**Quartiles**

**Quartiles** are three values that split sorted data into four parts, each with an equal number of observations. Quartiles are a type of quantile.

**First quartile**: Also known as Q1, or the lower quartile. This is the number halfway between the lowest number and the middle number.

**Second quartile**: Also known as Q2, or the median. This is the middle number halfway between the lowest number and the highest number.

**Third quartile**: Also known as Q3, or the upper quartile. This is the number halfway between the middle number and the highest number.

Quartiles are a set of **descriptive statistics**. They summarize the central tendency and variability of a dataset or distribution.

Quartiles are a type of percentile. A percentile is a value with a certain percentage of the data falling below it. In general terms, k% of the data falls below the kth percentile.

The first quartile (Q1, or the lowest quartile) is the 25th percentile, meaning that 25% of the data falls below the first quartile.

The second quartile (Q2, or the median) is the 50th percentile, meaning that 50% of the data falls below the second quartile.

The third quartile (Q3, or the upper quartile) is the 75th percentile, meaning that 75% of the data falls below the third quartile.

By splitting the data at the 25th, 50th, and 75th percentiles, the quartiles divide the data into four equal parts.

In a sample or dataset, the quartiles divide the data into four groups with equal numbers of observations.

In a probability distribution, the quartiles divide the distribution’s range into four intervals with equal probability.