1	5	1.2	A	0.378

2231	3	1 : 4 : 4	5	1.2	A	0.75
2812	3	1 : 1 : 1	15	1.2	A	0.189
2813	3	1 : 4 : 1	15	1.2	A	0.186
2814	3	1 : 4 : 4	15	1.2	A	0.567
2815	3	1 : 4 : 4	15	1.2	A	0.279
2819	3	1 : 1 : 1	15	1.2	A	0.093
2820	3	1 : 4 : 1	15	1.2	A	0.09
2821	3	1 : 4 : 4	15	1.2	A	0.279
2822	3	1 : 4 : 4	15	1.2	A	0.135
2827	3	1 : 4 : 1	15	1.2	A	0.378
2828	3	1 : 4 : 4	15	1.2	A	0.135
2833	3	1 : 1 : 1	15	1.2	A	0.045
2834	3	1 : 4 : 1	15	1.2	A	0.186
2839	3	1 : 1 : 1	15	1.2	A	0.189
2840	3	1 : 4 : 1	15	1.2	A	0.09
2841	3	1 : 4 : 4	15	1.2	A	0.567
2845	3	1 : 1 : 1	15	1.2	A	0.189
2846	3	1 : 1 : 1	15	1.2	A	0.093
2847	3	1 : 4 : 1	15	1.2	A	0.378
2848	3	1 : 4 : 4	15	1.2	A	0.279
2852	3	1 : 1 : 1	15	1.2	A	0.093
2853	3	1 : 1 : 1	15	1.2	A	0.045
2854	3	1 : 4 : 1	15	1.2	A	0.186
2855	3	1 : 4 : 4	15	1.2	A	0.135
2859	3	1 : 1 : 1	15	1.2	A	0.045
2860	3	1 : 4 : 1	15	1.2	A	0.378
2861	3	1 : 4 : 1	15	1.2	A	0.09
2862	3	1 : 4 : 4	15	1.2	A	0.567
2866	3	1 : 1 : 1	25	1.2	A	0.189
2867	3	1 : 4 : 1	25	1.2	A	0.186
2868	3	1 : 4 : 4	25	1.2	A	0.567
2869	3	1 : 4 : 4	25	1.2	A	0.279
2873	3	1 : 1 : 1	25	1.2	A	0.093
2874	3	1 : 4 : 1	25	1.2	A	0.09
2875	3	1 : 4 : 4	25	1.2	A	0.279
2876	3	1 : 4 : 4	25	1.2	A	0.135
2881	3	1 : 4 : 1	25	1.2	A	0.378
2882	3	1 : 4 : 4	25	1.2	A	0.135
2887	3	1 : 1 : 1	25	1.2	A	0.045
2888	3	1 : 4 : 1	25	1.2	A	0.186
2893	3	1 : 1 : 1	25	1.2	A	0.189
2894	3	1 : 4 : 1	25	1.2	A	0.09

2895	3	1 : 4 : 4	25	1.2	A	0.567
2899	3	1 : 1 : 1	25	1.2	A	0.189
2900	3	1 : 1 : 1	25	1.2	A	0.093
2901	3	1 : 4 : 1	25	1.2	A	0.378
2902	3	1 : 4 : 4	25	1.2	A	0.279
2906	3	1 : 1 : 1	25	1.2	A	0.093
2907	3	1 : 1 : 1	25	1.2	A	0.045
2908	3	1 : 4 : 1	25	1.2	A	0.186
2909	3	1 : 4 : 4	25	1.2	A	0.135
2913	3	1 : 1 : 1	25	1.2	A	0.045
2914	3	1 : 4 : 1	25	1.2	A	0.378
2915	3	1 : 4 : 1	25	1.2	A	0.09
2916	3	1 : 4 : 4	25	1.2	A	0.567
2920	3	1 : 1 : 1	5	1.2	A	0.189
2921	3	1 : 4 : 1	5	1.2	A	0.186
2922	3	1 : 4 : 4	5	1.2	A	0.567
2923	3	1 : 4 : 4	5	1.2	A	0.279
2927	3	1 : 1 : 1	5	1.2	A	0.093
2928	3	1 : 4 : 1	5	1.2	A	0.09
2929	3	1 : 4 : 4	5	1.2	A	0.279
2930	3	1 : 4 : 4	5	1.2	A	0.135
2935	3	1 : 4 : 1	5	1.2	A	0.378
2936	3	1 : 4 : 4	5	1.2	A	0.135
2941	3	1 : 1 : 1	5	1.2	A	0.045
2942	3	1 : 4 : 1	5	1.2	A	0.186
2947	3	1 : 1 : 1	5	1.2	A	0.189
2948	3	1 : 4 : 1	5	1.2	A	0.09
2949	3	1 : 4 : 4	5	1.2	A	0.567
2953	3	1 : 1 : 1	5	1.2	A	0.189
2954	3	1 : 1 : 1	5	1.2	A	0.093
2955	3	1 : 4 : 1	5	1.2	A	0.378
2956	3	1 : 4 : 4	5	1.2	A	0.279
2960	3	1 : 1 : 1	5	1.2	A	0.093
2961	3	1 : 1 : 1	5	1.2	A	0.045
2962	3	1 : 4 : 1	5	1.2	A	0.186
2963	3	1 : 4 : 4	5	1.2	A	0.135
2967	3	1 : 1 : 1	5	1.2	A	0.045
2968	3	1 : 4 : 1	5	1.2	A	0.378
2969	3	1 : 4 : 1	5	1.2	A	0.09
2970	3	1 : 4 : 4	5	1.2	A	0.567
3522	3	1 : 1 : 5	24	15	B	0.2
3523	3	1 : 1 : 5	24	15	B	0.5

3524	3	1 : 10 : 20	24	15	B	0.2
3525	3	1 : 10 : 20	24	15	B	0.5
3526	3	1 : 2 : 3	24	15	B	0.2
3527	3	1 : 2 : 3	24	15	B	0.5
3528	3	10 : 5 : 1	24	15	B	0.2
3529	3	10 : 5 : 1	24	15	B	0.5
3530	3	3 : 1 : 1	24	15	B	0.2
3531	3	3 : 1 : 1	24	15	B	0.5
3532	3	1 : 1 : 5	24	15	B	0.2
3533	3	1 : 1 : 5	24	15	B	0.9
3534	3	1 : 2 : 10	24	15	B	0.2
3535	3	1 : 2 : 10	24	15	B	0.9
3536	3	1 : 5 : 10	24	15	B	0.2
3537	3	1 : 5 : 10	24	15	B	0.9
3538	3	20 : 10 : 1	24	15	B	0.2
3539	3	20 : 10 : 1	24	15	B	0.9
3540	3	3 : 2 : 1	24	15	B	0.2
3541	3	3 : 2 : 1	24	15	B	0.9
3542	3	1 : 10 : 20	24	15	B	0.5
3543	3	1 : 10 : 20	24	15	B	0.9
3544	3	1 : 2 : 10	24	15	B	0.5
3545	3	1 : 2 : 10	24	15	B	0.9
3546	3	1 : 2 : 3	24	15	B	0.9
3547	3	10 : 5 : 1	24	15	B	0.5
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3549	3	3 : 1 : 1	24	15	B	0.5
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3551	3	1 : 1 : 5	24	15	B	0.2
3552	3	1 : 1 : 5	24	15	B	0.5
3553	3	1 : 2 : 3	24	15	B	0.2
3554	3	1 : 2 : 3	24	15	B	0.5
3555	3	1 : 5 : 10	24	15	B	0.2
3556	3	1 : 5 : 10	24	15	B	0.5
3557	3	20 : 10 : 1	24	15	B	0.2
3558	3	20 : 10 : 1	24	15	B	0.5
3559	3	3 : 2 : 1	24	15	B	0.2
3560	3	3 : 2 : 1	24	15	B	0.5
3561	3	1 : 1 : 5	24	15	B	0.9
3562	3	1 : 10 : 20	24	15	B	0.2
3563	3	1 : 10 : 20	24	15	B	0.9
3564	3	1 : 5 : 10	24	15	B	0.2
3565	3	1 : 5 : 10	24	15	B	0.9

3566	3	10 : 5 : 1	24	15	B	0.2
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3576	3	20 : 10 : 1	24	15	B	0.5
3577	3	20 : 10 : 1	24	15	B	0.9
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3582	3	1 : 5 : 10	24	15	B	0.5
3583	3	10 : 5 : 1	24	15	B	0.2
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3589	3	1 : 10 : 20	24	15	B	0.2
3590	3	1 : 10 : 20	24	15	B	0.9
3591	3	1 : 2 : 10	24	15	B	0.2
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3594	3	10 : 5 : 1	24	15	B	0.2
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3607	3	1 : 1 : 5	24	15	B	0.5

