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Best for small datasets or categorical data. Grouped Frequency Distribution: Data is divided into intervals (called class intervals) and frequencies are counted for each interval. Useful for large datasets or continuous data. Cumulative Frequency Distribution: Shows the running total of frequencies up to each point. Relative Frequency Distribution: Shows frequency as a proportion or percentage. Type When Used Example Ungrouped Small or simple datasets Number of students scoring exact marks Grouped Large numeric data with ranges Heights divided in ranges (150-155, 156-160) Key Formula for Frequency Distribution Here are some standard formulas for frequency distribution: Frequency: Number of times a value appears in a set. Relative Frequency: $\text{Relative Frequency} = \frac{\text{Frequency of a class}}{\text{Total number of observations}}$ Cumulative Frequency: Sum of the current frequency and all previous frequencies Class Mark: $\text{Class Mark} = \frac{\text{Lower Limit} + \text{Upper Limit}}{2}$ Cross-Disciplinary Usage Frequency distribution is not only useful in Maths but also plays an important role in Physics, Computer Science, and daily logical reasoning. Students preparing for JEE, NEET, or board exams will find frequency tables, histograms, and marked data handling topics regularly in exam questions. Step-by-Step Illustration Let's make an ungrouped frequency distribution table for this data set (marks out of 10): 6, 8, 6, 10, 8, 9, 7, 10, 7, 6 Marks Frequency 6 3 7 2 8 2 9 1 10 2 Now for a grouped frequency table, let's say marks out of 20: 5, 8, 12, 14, 17, 19, 9, 15, 12, 11, 18, 6, 13, 12, 7 Marks Interval Frequency 5-9 5 10-14 6 15-19 4 20-24 3 Step-by-step for creating a grouped frequency distribution table: 1. Arrange the data in ascending order. 2. Decide the number and width of class intervals. 3. Create columns for class intervals and tally marks. 4. Go through each data point and place a tally mark where it fits. 5. Count the tallies and write the frequency for each class. A quick trick for tallying large datasets: Instead of going line-by-line, first arrange numbers in order. Next, mark repeated numbers at once and tick off as you add to each column. This avoids missing counts and saves precious time, especially during exams. Vedantu's live sessions cover many such tally and grouping techniques for data handling speed. Try These Yourself Construct a frequency distribution table for the data: 11, 12, 12, 13, 14, 11, 13, 13, 15, 12. Make a grouped frequency table for heights (cm): 154, 159, 160, 165, 167, 155, 167, 162, 160, 156 using intervals of 5. Find the cumulative frequency for the grouped data: 5-9 (4), 10-14 (6), 15-19 (3). Convert the frequency table into a bar graph or histogram. Frequent Errors and Misunderstandings Choosing incorrect class interval width for grouped data. Overlapping intervals (e.g., 10-15 and 15-20) which may double-count or omit values. Missing values in tally marks or skipping data when counting frequencies. Confusing frequency and cumulative frequency columns. Relation to Other Concepts The idea of frequency distribution connects closely with topics such as histogram, frequency polygon, and data handling. Mastering frequency tables helps you easily solve questions on averages, mode, median, and other vital statistics covered in later chapters. Classroom Tip A quick way to remember frequency tables: Always check that the total frequency matches the total number of data values. For grouped tables, ensure there are no gaps or overlaps between intervals. Vedantu's teachers suggest sketching quick bar graphs from the table for easier visualization during practice or tests. Wrapping It All Up We explored frequency distribution—from definition, formulas, examples, mistakes, and its link with other maths concepts. Practice regularly with Vedantu's resources to get comfortable with organizing and analyzing data, which is a must-have skill for maths success and competitive exams. Explore More on Data and Statistics: Frequency distribution tables are a fundamental tool in statistics, used to organize and summarize data. They provide a clear and concise way to see how often each value (or range of values) occurs in a dataset. This makes it easier to identify patterns, trends, and outliers. If you're a student or just starting to learn about statistics, understanding frequency distribution tables is crucial. At its core, a frequency distribution table is a visual representation of how often each unique value appears in a dataset. Imagine you have a list of test scores from a class. A frequency distribution table would show you how many students scored each particular grade. Classes (or Bins/Intervals): These are the categories of the data group. When dealing with continuous data (like height or weight), you usually divide the data into ranges or intervals called classes. For discrete data (like the number of siblings), you can use individual values as classes. Frequency: This represents the number