A tertile is a statistical term used to divide a set of data into three equal parts or groups, each representing one-third of the total. Tertiles are a type of quantile, which is a way to partition a data set into equal portions.

To create tertiles:

First Tertile (T1): The lowest third of the data. Second Tertile (T2): The middle third of the data. Third Tertile (T3): The highest third of the data. Tertiles are commonly used in statistical analysis to explore the distribution of a variable or to compare the characteristics of different groups within a dataset. They provide a way to understand how individual data points relate to the overall distribution and can be useful in identifying patterns, trends, or potential outliers.

For example, if you have a dataset of exam scores for a group of students, dividing the scores into tertiles allows you to categorize students into groups based on their performance. The first tertile might represent lower scores, the second tertile moderate scores, and the third tertile higher scores.

In addition to tertiles, other common quantiles include quartiles (dividing the data into four parts) and percentiles (dividing the data into hundredths). These terms are often used in descriptive statistics to summarize and analyze the distribution of a dataset.