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3610	3	1 : 2 : 3	24	15	B	0.2
3611	3	1 : 2 : 3	24	15	B	0.5
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3644	3	1 : 1 : 5	24	15	B	0.2
3645	3	1 : 1 : 5	24	15	B	0.9
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3663	3	1 : 1 : 5	24	15	B	0.2
3664	3	1 : 1 : 5	24	15	B	0.5
3665	3	1 : 5 : 10	24	15	B	0.2
3666	3	1 : 5 : 10	24	15	B	0.5
3667	3	10 : 5 : 1	24	15	B	0.2
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3690	3	3 : 2 : 1	24	15	B	0.5
3691	3	3 : 2 : 1	24	15	B	0.9

3692	3	1 : 10 : 20	24	15	B	0.9
3693	3	1 : 2 : 10	24	15	B	0.2
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3701	3	10 : 5 : 1	24	15	B	0.2
3702	3	3 : 1 : 1	24	15	B	0.2
3703	3	3 : 1 : 1	24	15	B	0.2
3704	3	3 : 1 : 1	24	15	B	0.9
3705	3	3 : 1 : 1	24	15	B	0.9
3717	3	2 : 2 : 2	24	15	B	1.1
3718	3	2 : 2 : 2	24	15	B	1.1
3721	3	20 : 5 : 2	24	15	B	1.1
3723	3	5 : 1 : 1	24	15	B	1.1
3724	3	5 : 1 : 1	24	15	B	1.1
3762	3	1 : 1 : 1	24	15	B	3.1
3763	3	1 : 1 : 1	24	15	B	3.1
3837	3	10 : 5 : 1	15	1.2	C	0.17
3838	3	10 : 5 : 1	15	1.2	C	0.17
3839	3	10 : 5 : 1	15	1.2	C	0.5
3840	3	10 : 5 : 1	15	1.2	C	0.5
3841	3	10 : 5 : 1	15	1.2	C	1.5
3842	3	1 : 1 : 1	15	1.2	C	0.17
3843	3	1 : 1 : 1	15	1.2	C	0.17
3844	3	1 : 1 : 1	15	1.2	C	0.5
3845	3	1 : 1 : 1	15	1.2	C	1.5
3846	3	3 : 2 : 1	15	1.2	C	0.17
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3864	3	3 : 2 : 1	15	1.2	C	0.17
3865	3	3 : 2 : 1	15	1.2	C	0.17
3866	3	3 : 2 : 1	15	1.2	C	0.5

3867	3	3 : 2 : 1	15	1.2	C	0.5
3868	3	3 : 2 : 1	15	1.2	C	1.5
3869	3	5 : 1 : 1	15	1.2	C	0.17
3870	3	5 : 1 : 1	15	1.2	C	0.17
3871	3	5 : 1 : 1	15	1.2	C	0.5
3872	3	5 : 1 : 1	15	1.2	C	1.5
3910	3	1 : 1 : 1	15	1.2	C	1.5
3911	3	1 : 1 : 1	15	1.2	C	1.5
3912	3	1 : 1 : 1	15	1.2	C	1.5
1720	4	1 : 1 : 1 : 1	25	1.2	A	0.124
1726	4	1 : 1 : 1 : 1	25	1.2	A	0.06
1732	4	1 : 2 : 2 : 1	25	1.2	A	0.75
1738	4	1 : 2 : 2 : 1	25	1.2	A	0.378
1739	4	1 : 1 : 4 : 1	25	1.2	A	0.75
1744	4	1 : 2 : 2 : 1	25	1.2	A	0.186
1745	4	1 : 1 : 4 : 1	25	1.2	A	0.441
1750	4	1 : 2 : 2 : 1	25	1.2	A	0.09
1751	4	1 : 1 : 4 : 1	25	1.2	A	0.217
1757	4	1 : 1 : 1 : 1	25	1.2	A	0.5
1758	4	1 : 1 : 4 : 1	25	1.2	A	0.105
1762	4	1 : 1 : 1 : 1	25	1.2	A	0.252
1768	4	1 : 1 : 1 : 1	5	1.2	A	0.124
1774	4	1 : 1 : 1 : 1	5	1.2	A	0.06
1780	4	1 : 2 : 2 : 1	5	1.2	A	0.75
1787	4	1 : 2 : 2 : 1	5	1.2	A	0.378
1788	4	1 : 1 : 4 : 1	5	1.2	A	0.75
1793	4	1 : 2 : 2 : 1	5	1.2	A	0.186
1794	4	1 : 1 : 4 : 1	5	1.2	A	0.441
1799	4	1 : 2 : 2 : 1	5	1.2	A	0.09
1800	4	1 : 1 : 4 : 1	5	1.2	A	0.217
1805	4	1 : 1 : 1 : 1	5	1.2	A	0.5
1806	4	1 : 1 : 4 : 1	5	1.2	A	0.105
1810	4	1 : 1 : 1 : 1	5	1.2	A	0.252
2232	4	1 : 1 : 4 : 1	15	1.2	A	0.441
2233	4	1 : 4 : 4 : 4	15	1.2	A	0.403
2237	4	1 : 1 : 1 : 1	15	1.2	A	0.06
2238	4	1 : 4 : 4 : 4	15	1.2	A	0.195
2242	4	1 : 1 : 4 : 1	15	1.2	A	0.441
2243	4	1 : 1 : 4 : 1	15	1.2	A	0.217
2244	4	1 : 4 : 4 : 4	15	1.2	A	0.75
2246	4	1 : 1 : 1 : 1	15	1.2	A	0.06
2247	4	1 : 1 : 4 : 1	15	1.2	A	0.217

2248	4	1 : 1 : 4 : 1	15	1.2	A	0.105
2249	4	1 : 4 : 4 : 4	15	1.2	A	0.403
2252	4	1 : 1 : 1 : 1	15	1.2	A	0.252
2253	4	1 : 1 : 4 : 1	15	1.2	A	0.105
2254	4	1 : 4 : 4 : 4	15	1.2	A	0.75
2255	4	1 : 4 : 4 : 4	15	1.2	A	0.195
2258	4	1 : 1 : 1 : 1	15	1.2	A	0.124
2259	4	1 : 1 : 4 : 1	15	1.2	A	0.441
2260	4	1 : 4 : 4 : 4	15	1.2	A	0.403
2263	4	1 : 1 : 1 : 1	15	1.2	A	0.06
2264	4	1 : 1 : 4 : 1	15	1.2	A	0.217
2265	4	1 : 4 : 4 : 4	15	1.2	A	0.195
2268	4	1 : 1 : 1 : 1	15	1.2	A	0.252
2269	4	1 : 1 : 4 : 1	15	1.2	A	0.105
2270	4	1 : 4 : 4 : 4	15	1.2	A	0.75
2274	4	1 : 1 : 4 : 1	25	1.2	A	0.441
2275	4	1 : 4 : 4 : 4	25	1.2	A	0.403
2279	4	1 : 1 : 1 : 1	25	1.2	A	0.06
2280	4	1 : 4 : 4 : 4	25	1.2	A	0.195
2284	4	1 : 1 : 4 : 1	25	1.2	A	0.441
2285	4	1 : 1 : 4 : 1	25	1.2	A	0.217
2286	4	1 : 4 : 4 : 4	25	1.2	A	0.75
2288	4	1 : 1 : 1 : 1	25	1.2	A	0.06
2289	4	1 : 1 : 4 : 1	25	1.2	A	0.217
2290	4	1 : 1 : 4 : 1	25	1.2	A	0.105
2291	4	1 : 4 : 4 : 4	25	1.2	A	0.403
2294	4	1 : 1 : 1 : 1	25	1.2	A	0.252
2295	4	1 : 1 : 4 : 1	25	1.2	A	0.105
2296	4	1 : 4 : 4 : 4	25	1.2	A	0.75
2297	4	1 : 4 : 4 : 4	25	1.2	A	0.195
2300	4	1 : 1 : 1 : 1	25	1.2	A	0.124
2301	4	1 : 1 : 4 : 1	25	1.2	A	0.441
2302	4	1 : 4 : 4 : 4	25	1.2	A	0.403
2305	4	1 : 1 : 1 : 1	25	1.2	A	0.06
2306	4	1 : 1 : 4 : 1	25	1.2	A	0.217
2307	4	1 : 4 : 4 : 4	25	1.2	A	0.195
2310	4	1 : 1 : 1 : 1	25	1.2	A	0.252
2311	4	1 : 1 : 4 : 1	25	1.2	A	0.105
2312	4	1 : 4 : 4 : 4	25	1.2	A	0.75
2316	4	1 : 1 : 4 : 1	5	1.2	A	0.441
2317	4	1 : 4 : 4 : 4	5	1.2	A	0.403
2321	4	1 : 1 : 1 : 1	5	1.2	A	0.06