of times a value falls within a particular class or has a specific value. It's essentially a count of occurrences. Relative Frequency: This is the frequency of a class divided by the total number of observations. It shows the proportion of data that falls within each class and is often expressed as a percentage. Relative Frequency = $\frac{\text{Frequency of Class}}{\text{Total Number of Observations}}$ Cumulative Frequency: This is the sum of the frequencies of a given class and all preceding classes. It shows the total number of observations that are less than or equal to the upper limit of a class. Cumulative Relative Frequency: This is the sum of the relative frequencies of a given class and all preceding classes. It represents the proportion (or percentage) of the data that falls below the upper limit of each class. Here's a step-by-step guide to creating a frequency distribution table: Determine the Range: Find the highest and lowest values in your dataset. The range is the difference between these two values. Range = Highest Value - Lowest Value. Decide on the Number of Classes: There's no magic number, but generally, 5 to 20 classes are recommended. Too few classes can hide important details, while too many can make the table cumbersome. Sturges' rule is a common guideline: Number of Classes $\approx 1 + 3.322 \times \log_{10}(\text{Number of Observations})$. Calculate the Class Width: Divide the range by the number of classes to determine the width of each class interval. Class Width = $\frac{\text{Range}}{\text{Number of Classes}}$. It's often helpful to round the class width to a convenient number. Define the Class Limits: Determine the starting and ending points for each class. Make sure that the classes are mutually exclusive (no overlap) and exhaustive (cover the entire range of data). Tally the Frequencies: Go through your dataset and count how many values fall into each class. Calculate Relative Frequencies: Divide each class frequency by the total number of observations. Calculate Cumulative Frequencies: Add the frequencies cumulatively, starting from the first class. Calculate Cumulative Relative Frequencies: Add the relative frequencies cumulatively, starting from the first class. Let's say you have the following exam scores for 20 students: 65, 70, 72, 75, 78, 80, 82, 85, 85, 88, 90, 92, 92, 95, 98, 73, 77, 81, 86, 91 Range: 98 - 65 = 33 Number of Classes (using Sturges' Rule): $1 + 3.322 \times \log_{10}(20) \approx 5.32$. Let's round it to 5. Class Width: $\frac{33}{5} \approx 6.6$. Let's round it to 7. Class Limits: 65-72, 73-79, 80-86, 87-93, 94-100 Frequency Table: Class Frequency Relative Frequency Cumulative Frequency Cumulative Relative Frequency 65-72 4 0.20 0.10 72-79 4 0.20 0.20 79-85 5 0.25 0.11 85-92 6 0.30 0.17 85-93 9 0.45 0.20 93-99 3 0.15 0.20 100 Data Summary: They condense large datasets into a more manageable and understandable format. Pattern Identification: They help reveal underlying patterns and trends in the data. Outlier Detection: They make it easier to spot unusual or extreme values. Basis for Other Analyses: They serve as a foundation for creating histograms and other graphical representations of data. And also Frequency distribution table is mandatory in many statistical calculations Grouped Frequency Distribution: This is used when dealing with continuous data or a large range of discrete data. Ungrouped Frequency Distribution: This is used when dealing with discrete data with a small number of distinct values. Frequency distribution tables are a powerful tool for organizing and understanding data. By following the steps outlined in this guide and considering the nuances discussed in the Q&A, you can effectively use frequency distribution tables to gain valuable insights from your data. Understanding them is a cornerstone for further statistical exploration. Data Science BlogQ: What do I do if a value falls exactly on the boundary between two classes?A: You need to have a clear rule for how to handle boundary values. Common approaches include: Upper Limit Included: Include the boundary value in the higher class. Lower Limit Included: Include the boundary value in the lower class. Subtract a Small Value: Subtract a tiny value (e.g., 0.0001) from the boundary value before assigning it to a class. This ensures it falls definitively into the lower class. You need to consistently apply the chosen rule. Q: How do I choose the right number of classes?A: While Sturges' rule provides a good starting point, the best number of classes depends on the nature of your data and the purpose of your analysis. Experiment with different numbers of classes and choose the one that best reveals the underlying patterns without being overly complex. Consider the distribution shape. If the distribution is highly skewed, more classes might be needed to capture the skewness properly. Q: Can I use frequency distribution tables for categorical data?A: Yes! For categorical data (e.g., colors, types of cars), the "classes" become the different categories, and the frequency is the number of occurrences of each category. This is often a simple yet effective way to summarize categorical data. Q: What's the difference between relative frequency and percentage frequency?A: Percentage frequency is simply the relative frequency multiplied by 100. Both represent the same information, just in different formats. Q: How are frequency distribution tables related to histograms?A: A histogram is a graphical representation of a frequency distribution. The classes are represented on the x-axis, and the frequencies (or relative frequencies) are represented on the y-axis as bars. The height of each bar corresponds to the frequency of that class. In our day to day life, recording information is very crucial. A piece of information or representation of facts or ideas which can be further processed is known as data. The weather forecast, maintenance of records, dates, time, and everything is related to data collection. The collection, presentation, analysis, organization and interpretation of observations or data is known as statistics. We can make predictions about the nature of data based on the previous data using statistics. Statistics are helpful when a large amount of data is to be studied and observed. The collected statistical data can be represented by various methods such as tables, bar graphs, pie charts, histograms, frequency polygons, etc. In the upcoming discussion, data collection through a frequency distribution table is discussed. What is Frequency Distribution Table in Statistics? In statistics, a frequency distribution table is a comprehensive way of representing the organisation of raw data of a quantitative variable. This table shows how various values of a variable are distributed and their corresponding frequencies. However, we can make two frequency distribution tables: (i) Discrete frequency distribution (ii) Continuous frequency distribution (Grouped frequency distribution) How to Make a Frequency Distribution Table? Frequency distribution tables can be made using tally marks for both discrete and continuous data values. The way of preparing discrete frequency tables and continuous frequency distribution tables are different from each other. In this section, you will learn how to make a discrete frequency distribution table with the help of examples. Examples Suppose the runs scored by the 11 players of the Indian cricket team in a match are given as follows: $\{11, 25, 65, 03, 12, 35, 46, 67, 56, 00, 31, 17\}$ end{array} } This type of data is in raw form and is known as raw data. The difference between the measure of highest and lowest value in a collection of data is known as the range. Here, the range is $\frac{\text{Number of observations increases, this type of representation is quite hectic, and the calculations could be quite complex. As statistics is about the presentation of data in an organized form, the data representation in tabular form is more convenient. Considering another example: In a quiz, the marks obtained by 20 students out of 30 are given as } (\text{begin{array} \{11, 12, 15, 29, 30, 21, 30, 30, 15, 29, 20, 16, 21, 23, 24, 23, 21\} \end{array})$ This data can be represented in tabular form as follows: Table 1: Frequency Distribution Table (Ungrouped) Marks obtained in quiz Number of students(Frequency) 12 1 15 4 16 1 17 1 19 1 20 2 21 3 22 1 24 1 29 1 30 3 Total 20 The number of times data occurs in a data set is known as the frequency of data. In the above example, frequency is the number of students who scored various marks as tabulated. This type of tabular data collection is known as an ungrouped frequency table. What happens if, instead of 20 students, 200 students took the same test. Would it have been easy to represent such data in the format of an ungrouped frequency distribution table? Well, obviously no. To represent a vast amount of information, the data is subdivided into groups of similar sizes known as class or class intervals, and the size of each class is known as class width or class size. Frequency Distribution Table for Grouped Data The frequency distribution table for grouped data is also known as the continuous frequency distribution table. This is also known as the grouped frequency distribution table. Here, we need to make the frequency distribution table by dividing the data values into a suitable number of classes and with the appropriate class height. Let's understand this with the help of the solved example given below: Question: The heights of 50 students, measured to the nearest centimetres, have been found to be as follows: 161, 150, 154, 165, 168, 161, 154, 162, 150, 151, 162, 164, 171, 165, 158, 154, 156, 172, 160, 170, 153, 159, 161, 170, 162, 165, 166, 168, 165, 164, 154, 152, 153, 156, 158, 162, 160, 161, 173, 166, 161, 159, 162, 167, 168, 159, 158, 153, 154, 159 (i) Represent the data given above by a grouped frequency distribution table, taking the class intervals as 160 - 165, 165 - 170, etc. (ii) What can you conclude about their heights from the table? Solution: (i) Let us make the grouped frequency distribution table with classes: 150 - 155, 155 - 160, 160 - 165, 165 - 170, 170 - 175 Class intervals and the corresponding frequencies are tabulated as: (ii) From the given data and above table, we can observe that 35 students, i.e. more than 50% of the total students, are shorter than 165 cm. Practice Problems The scores (out of 100) obtained by 33 students in a mathematics test are as follows: 69, 48, 84, 58, 48, 73, 48, 66, 58, 84000 66, 64, 71, 64, 66, 69, 66, 83, 66, 69, 71, 81, 71, 73, 69, 66, 64, 58, 64, 69, 69 Represent this data in the form of a frequency distribution. The following are the marks (out of 100) of 60 students in mathematics. 