2322	4	1 : 4 : 4 : 4	5	1.2	A	0.195
2326	4	1 : 1 : 4 : 1	5	1.2	A	0.441
2327	4	1 : 1 : 4 : 1	5	1.2	A	0.217
2328	4	1 : 4 : 4 : 4	5	1.2	A	0.75
2330	4	1 : 1 : 1 : 1	5	1.2	A	0.06
2331	4	1 : 1 : 4 : 1	5	1.2	A	0.217
2332	4	1 : 1 : 4 : 1	5	1.2	A	0.105
2333	4	1 : 4 : 4 : 4	5	1.2	A	0.403
2336	4	1 : 1 : 1 : 1	5	1.2	A	0.252
2337	4	1 : 1 : 4 : 1	5	1.2	A	0.105
2338	4	1 : 4 : 4 : 4	5	1.2	A	0.75
2339	4	1 : 4 : 4 : 4	5	1.2	A	0.195
2342	4	1 : 1 : 1 : 1	5	1.2	A	0.124
2343	4	1 : 1 : 4 : 1	5	1.2	A	0.441
2344	4	1 : 4 : 4 : 4	5	1.2	A	0.403
2347	4	1 : 1 : 1 : 1	5	1.2	A	0.06
2348	4	1 : 1 : 4 : 1	5	1.2	A	0.217
2349	4	1 : 4 : 4 : 4	5	1.2	A	0.195
2352	4	1 : 1 : 1 : 1	5	1.2	A	0.252
2353	4	1 : 1 : 4 : 1	5	1.2	A	0.105
2354	4	1 : 4 : 4 : 4	5	1.2	A	0.75
2357	4	1 : 1 : 1 : 1	15	1.2	A	0.06
2358	4	1 : 1 : 4 : 1	15	1.2	A	0.105
2359	4	1 : 1 : 4 : 1	15	1.2	A	0.217
2360	4	1 : 2 : 2 : 1	15	1.2	A	0.186
2365	4	1 : 1 : 1 : 1	15	1.2	A	0.5
2366	4	1 : 1 : 1 : 1	15	1.2	A	0.5
2367	4	1 : 1 : 4 : 1	15	1.2	A	0.105
2368	4	1 : 2 : 2 : 1	15	1.2	A	0.09
2374	4	1 : 1 : 1 : 1	15	1.2	A	0.252
2375	4	1 : 1 : 1 : 1	15	1.2	A	0.252
2376	4	1 : 1 : 4 : 1	15	1.2	A	0.75
2377	4	1 : 2 : 2 : 1	15	1.2	A	0.75
2383	4	1 : 1 : 1 : 1	15	1.2	A	0.124
2384	4	1 : 1 : 1 : 1	15	1.2	A	0.124
2385	4	1 : 1 : 4 : 1	15	1.2	A	0.441
2386	4	1 : 2 : 2 : 1	15	1.2	A	0.378
2387	4	1 : 2 : 2 : 1	15	1.2	A	0.75
2392	4	1 : 1 : 1 : 1	15	1.2	A	0.06
2393	4	1 : 1 : 1 : 1	15	1.2	A	0.06
2394	4	1 : 1 : 4 : 1	15	1.2	A	0.217
2395	4	1 : 2 : 2 : 1	15	1.2	A	0.186

2396	4	1 : 2 : 2 : 1	15	1.2	A	0.378
2401	4	1 : 1 : 1 : 1	15	1.2	A	0.5
2402	4	1 : 1 : 4 : 1	15	1.2	A	0.75
2403	4	1 : 1 : 4 : 1	15	1.2	A	0.105
2404	4	1 : 2 : 2 : 1	15	1.2	A	0.09
2405	4	1 : 2 : 2 : 1	15	1.2	A	0.186
2411	4	1 : 1 : 1 : 1	15	1.2	A	0.252
2412	4	1 : 1 : 4 : 1	15	1.2	A	0.441
2413	4	1 : 1 : 4 : 1	15	1.2	A	0.75
2414	4	1 : 2 : 2 : 1	15	1.2	A	0.75
2415	4	1 : 2 : 2 : 1	15	1.2	A	0.09
2421	4	1 : 1 : 1 : 1	15	1.2	A	0.124
2422	4	1 : 1 : 4 : 1	15	1.2	A	0.217
2423	4	1 : 1 : 4 : 1	15	1.2	A	0.441
2424	4	1 : 2 : 2 : 1	15	1.2	A	0.378
2429	4	1 : 1 : 1 : 1	25	1.2	A	0.06
2430	4	1 : 1 : 4 : 1	25	1.2	A	0.105
2431	4	1 : 1 : 4 : 1	25	1.2	A	0.217
2432	4	1 : 2 : 2 : 1	25	1.2	A	0.186
2437	4	1 : 1 : 1 : 1	25	1.2	A	0.5
2438	4	1 : 1 : 1 : 1	25	1.2	A	0.5
2439	4	1 : 1 : 4 : 1	25	1.2	A	0.105
2440	4	1 : 2 : 2 : 1	25	1.2	A	0.09
2446	4	1 : 1 : 1 : 1	25	1.2	A	0.252
2447	4	1 : 1 : 1 : 1	25	1.2	A	0.252
2448	4	1 : 1 : 4 : 1	25	1.2	A	0.75
2449	4	1 : 2 : 2 : 1	25	1.2	A	0.75
2455	4	1 : 1 : 1 : 1	25	1.2	A	0.124
2456	4	1 : 1 : 1 : 1	25	1.2	A	0.124
2457	4	1 : 1 : 4 : 1	25	1.2	A	0.441
2458	4	1 : 2 : 2 : 1	25	1.2	A	0.378
2459	4	1 : 2 : 2 : 1	25	1.2	A	0.75
2464	4	1 : 1 : 1 : 1	25	1.2	A	0.06
2465	4	1 : 1 : 1 : 1	25	1.2	A	0.06
2466	4	1 : 1 : 4 : 1	25	1.2	A	0.217
2467	4	1 : 2 : 2 : 1	25	1.2	A	0.186
2468	4	1 : 2 : 2 : 1	25	1.2	A	0.378
2473	4	1 : 1 : 1 : 1	25	1.2	A	0.5
2474	4	1 : 1 : 4 : 1	25	1.2	A	0.75
2475	4	1 : 1 : 4 : 1	25	1.2	A	0.105
2476	4	1 : 2 : 2 : 1	25	1.2	A	0.09
2477	4	1 : 2 : 2 : 1	25	1.2	A	0.186

2483	4	1 : 1 : 1 : 1	25	1.2	A	0.252
2484	4	1 : 1 : 4 : 1	25	1.2	A	0.441
2485	4	1 : 1 : 4 : 1	25	1.2	A	0.75
2486	4	1 : 2 : 2 : 1	25	1.2	A	0.75
2487	4	1 : 2 : 2 : 1	25	1.2	A	0.09
2493	4	1 : 1 : 1 : 1	25	1.2	A	0.124
2494	4	1 : 1 : 4 : 1	25	1.2	A	0.217
2495	4	1 : 1 : 4 : 1	25	1.2	A	0.441
2496	4	1 : 2 : 2 : 1	25	1.2	A	0.378
2501	4	1 : 1 : 1 : 1	5	1.2	A	0.06
2502	4	1 : 1 : 4 : 1	5	1.2	A	0.105
2503	4	1 : 1 : 4 : 1	5	1.2	A	0.217
2504	4	1 : 2 : 2 : 1	5	1.2	A	0.186
2509	4	1 : 1 : 1 : 1	5	1.2	A	0.5
2510	4	1 : 1 : 1 : 1	5	1.2	A	0.5
2511	4	1 : 1 : 4 : 1	5	1.2	A	0.105
2512	4	1 : 2 : 2 : 1	5	1.2	A	0.09
2518	4	1 : 1 : 1 : 1	5	1.2	A	0.252
2519	4	1 : 1 : 1 : 1	5	1.2	A	0.252
2520	4	1 : 1 : 4 : 1	5	1.2	A	0.75
2521	4	1 : 2 : 2 : 1	5	1.2	A	0.75
2527	4	1 : 1 : 1 : 1	5	1.2	A	0.124
2528	4	1 : 1 : 1 : 1	5	1.2	A	0.124
2529	4	1 : 1 : 4 : 1	5	1.2	A	0.441
2530	4	1 : 2 : 2 : 1	5	1.2	A	0.378
2531	4	1 : 2 : 2 : 1	5	1.2	A	0.75
2536	4	1 : 1 : 1 : 1	5	1.2	A	0.06
2537	4	1 : 1 : 1 : 1	5	1.2	A	0.06
2538	4	1 : 1 : 4 : 1	5	1.2	A	0.217
2539	4	1 : 2 : 2 : 1	5	1.2	A	0.186
2540	4	1 : 2 : 2 : 1	5	1.2	A	0.378
2545	4	1 : 1 : 1 : 1	5	1.2	A	0.5
2546	4	1 : 1 : 4 : 1	5	1.2	A	0.75
2547	4	1 : 1 : 4 : 1	5	1.2	A	0.105
2548	4	1 : 2 : 2 : 1	5	1.2	A	0.09
2549	4	1 : 2 : 2 : 1	5	1.2	A	0.186
2555	4	1 : 1 : 1 : 1	5	1.2	A	0.252
2556	4	1 : 1 : 4 : 1	5	1.2	A	0.441
2557	4	1 : 1 : 4 : 1	5	1.2	A	0.75
2558	4	1 : 2 : 2 : 1	5	1.2	A	0.75
2559	4	1 : 2 : 2 : 1	5	1.2	A	0.09
2565	4	1 : 1 : 1 : 1	5	1.2	A	0.124