16, 13, 5, 80, 86, 7, 51, 48, 24, 56, 70, 19, 61, 17, 16, 36, 34, 42, 34, 35, 72, 55, 75, 31, 52, 87, 92, 74, 45, 62, 68, 86, 35, 85, 36, 81, 75, 55, 26, 95, 31, 7, 78, 92, 62, 52, 56, 15, 63,25, 36, 54, 44, 47, 27, 72, 17, 4, 30. Construct a grouped frequency distribution table with width 10 of each class starting from 0 - 9. The value of n up to 50 decimal places is given below: 3.14159265358979323846264338327950288419716939937510 (i) Make a frequency distribution of the digits from 0 to 9 after the decimal point. (ii) What are the most and the least frequently occurring digits? To keep learning please visit our website www.byjus.com and download BYJU'S-The Learning App from Google Play Store. A frequency distribution is a way to organize data and see how often each value appears. It shows how many times each value or range of values occurs in a dataset. This helps us understand patterns, like which values are common and which are rare. Frequency distributions are often shown in tables or graphs, and make it easier to analyze and conclude data. Frequency Distribution Frequency Distribution Graphs To represent the Frequency Distribution, there are various methods such as a Histogram, Bar Graph, Frequency Polygon, and Pie Chart. A brief description of all these graphs is as follows: Graph Type Description Use Cases Histogram Represents the frequency of each interval of continuous data using bars of equal width. Continuous data distribution analysis. Bar Graph Represents the frequency of each interval using bars of equal width; it can also represent discrete data. Comparing discrete data categories. Frequency Polygon Connects midpoints of class frequencies using lines, similar to a histogram but without bars. Comparing various datasets. Pie Chart Circular graph showing data as slices of a circle, indicating the proportional size of each slice relative to the whole dataset. Showing relative sizes of data portions. Frequency Distribution Table A frequency distribution table is a way to organize and present data in a tabular form, showing which helps us summarize the large dataset into a concise table. In the frequency distribution table, there are two columns: one representing the data either in the form of a range or an individual data set and the other column showing the frequency of each interval or individual. For example, let's say we have a dataset of students' test scores in a class. Test Score Frequency 20-26 60 26-32 60 32-38 60 38-44 60 44-50 60 50-56 60 56-62 60 62-68 60 68-74 60 74-80 60 80-86 60 86-92 60 92-98 60 98-100 60 Check: Difference between Frequency Array and Frequency Distribution Types of Frequency Distribution There are four types of frequency distribution: Grouped Frequency Distribution Ungrouped Frequency Distribution Relative Frequency Distribution Cumulative Frequency Distribution Grouped Frequency Distribution In Grouped Frequency Distribution observations are divided between different intervals such as class intervals and then their frequencies are counted for each class interval. This Frequency Distribution is used mostly when the data set is very large. Example: Make the Frequency Distribution Table for the ungrouped data given as follows: 23, 27, 21, 14, 43, 37, 38, 41, 55, 11, 35, 15, 21, 24, 57, 35, 29, 10, 39, 42, 27, 17, 45, 52, 31, 36, 39, 38, 43, 46, 32, 37, 25 Solution: As there are observations in between 10 and 57, we can choose class intervals as 10-20, 20-30, 30-40, 40-50, and 50-60. In these class intervals, all the observations are covered and for each interval, there are different frequency which we can count for each interval. Thus, the Frequency Distribution Table for the given data is as follows: Class Interval Frequency 10 - 20 5 20 - 30 8 30 - 40 12 40 - 50 10 50 - 60 5 Now we can use the grouped frequency distribution table. All distinct observations are mentioned and counted individually. This Frequency Distribution is often used when the given dataset is small. Example: Make the Frequency Distribution Table for the ungrouped data given as follows: 10, 20, 15, 25, 30, 10, 15, 10, 25, 20, 15, 10, 30, 25 Solution: As unique observations in the given data are only 10, 15, 20, 25, and 30 with each having a different frequency. Thus, the Frequency Distribution Table of the given data is as follows: Value Frequency 10 4 15 3 20 3 25 3 30 2 Relative Frequency Distribution This distribution