2566	4	1 : 1 : 4 : 1	5	1.2	A	0.217
2567	4	1 : 1 : 4 : 1	5	1.2	A	0.441
2568	4	1 : 2 : 2 : 1	5	1.2	A	0.378
2573	4	1 : 1 : 2 : 1	15	1.2	A	0.075
2574	4	1 : 1 : 2 : 1	15	1.2	A	0.075
2575	4	1 : 1 : 9 : 1	15	1.2	A	0.372
2576	4	1 : 1 : 9 : 1	15	1.2	A	0.372
2577	4	1 : 4 : 4 : 1	15	1.2	A	0.63
2578	4	1 : 4 : 4 : 1	15	1.2	A	0.63
2579	4	1 : 9 : 9 : 1	15	1.2	A	0.5
2580	4	1 : 4 : 4 : 4	15	1.2	A	0.5
2581	4	1 : 4 : 4 : 4	15	1.2	A	0.5
2582	4	1 : 1 : 2 : 1	15	1.2	A	0.625
2583	4	1 : 1 : 2 : 1	15	1.2	A	0.625
2584	4	1 : 1 : 9 : 1	15	1.2	A	0.18
2585	4	1 : 1 : 9 : 1	15	1.2	A	0.18
2586	4	1 : 4 : 4 : 1	15	1.2	A	0.31
2587	4	1 : 4 : 4 : 1	15	1.2	A	0.31
2588	4	1 : 9 : 9 : 1	15	1.2	A	0.3
2589	4	1 : 9 : 9 : 1	15	1.2	A	0.3
2590	4	1 : 4 : 4 : 4	15	1.2	A	0.403
2591	4	1 : 4 : 4 : 4	15	1.2	A	0.403
2592	4	1 : 1 : 2 : 1	15	1.2	A	0.315
2593	4	1 : 1 : 2 : 1	15	1.2	A	0.315
2594	4	1 : 1 : 9 : 1	15	1.2	A	0.75
2595	4	1 : 1 : 9 : 1	15	1.2	A	0.75
2596	4	1 : 4 : 4 : 1	15	1.2	A	0.15
2597	4	1 : 4 : 4 : 1	15	1.2	A	0.15
2598	4	1 : 9 : 9 : 1	15	1.2	A	0.75
2599	4	1 : 9 : 9 : 1	15	1.2	A	0.75
2600	4	1 : 4 : 4 : 4	15	1.2	A	0.195
2601	4	1 : 4 : 4 : 4	15	1.2	A	0.195
2602	4	1 : 1 : 2 : 1	15	1.2	A	0.155
2603	4	1 : 1 : 2 : 1	15	1.2	A	0.155
2604	4	1 : 1 : 9 : 1	15	1.2	A	0.5
2605	4	1 : 1 : 9 : 1	15	1.2	A	0.5
2606	4	1 : 4 : 4 : 1	15	1.2	A	0.75
2607	4	1 : 4 : 4 : 1	15	1.2	A	0.75
2608	4	1 : 9 : 9 : 1	15	1.2	A	0.62
2609	4	1 : 9 : 9 : 1	15	1.2	A	0.62
2610	4	1 : 4 : 4 : 4	15	1.2	A	0.75
2611	4	1 : 4 : 4 : 4	15	1.2	A	0.75

2612	4	1 : 1 : 2 : 1	15	1.2	A	0.075
2613	4	1 : 1 : 2 : 1	15	1.2	A	0.075
2614	4	1 : 1 : 9 : 1	15	1.2	A	0.372
2615	4	1 : 1 : 9 : 1	15	1.2	A	0.372
2616	4	1 : 4 : 4 : 1	15	1.2	A	0.63
2617	4	1 : 4 : 4 : 1	15	1.2	A	0.63
2618	4	1 : 9 : 9 : 1	15	1.2	A	0.5
2619	4	1 : 4 : 4 : 4	15	1.2	A	0.5
2620	4	1 : 4 : 4 : 4	15	1.2	A	0.5
2621	4	1 : 1 : 2 : 1	15	1.2	A	0.625
2622	4	1 : 1 : 2 : 1	15	1.2	A	0.625
2623	4	1 : 1 : 9 : 1	15	1.2	A	0.18
2624	4	1 : 1 : 9 : 1	15	1.2	A	0.18
2625	4	1 : 4 : 4 : 1	15	1.2	A	0.31
2626	4	1 : 4 : 4 : 1	15	1.2	A	0.31
2627	4	1 : 9 : 9 : 1	15	1.2	A	0.3
2628	4	1 : 9 : 9 : 1	15	1.2	A	0.5
2629	4	1 : 4 : 4 : 4	15	1.2	A	0.403
2630	4	1 : 1 : 2 : 1	15	1.2	A	0.315
2631	4	1 : 1 : 2 : 1	15	1.2	A	0.315
2632	4	1 : 1 : 9 : 1	15	1.2	A	0.75
2633	4	1 : 1 : 9 : 1	15	1.2	A	0.75
2634	4	1 : 4 : 4 : 1	15	1.2	A	0.15
2635	4	1 : 4 : 4 : 1	15	1.2	A	0.15
2636	4	1 : 9 : 9 : 1	15	1.2	A	0.75
2637	4	1 : 9 : 9 : 1	15	1.2	A	0.75
2638	4	1 : 9 : 9 : 1	15	1.2	A	0.3
2639	4	1 : 4 : 4 : 4	15	1.2	A	0.195
2640	4	1 : 4 : 4 : 4	15	1.2	A	0.403
2641	4	1 : 1 : 2 : 1	15	1.2	A	0.155
2642	4	1 : 1 : 2 : 1	15	1.2	A	0.155
2643	4	1 : 1 : 9 : 1	15	1.2	A	0.5
2644	4	1 : 1 : 9 : 1	15	1.2	A	0.5
2645	4	1 : 4 : 4 : 1	15	1.2	A	0.75
2646	4	1 : 4 : 4 : 1	15	1.2	A	0.75
2647	4	1 : 9 : 9 : 1	15	1.2	A	0.62
2648	4	1 : 9 : 9 : 1	15	1.2	A	0.62
2649	4	1 : 4 : 4 : 4	15	1.2	A	0.75
2650	4	1 : 4 : 4 : 4	15	1.2	A	0.75
2651	4	1 : 4 : 4 : 4	15	1.2	A	0.195
2652	4	1 : 1 : 2 : 1	25	1.2	A	0.075
2653	4	1 : 1 : 2 : 1	25	1.2	A	0.075