displays the proportion or percentage of observations in each interval or class. It is useful for comparing different data sets or for analyzing the distribution of data within a set. Relative Frequency = $\frac{\text{Frequency of a Class}}{\text{Total Number of Events}}$ Example: Make the Relative Frequency Distribution Table for the following data: Score Range 2021-14041-6061-8081-100 Frequency 51020105 Solution: To create the Relative Frequency Distribution table, we need to calculate Relative Frequency for each class interval. Thus, Relative Frequency Distribution table is given as follows: Score Range Frequency Relative Frequency 20-25 50 = 0.1021-4010150 = 0.2041-6020250 = 0.4061-8010150 = 0.2081-1005150 = 0.10 Total 501.00 Cumulative Frequency Distribution A cumulative frequency distribution shows the total number of observations up to and including a certain value or class. It helps in understanding how values accumulate across a dataset. Less than Type: We sum all the frequencies before the current interval. More than Type: We sum all the frequencies after the current interval. Check: Cumulative Frequency How to Calculate Cumulative Frequency Table in Excel Let's see how to represent a cumulative frequency distribution through an example. Example: The table below gives the values of runs scored by Virat Kohli in the last 25 T-20 matches. Represent the data in the form of less-than-type cumulative frequency distribution: 4534507522566370493308143986928870565057454212395 Solution: Since there are a lot of distinct values, we'll express this in the form of grouped distributions with intervals like 0-10, 10-20 and so on. First, let's represent the data in the form of grouped frequency distribution. Runs Frequency 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100 Now we will convert this frequency distribution into cumulative frequency distribution by summing up the values of current interval and all the previous intervals. Runs scored by Virat Kohli Cumulative Frequency Less than 10 20 30 40 50 60 70 80 90 100 More than 40 60 80 90 95 100 105 110 115 120 More than 40 60 80 90 95 100 105 110 115 120 More than 70 60 70 75 80 85 90 95 100 105 110 115 120 More than 80 30 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 90 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 95 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 100 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 105 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 110 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 115 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 120 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 125 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 130 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 135 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 140 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 145 0 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 150 0 0 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 155 0 0 0 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 160 0 0 0 0 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 165 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 170 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 175 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 180 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 185 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 190 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 195 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 200 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 205 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 210 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 215 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 220 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 225 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 230 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 235 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 240 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 245 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 250 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 255 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 260 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 265 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 270 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 275 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 280 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 285 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 290 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 295 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 300 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 305 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 310 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 315 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 320 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 More than 325 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 1