2654	4	1 : 1 : 9 : 1	25	1.2	A	0.372
2655	4	1 : 1 : 9 : 1	25	1.2	A	0.372
2656	4	1 : 4 : 4 : 1	25	1.2	A	0.63
2657	4	1 : 4 : 4 : 1	25	1.2	A	0.63
2658	4	1 : 9 : 9 : 1	25	1.2	A	0.5
2659	4	1 : 4 : 4 : 4	25	1.2	A	0.5
2660	4	1 : 4 : 4 : 4	25	1.2	A	0.5
2661	4	1 : 1 : 2 : 1	25	1.2	A	0.625
2662	4	1 : 1 : 2 : 1	25	1.2	A	0.625
2663	4	1 : 1 : 9 : 1	25	1.2	A	0.18
2664	4	1 : 1 : 9 : 1	25	1.2	A	0.18
2665	4	1 : 4 : 4 : 1	25	1.2	A	0.31
2666	4	1 : 4 : 4 : 1	25	1.2	A	0.31
2667	4	1 : 9 : 9 : 1	25	1.2	A	0.3
2668	4	1 : 9 : 9 : 1	25	1.2	A	0.3
2669	4	1 : 4 : 4 : 4	25	1.2	A	0.403
2670	4	1 : 4 : 4 : 4	25	1.2	A	0.403
2671	4	1 : 1 : 2 : 1	25	1.2	A	0.315
2672	4	1 : 1 : 2 : 1	25	1.2	A	0.315
2673	4	1 : 1 : 9 : 1	25	1.2	A	0.75
2674	4	1 : 1 : 9 : 1	25	1.2	A	0.75
2675	4	1 : 4 : 4 : 1	25	1.2	A	0.15
2676	4	1 : 4 : 4 : 1	25	1.2	A	0.15
2677	4	1 : 9 : 9 : 1	25	1.2	A	0.75
2678	4	1 : 9 : 9 : 1	25	1.2	A	0.75
2679	4	1 : 4 : 4 : 4	25	1.2	A	0.195
2680	4	1 : 4 : 4 : 4	25	1.2	A	0.195
2681	4	1 : 1 : 2 : 1	25	1.2	A	0.155
2682	4	1 : 1 : 2 : 1	25	1.2	A	0.155
2683	4	1 : 1 : 9 : 1	25	1.2	A	0.5
2684	4	1 : 1 : 9 : 1	25	1.2	A	0.5
2685	4	1 : 4 : 4 : 1	25	1.2	A	0.75
2686	4	1 : 4 : 4 : 1	25	1.2	A	0.75
2687	4	1 : 9 : 9 : 1	25	1.2	A	0.62
2688	4	1 : 9 : 9 : 1	25	1.2	A	0.62
2689	4	1 : 4 : 4 : 4	25	1.2	A	0.75
2690	4	1 : 4 : 4 : 4	25	1.2	A	0.75
2691	4	1 : 1 : 2 : 1	25	1.2	A	0.075
2692	4	1 : 1 : 2 : 1	25	1.2	A	0.075
2693	4	1 : 1 : 9 : 1	25	1.2	A	0.372
2694	4	1 : 1 : 9 : 1	25	1.2	A	0.372
2695	4	1 : 4 : 4 : 1	25	1.2	A	0.63

2696	4	1 : 4 : 4 : 1	25	1.2	A	0.63
2697	4	1 : 9 : 9 : 1	25	1.2	A	0.5
2698	4	1 : 4 : 4 : 4	25	1.2	A	0.5
2699	4	1 : 4 : 4 : 4	25	1.2	A	0.5
2700	4	1 : 1 : 2 : 1	25	1.2	A	0.625
2701	4	1 : 1 : 2 : 1	25	1.2	A	0.625
2702	4	1 : 1 : 9 : 1	25	1.2	A	0.18
2703	4	1 : 1 : 9 : 1	25	1.2	A	0.18
2704	4	1 : 4 : 4 : 1	25	1.2	A	0.31
2705	4	1 : 4 : 4 : 1	25	1.2	A	0.31
2706	4	1 : 9 : 9 : 1	25	1.2	A	0.3
2707	4	1 : 9 : 9 : 1	25	1.2	A	0.5
2708	4	1 : 4 : 4 : 4	25	1.2	A	0.403
2709	4	1 : 1 : 2 : 1	25	1.2	A	0.315
2710	4	1 : 1 : 2 : 1	25	1.2	A	0.315
2711	4	1 : 1 : 9 : 1	25	1.2	A	0.75
2712	4	1 : 1 : 9 : 1	25	1.2	A	0.75
2713	4	1 : 4 : 4 : 1	25	1.2	A	0.15
2714	4	1 : 4 : 4 : 1	25	1.2	A	0.15
2715	4	1 : 9 : 9 : 1	25	1.2	A	0.75
2716	4	1 : 9 : 9 : 1	25	1.2	A	0.75
2717	4	1 : 9 : 9 : 1	25	1.2	A	0.3
2718	4	1 : 4 : 4 : 4	25	1.2	A	0.195
2719	4	1 : 4 : 4 : 4	25	1.2	A	0.403
2720	4	1 : 1 : 2 : 1	25	1.2	A	0.155
2721	4	1 : 1 : 2 : 1	25	1.2	A	0.155
2722	4	1 : 1 : 9 : 1	25	1.2	A	0.5
2723	4	1 : 1 : 9 : 1	25	1.2	A	0.5
2724	4	1 : 4 : 4 : 1	25	1.2	A	0.75
2725	4	1 : 4 : 4 : 1	25	1.2	A	0.75
2726	4	1 : 9 : 9 : 1	25	1.2	A	0.62
2727	4	1 : 9 : 9 : 1	25	1.2	A	0.62
2728	4	1 : 4 : 4 : 4	25	1.2	A	0.75
2729	4	1 : 4 : 4 : 4	25	1.2	A	0.75
2730	4	1 : 4 : 4 : 4	25	1.2	A	0.195
2731	4	1 : 1 : 2 : 1	5	1.2	A	0.075
2732	4	1 : 1 : 2 : 1	5	1.2	A	0.075
2733	4	1 : 1 : 9 : 1	5	1.2	A	0.372
2734	4	1 : 1 : 9 : 1	5	1.2	A	0.372
2735	4	1 : 4 : 4 : 1	5	1.2	A	0.63
2736	4	1 : 4 : 4 : 1	5	1.2	A	0.63
2737	4	1 : 9 : 9 : 1	5	1.2	A	0.5

2738	4	1 : 4 : 4 : 4	5	1.2	A	0.5
2739	4	1 : 4 : 4 : 4	5	1.2	A	0.5
2740	4	1 : 1 : 2 : 1	5	1.2	A	0.625
2741	4	1 : 1 : 2 : 1	5	1.2	A	0.625
2742	4	1 : 1 : 9 : 1	5	1.2	A	0.18
2743	4	1 : 1 : 9 : 1	5	1.2	A	0.18
2744	4	1 : 4 : 4 : 1	5	1.2	A	0.31
2745	4	1 : 4 : 4 : 1	5	1.2	A	0.31
2746	4	1 : 9 : 9 : 1	5	1.2	A	0.3
2747	4	1 : 9 : 9 : 1	5	1.2	A	0.3
2748	4	1 : 4 : 4 : 4	5	1.2	A	0.403
2749	4	1 : 4 : 4 : 4	5	1.2	A	0.403
2750	4	1 : 1 : 2 : 1	5	1.2	A	0.315
2751	4	1 : 1 : 2 : 1	5	1.2	A	0.315
2752	4	1 : 1 : 9 : 1	5	1.2	A	0.75
2753	4	1 : 1 : 9 : 1	5	1.2	A	0.75
2754	4	1 : 4 : 4 : 1	5	1.2	A	0.15
2755	4	1 : 4 : 4 : 1	5	1.2	A	0.15
2756	4	1 : 9 : 9 : 1	5	1.2	A	0.75
2757	4	1 : 9 : 9 : 1	5	1.2	A	0.75
2758	4	1 : 4 : 4 : 4	5	1.2	A	0.195
2759	4	1 : 4 : 4 : 4	5	1.2	A	0.195
2760	4	1 : 1 : 2 : 1	5	1.2	A	0.155
2761	4	1 : 1 : 2 : 1	5	1.2	A	0.155
2762	4	1 : 1 : 9 : 1	5	1.2	A	0.5
2763	4	1 : 1 : 9 : 1	5	1.2	A	0.5
2764	4	1 : 4 : 4 : 1	5	1.2	A	0.75
2765	4	1 : 4 : 4 : 1	5	1.2	A	0.75
2766	4	1 : 9 : 9 : 1	5	1.2	A	0.62
2767	4	1 : 9 : 9 : 1	5	1.2	A	0.62
2768	4	1 : 4 : 4 : 4	5	1.2	A	0.75
2769	4	1 : 4 : 4 : 4	5	1.2	A	0.75
2770	4	1 : 1 : 2 : 1	5	1.2	A	0.075
2771	4	1 : 1 : 2 : 1	5	1.2	A	0.075
2772	4	1 : 1 : 9 : 1	5	1.2	A	0.372
2773	4	1 : 1 : 9 : 1	5	1.2	A	0.372
2774	4	1 : 4 : 4 : 1	5	1.2	A	0.63
2775	4	1 : 4 : 4 : 1	5	1.2	A	0.63
2776	4	1 : 9 : 9 : 1	5	1.2	A	0.5
2777	4	1 : 4 : 4 : 4	5	1.2	A	0.5
2778	4	1 : 4 : 4 : 4	5	1.2	A	0.5
2779	4	1 : 1 : 2 : 1	5	1.2	A	0.625

2780	4	1 : 1 : 2 : 1	5	1.2	A	0.625
2781	4	1 : 1 : 9 : 1	5	1.2	A	0.18
2782	4	1 : 1 : 9 : 1	5	1.2	A	0.18
2783	4	1 : 4 : 4 : 1	5	1.2	A	0.31
2784	4	1 : 4 : 4 : 1	5	1.2	A	0.31
2785	4	1 : 9 : 9 : 1	5	1.2	A	0.3
2786	4	1 : 9 : 9 : 1	5	1.2	A	0.5
2787	4	1 : 4 : 4 : 4	5	1.2	A	0.403
2788	4	1 : 1 : 2 : 1	5	1.2	A	0.315
2789	4	1 : 1 : 2 : 1	5	1.2	A	0.315
2790	4	1 : 1 : 9 : 1	5	1.2	A	0.75
2791	4	1 : 1 : 9 : 1	5	1.2	A	0.75
2792	4	1 : 4 : 4 : 1	5	1.2	A	0.15
2793	4	1 : 4 : 4 : 1	5	1.2	A	0.15
2794	4	1 : 9 : 9 : 1	5	1.2	A	0.75
2795	4	1 : 9 : 9 : 1	5	1.2	A	0.75
2796	4	1 : 9 : 9 : 1	5	1.2	A	0.3
2797	4	1 : 4 : 4 : 4	5	1.2	A	0.195
2798	4	1 : 4 : 4 : 4	5	1.2	A	0.403
2799	4	1 : 1 : 2 : 1	5	1.2	A	0.155
2800	4	1 : 1 : 9 : 1	5	1.2	A	0.5
2801	4	1 : 1 : 9 : 1	5	1.2	A	0.5
2802	4	1 : 4 : 4 : 1	5	1.2	A	0.75
2803	4	1 : 4 : 4 : 1	5	1.2	A	0.75
2804	4	1 : 9 : 9 : 1	5	1.2	A	0.62
2805	4	1 : 9 : 9 : 1	5	1.2	A	0.62
2806	4	1 : 4 : 4 : 4	5	1.2	A	0.75
2807	4	1 : 4 : 4 : 4	5	1.2	A	0.75
2808	4	1 : 4 : 4 : 4	5	1.2	A	0.195
2971	4	1 : 1 : 1 : 1	15	1.2	A	0.124
2972	4	1 : 1 : 4 : 1	15	1.2	A	0.441
2973	4	1 : 4 : 4 : 4	15	1.2	A	0.403
2978	4	1 : 1 : 1 : 1	15	1.2	A	0.252
2979	4	1 : 1 : 1 : 1	15	1.2	A	0.06
2980	4	1 : 4 : 4 : 4	15	1.2	A	0.195
2985	4	1 : 1 : 1 : 1	15	1.2	A	0.124
2986	4	1 : 1 : 4 : 1	15	1.2	A	0.441
2987	4	1 : 1 : 4 : 1	15	1.2	A	0.217
2988	4	1 : 4 : 4 : 4	15	1.2	A	0.75
2991	4	1 : 1 : 1 : 1	15	1.2	A	0.06
2992	4	1 : 1 : 4 : 1	15	1.2	A	0.217
2993	4	1 : 1 : 4 : 1	15	1.2	A	0.105

2994	4	1 : 4 : 4 : 4	15	1.2	A	0.403
2997	4	1 : 1 : 1 : 1	15	1.2	A	0.252
2998	4	1 : 1 : 4 : 1	15	1.2	A	0.105
2999	4	1 : 4 : 4 : 4	15	1.2	A	0.75
3000	4	1 : 4 : 4 : 4	15	1.2	A	0.195
3004	4	1 : 1 : 1 : 1	15	1.2	A	0.124
3005	4	1 : 1 : 4 : 1	15	1.2	A	0.441
3006	4	1 : 4 : 4 : 4	15	1.2	A	0.403
3011	4	1 : 1 : 1 : 1	15	1.2	A	0.06
3012	4	1 : 1 : 4 : 1	15	1.2	A	0.217
3013	4	1 : 4 : 4 : 4	15	1.2	A	0.195
3018	4	1 : 1 : 1 : 1	15	1.2	A	0.252
3019	4	1 : 1 : 4 : 1	15	1.2	A	0.105
3020	4	1 : 4 : 4 : 4	15	1.2	A	0.75
3025	4	1 : 1 : 1 : 1	25	1.2	A	0.124
3026	4	1 : 1 : 4 : 1	25	1.2	A	0.441
3027	4	1 : 4 : 4 : 4	25	1.2	A	0.403
3032	4	1 : 1 : 1 : 1	25	1.2	A	0.252
3033	4	1 : 1 : 1 : 1	25	1.2	A	0.06
3034	4	1 : 4 : 4 : 4	25	1.2	A	0.195
3039	4	1 : 1 : 1 : 1	25	1.2	A	0.124
3040	4	1 : 1 : 4 : 1	25	1.2	A	0.441
3041	4	1 : 1 : 4 : 1	25	1.2	A	0.217
3042	4	1 : 4 : 4 : 4	25	1.2	A	0.75
3045	4	1 : 1 : 1 : 1	25	1.2	A	0.06
3046	4	1 : 1 : 4 : 1	25	1.2	A	0.217
3047	4	1 : 1 : 4 : 1	25	1.2	A	0.105
3048	4	1 : 4 : 4 : 4	25	1.2	A	0.403
3051	4	1 : 1 : 1 : 1	25	1.2	A	0.252
3052	4	1 : 1 : 4 : 1	25	1.2	A	0.105
3053	4	1 : 4 : 4 : 4	25	1.2	A	0.75
3054	4	1 : 4 : 4 : 4	25	1.2	A	0.195
3058	4	1 : 1 : 1 : 1	25	1.2	A	0.124
3059	4	1 : 1 : 4 : 1	25	1.2	A	0.441
3060	4	1 : 4 : 4 : 4	25	1.2	A	0.403
3065	4	1 : 1 : 1 : 1	25	1.2	A	0.06
3066	4	1 : 1 : 4 : 1	25	1.2	A	0.217
3067	4	1 : 4 : 4 : 4	25	1.2	A	0.195
3072	4	1 : 1 : 1 : 1	25	1.2	A	0.252
3073	4	1 : 1 : 4 : 1	25	1.2	A	0.105
3074	4	1 : 4 : 4 : 4	25	1.2	A	0.75
3079	4	1 : 1 : 1 : 1	5	1.2	A	0.124

3080	4	1 : 1 : 4 : 1	5	1.2	A	0.441
3081	4	1 : 4 : 4 : 4	5	1.2	A	0.403
3086	4	1 : 1 : 1 : 1	5	1.2	A	0.252
3087	4	1 : 1 : 1 : 1	5	1.2	A	0.06
3088	4	1 : 4 : 4 : 4	5	1.2	A	0.195
3093	4	1 : 1 : 1 : 1	5	1.2	A	0.124
3094	4	1 : 1 : 4 : 1	5	1.2	A	0.441
3095	4	1 : 1 : 4 : 1	5	1.2	A	0.217
3096	4	1 : 4 : 4 : 4	5	1.2	A	0.75
3099	4	1 : 1 : 1 : 1	5	1.2	A	0.06
3100	4	1 : 1 : 4 : 1	5	1.2	A	0.217
3101	4	1 : 1 : 4 : 1	5	1.2	A	0.105
3102	4	1 : 4 : 4 : 4	5	1.2	A	0.403
3105	4	1 : 1 : 1 : 1	5	1.2	A	0.252
3106	4	1 : 1 : 4 : 1	5	1.2	A	0.105
3107	4	1 : 4 : 4 : 4	5	1.2	A	0.75
3108	4	1 : 4 : 4 : 4	5	1.2	A	0.195
3112	4	1 : 1 : 1 : 1	5	1.2	A	0.124
3113	4	1 : 1 : 4 : 1	5	1.2	A	0.441
3114	4	1 : 4 : 4 : 4	5	1.2	A	0.403
3119	4	1 : 1 : 1 : 1	5	1.2	A	0.06
3120	4	1 : 1 : 4 : 1	5	1.2	A	0.217
3121	4	1 : 4 : 4 : 4	5	1.2	A	0.195
3126	4	1 : 1 : 1 : 1	5	1.2	A	0.252
3127	4	1 : 1 : 4 : 1	5	1.2	A	0.105
3128	4	1 : 4 : 4 : 4	5	1.2	A	0.75
3706	4	1 : 2 : 3 : 4	24	15	B	0.2
3707	4	1 : 2 : 3 : 4	24	15	B	0.2
3708	4	1 : 5 : 10 : 20	24	15	B	0.2
3709	4	1 : 5 : 10 : 20	24	15	B	0.2
3710	4	1 : 5 : 10 : 20	24	15	B	0.5
3711	4	1 : 5 : 10 : 20	24	15	B	0.5
3712	4	10 : 10 : 1 : 1	24	15	B	0.2
3713	4	10 : 10 : 1 : 1	24	15	B	0.2
3714	4	10 : 10 : 1 : 1	24	15	B	0.5
3715	4	2 : 2 : 2 : 1	24	15	B	0.8
3716	4	2 : 2 : 2 : 1	24	15	B	0.8
3719	4	20 : 5 : 2 : 1	24	15	B	0.8
3720	4	20 : 5 : 2 : 1	24	15	B	0.8
3722	4	5 : 1 : 1 : 1	24	15	B	0.8
3725	4	5 : 2 : 1 : 1	24	15	B	0.8
3726	4	5 : 2 : 1 : 1	24	15	B	0.8

3727	4	5 : 2 : 1 : 1	24	15	B	1.1
3728	4	5 : 2 : 1 : 1	24	15	B	1.1
3729	4	5 : 5 : 5 : 1	24	15	B	0.8
3730	4	5 : 5 : 5 : 1	24	15	B	0.8
3731	4	5 : 5 : 5 : 1	24	15	B	1.1
3732	4	5 : 5 : 5 : 1	24	15	B	1.1
3733	4	1 : 2 : 3 : 4	24	15	B	0.1
3734	4	1 : 2 : 3 : 4	24	15	B	0.1
3735	4	1 : 2 : 3 : 4	24	15	B	0.6
3736	4	1 : 2 : 3 : 4	24	15	B	0.6
3737	4	1 : 2 : 3 : 4	24	15	B	0.9
3738	4	1 : 2 : 3 : 4	24	15	B	0.9
3739	4	3 : 3 : 2 : 1	24	15	B	0.1
3740	4	3 : 3 : 2 : 1	24	15	B	0.6
3741	4	3 : 3 : 2 : 1	24	15	B	0.6
3742	4	3 : 3 : 2 : 1	24	15	B	0.9
3743	4	3 : 3 : 2 : 1	24	15	B	0.9
3744	4	5 : 1 : 1 : 1	24	15	B	0.1
3745	4	5 : 1 : 1 : 1	24	15	B	0.6
3746	4	5 : 1 : 1 : 1	24	15	B	0.6
3747	4	1 : 3 : 5 : 10	24	15	B	0.1
3748	4	1 : 3 : 5 : 10	24	15	B	0.1
3749	4	1 : 3 : 5 : 10	24	15	B	0.2
3750	4	1 : 3 : 5 : 10	24	15	B	0.4
3751	4	2 : 2 : 1 : 1	24	15	B	0.2
3752	4	2 : 2 : 1 : 1	24	15	B	0.2
3753	4	2 : 2 : 1 : 1	24	15	B	0.4
3754	4	2 : 2 : 1 : 1	24	15	B	0.4
3755	4	20 : 10 : 1 : 1	24	15	B	0.1
3756	4	20 : 10 : 1 : 1	24	15	B	0.2
3757	4	20 : 10 : 1 : 1	24	15	B	0.2
3758	4	20 : 10 : 1 : 1	24	15	B	0.4
3759	4	1 : 1 : 1 : 3	24	15	B	0.4
3760	4	1 : 1 : 1 : 3	24	15	B	0.4
3761	4	1 : 1 : 1 : 3	24	15	B	0.7
3764	4	1 : 1 : 1 : 5	24	15	B	0.4
3765	4	1 : 1 : 1 : 5	24	15	B	0.7
3766	4	1 : 1 : 1 : 5	24	15	B	0.7
3767	4	1 : 1 : 1 : 7	24	15	B	0.4
3768	4	1 : 1 : 1 : 7	24	15	B	0.4
3769	4	1 : 1 : 1 : 7	24	15	B	0.7
3770	4	1 : 1 : 1 : 7	24	15	B	0.7

3772	4	10 : 5 : 2 : 1	24	15	B	1.1
3775	4	5 : 4 : 3 : 2	24	15	B	1.1
3776	4	5 : 4 : 3 : 2	24	15	B	1.1
3780	4	10 : 10 : 10 : 10	24	15	B	1.1
3781	4	10 : 10 : 10 : 10	24	15	B	1.1
3786	4	10 : 10 : 5 : 1	24	15	B	1.1
3787	4	10 : 10 : 5 : 1	24	15	B	1.1
3795	4	20 : 1 : 1 : 1	24	15	B	1.1
3796	4	20 : 1 : 1 : 1	24	15	B	1.1
3877	4	4 : 3 : 2 : 1	15	1.2	C	0.17
3878	4	4 : 3 : 2 : 1	15	1.2	C	0.5
3879	4	4 : 3 : 2 : 1	15	1.2	C	1.5
3880	4	5 : 5 : 1 : 1	15	1.2	C	0.17
3881	4	5 : 5 : 1 : 1	15	1.2	C	0.5
3882	4	5 : 5 : 1 : 1	15	1.2	C	1.5
3883	4	1 : 1 : 1 : 1	15	1.2	C	0.17
3884	4	1 : 1 : 1 : 1	15	1.2	C	0.5
3885	4	1 : 1 : 1 : 1	15	1.2	C	1.5
1721	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
1722	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.5
1727	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
1728	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
1733	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
1734	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
1740	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.75
1746	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.504
1752	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.248
1759	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.12
1763	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.625
1764	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
1769	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.315
1770	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.5
1775	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
1776	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
1781	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075
1782	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21
1789	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.75
1795	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.504
1801	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.248
1807	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.12
1811	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.625
1812	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75

2234	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.155
2235	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.075
2236	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.434
2239	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.075
2240	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.75
2241	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.21
2245	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.434
2250	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.315
2251	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.21
2256	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.155
2257	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.75
2261	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.075
2262	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.434
2266	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.315
2267	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.21
2271	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.315
2272	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.155
2273	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.75
2276	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
2277	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
2278	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
2281	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
2282	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
2283	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
2287	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
2292	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
2293	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
2298	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
2299	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
2303	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
2304	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
2308	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
2309	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
2313	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
2314	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
2315	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
2318	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
2319	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075
2320	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
2323	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075
2324	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75
2325	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21

2329	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
2334	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.315
2335	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21
2340	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
2341	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75
2345	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075
2346	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
2350	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.315
2351	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21
2355	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
2356	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75
2361	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.075
2362	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.248
2363	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.248
2364	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.5
2369	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.625
2370	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.625
2371	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.12
2372	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.12
2373	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.434
2378	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.315
2379	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.315
2380	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.75
2381	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.75
2382	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.21
2388	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.155
2389	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.504
2390	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.5
2391	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.75
2397	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.075
2398	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.155
2399	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.248
2400	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.5
2406	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.625
2407	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.075
2408	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.12
2409	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.434
2410	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.434
2416	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.315
2417	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.75
2418	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.75
2419	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.21

2420	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.21
2425	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.155
2426	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.504
2427	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.504
2428	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.75
2433	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
2434	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.248
2435	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.248
2436	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.5
2441	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.625
2442	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.625
2443	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.12
2444	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.12
2445	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
2450	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
2451	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
2452	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.75
2453	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
2454	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
2460	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
2461	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.504
2462	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.5
2463	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
2469	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
2470	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
2471	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.248
2472	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.5
2478	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.625
2479	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
2480	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.12
2481	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
2482	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
2488	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
2489	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.75
2490	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.75
2491	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
2492	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
2497	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
2498	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.504
2499	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.504
2500	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
2505	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075

2506	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.248
2507	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.248
2508	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.5
2513	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.625
2514	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.625
2515	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.12
2516	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.12
2517	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
2522	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.315
2523	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.315
2524	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.75
2525	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75
2526	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21
2532	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
2533	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.504
2534	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.5
2535	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75
2541	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075
2542	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
2543	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.248
2544	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.5
2550	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.625
2551	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075
2552	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.12
2553	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
2554	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
2560	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.315
2561	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.75
2562	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.75
2563	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21
2564	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21
2569	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
2570	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.504
2571	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.504
2572	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75
2974	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.315
2975	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.248
2976	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.75
2977	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.434
2981	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.155
2982	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.12
2983	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.434

2984	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.21
2989	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.504
2990	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.21
2995	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.075
2996	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.248
3001	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.315
3002	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.12
3003	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.75
3007	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.315
3008	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.155
3009	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.504
3010	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.434
3014	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.155
3015	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.075
3016	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.248
3017	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.21
3021	5	1 : 1 : 1 : 1 : 1	15	1.2	A	0.075
3022	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.504
3023	5	1 : 1 : 4 : 1 : 1	15	1.2	A	0.12
3024	5	1 : 4 : 4 : 4 : 1	15	1.2	A	0.75
3028	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
3029	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.248
3030	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
3031	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
3035	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
3036	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.12
3037	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
3038	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
3043	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.504
3044	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
3049	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
3050	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.248
3055	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
3056	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.12
3057	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
3061	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.315
3062	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
3063	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.504
3064	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.434
3068	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.155
3069	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
3070	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.248

3071	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.21
3075	5	1 : 1 : 1 : 1 : 1	25	1.2	A	0.075
3076	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.504
3077	5	1 : 1 : 4 : 1 : 1	25	1.2	A	0.12
3078	5	1 : 4 : 4 : 4 : 1	25	1.2	A	0.75
3082	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.315
3083	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.248
3084	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75
3085	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
3089	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
3090	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.12
3091	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
3092	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21
3097	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.504
3098	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21
3103	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075
3104	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.248
3109	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.315
3110	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.12
3111	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75
3115	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.315
3116	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
3117	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.504
3118	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.434
3122	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.155
3123	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075
3124	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.248
3125	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.21
3129	5	1 : 1 : 1 : 1 : 1	5	1.2	A	0.075
3130	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.504
3131	5	1 : 1 : 4 : 1 : 1	5	1.2	A	0.12
3132	5	1 : 4 : 4 : 4 : 1	5	1.2	A	0.75
3133	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.09
3134	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.09
3135	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.279
3136	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.279
3137	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.21
3138	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.21
3139	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.5
3140	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.5
3141	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.75
3142	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.75

3143	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.135
3144	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.135
3145	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.75
3146	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.75
3147	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.435
3148	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.435
3149	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.378
3150	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.378
3151	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.75
3152	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.75
3153	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.5
3154	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.5
3155	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.75
3156	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.75
3157	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.186
3158	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.186
3159	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.567
3160	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.567
3161	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.434
3162	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.6
3163	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.6
3164	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.09
3165	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.09
3166	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.279
3167	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.279
3168	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.21
3169	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.434
3170	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.5
3171	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.75
3172	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.75
3173	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.135
3174	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.135
3175	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.75
3176	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.75
3177	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.21
3178	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.435
3179	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.5
3180	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.378
3181	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.378
3182	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.75
3183	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.75
3184	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.5

3185	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.5
3186	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.75
3187	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.75
3188	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.435
3189	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.186
3190	5	1 : 1 : 2 : 1 : 1	15	1.2	A	0.186
3191	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.567
3192	5	1 : 1 : 2 : 4 : 1	15	1.2	A	0.567
3193	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.434
3194	5	1 : 1 : 2 : 9 : 1	15	1.2	A	0.434
3195	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.6
3196	5	1 : 9 : 9 : 9 : 1	15	1.2	A	0.6
3197	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.09
3198	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.09
3199	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.279
3200	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.279
3201	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.21
3202	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.21
3203	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.5
3204	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.5
3205	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.75
3206	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.75
3207	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.135
3208	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.135
3209	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.75
3210	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.75
3211	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.435
3212	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.435
3213	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.378
3214	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.378
3215	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.75
3216	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.75
3217	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.5
3218	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.5
3219	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.75
3220	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.75
3221	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.186
3222	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.186
3223	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.567
3224	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.567
3225	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.434
3226	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.6

3227	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.6
3228	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.09
3229	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.09
3230	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.279
3231	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.279
3232	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.21
3233	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.434
3234	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.5
3235	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.75
3236	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.75
3237	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.135
3238	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.135
3239	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.75
3240	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.75
3241	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.21
3242	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.435
3243	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.5
3244	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.378
3245	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.378
3246	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.75
3247	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.75
3248	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.5
3249	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.5
3250	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.75
3251	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.75
3252	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.435
3253	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.186
3254	5	1 : 1 : 2 : 1 : 1	25	1.2	A	0.186
3255	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.567
3256	5	1 : 1 : 2 : 4 : 1	25	1.2	A	0.567
3257	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.434
3258	5	1 : 1 : 2 : 9 : 1	25	1.2	A	0.434
3259	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.6
3260	5	1 : 9 : 9 : 9 : 1	25	1.2	A	0.6
3261	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.09
3262	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.09
3263	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.279
3264	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.279
3265	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.21
3266	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.21
3267	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.5
3268	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.5

3269	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.75
3270	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.75
3271	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.135
3272	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.135
3273	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.75
3274	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.75
3275	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.435
3276	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.435
3277	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.378
3278	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.378
3279	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.75
3280	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.75
3281	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.5
3282	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.5
3283	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.75
3284	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.75
3285	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.186
3286	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.186
3287	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.567
3288	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.567
3289	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.434
3290	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.6
3291	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.6
3292	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.09
3293	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.09
3294	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.279
3295	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.279
3296	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.21
3297	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.434
3298	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.5
3299	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.75
3300	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.75
3301	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.135
3302	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.135
3303	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.75
3304	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.75
3305	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.21
3306	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.435
3307	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.5
3308	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.378
3309	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.75
3310	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.75

3311	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.5
3312	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.5
3313	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.75
3314	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.75
3315	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.435
3316	5	1 : 1 : 2 : 1 : 1	5	1.2	A	0.186
3317	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.567
3318	5	1 : 1 : 2 : 4 : 1	5	1.2	A	0.567
3319	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.434
3320	5	1 : 1 : 2 : 9 : 1	5	1.2	A	0.434
3321	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.6
3322	5	1 : 9 : 9 : 9 : 1	5	1.2	A	0.6
3771	5	10 : 5 : 2 : 1 : 1	24	15	B	0.6
3773	5	5 : 4 : 3 : 2 : 1	24	15	B	0.6
3774	5	5 : 4 : 3 : 2 : 1	24	15	B	0.6
3777	5	10 : 10 : 10 : 10 : 1	24	15	B	0.3
3778	5	10 : 10 : 10 : 10 : 1	24	15	B	0.6
3779	5	10 : 10 : 10 : 10 : 1	24	15	B	0.6
3782	5	10 : 10 : 5 : 1 : 1	24	15	B	0.3
3783	5	10 : 10 : 5 : 1 : 1	24	15	B	0.3
3784	5	10 : 10 : 5 : 1 : 1	24	15	B	0.6
3785	5	10 : 10 : 5 : 1 : 1	24	15	B	0.6
3788	5	2 : 2 : 5 : 5 : 5	24	15	B	0.3
3789	5	2 : 2 : 5 : 5 : 5	24	15	B	0.3
3790	5	2 : 2 : 5 : 5 : 5	24	15	B	0.6
3791	5	2 : 2 : 5 : 5 : 5	24	15	B	0.6
3792	5	20 : 1 : 1 : 1 : 1	24	15	B	0.3
3793	5	20 : 1 : 1 : 1 : 1	24	15	B	0.3
3794	5	20 : 1 : 1 : 1 : 1	24	15	B	0.6
3797	5	1 : 1 : 2 : 2 : 2	24	15	B	0.3
3798	5	1 : 1 : 2 : 2 : 2	24	15	B	0.6
3799	5	1 : 1 : 2 : 2 : 2	24	15	B	0.6
3800	5	1 : 1 : 2 : 2 : 2	24	15	B	2.1
3801	5	1 : 1 : 2 : 2 : 2	24	15	B	2.1
3802	5	1 : 2 : 3 : 4 : 5	24	15	B	0.3
3803	5	1 : 2 : 3 : 4 : 5	24	15	B	0.3
3804	5	1 : 2 : 3 : 4 : 5	24	15	B	0.6
3805	5	1 : 2 : 3 : 4 : 5	24	15	B	0.6
3806	5	3 : 1 : 1 : 1 : 1	24	15	B	0.3
3807	5	3 : 1 : 1 : 1 : 1	24	15	B	0.3
3808	5	3 : 1 : 1 : 1 : 1	24	15	B	0.6
3809	5	3 : 1 : 1 : 1 : 1	24	15	B	0.6

3810	5	3 : 1 : 1 : 1 : 1	24	15	B	1.1
3811	5	3 : 1 : 1 : 1 : 1	24	15	B	1.1
3812	5	5 : 1 : 1 : 1 : 1	24	15	B	0.3
3813	5	5 : 1 : 1 : 1 : 1	24	15	B	0.3
3814	5	5 : 1 : 1 : 1 : 1	24	15	B	0.6
3815	5	5 : 1 : 1 : 1 : 1	24	15	B	1.1
3816	5	5 : 1 : 1 : 1 : 1	24	15	B	1.1
3886	5	10 : 1 : 1 : 1 : 1	15	1.2	C	0.17
3887	5	10 : 1 : 1 : 1 : 1	15	1.2	C	0.5
3888	5	10 : 1 : 1 : 1 : 1	15	1.2	C	1.5
3889	5	10 : 3 : 1 : 1 : 1	15	1.2	C	0.17
3890	5	10 : 3 : 1 : 1 : 1	15	1.2	C	0.5
3891	5	10 : 3 : 1 : 1 : 1	15	1.2	C	1.5
3892	5	5 : 5 : 1 : 1 : 1	15	1.2	C	0.17
3893	5	5 : 5 : 1 : 1 : 1	15	1.2	C	0.5
3894	5	5 : 5 : 1 : 1 : 1	15	1.2	C	1.5
3895	5	20 : 1 : 1 : 1 : 1	15	1.2	C	0.17
3896	5	20 : 1 : 1 : 1 : 1	15	1.2	C	0.5
3897	5	20 : 1 : 1 : 1 : 1	15	1.2	C	1.5
3898	5	1 : 1 : 1 : 1 : 1	15	1.2	C	0.17
3899	5	1 : 1 : 1 : 1 : 1	15	1.2	C	0.5
3900	5	1 : 1 : 1 : 1 : 1	15	1.2	C	1.5