The difference between the upper and lower quartile is known as the interquartile range. The formula for the interquartile range is given below

**Interquartile range = Upper Quartile – Lower Quartile = Q­3 – Q­1**

The numbers chosen are to help us know the center of our data, as well as how spread out the data points are

* The minimum – this is the smallest value in our data set.
* The first quartile – this number is denoted *Q*1 and 25% of our data falls below the first quartile.
* The median – this is the midway point of the data. 50% of all data falls below the median.
* The third quartile – this number is denoted *Q*3 and 75% of our data falls below the third quartile.
* The maximum – this is the largest value in our data set.

standard deviation is the square root of the variance, variance is the average of all data points within a group.

Variance is the average squared deviations from the mean, while standard deviation is the square root of this number

If the curve is shifted to the left or to the right it is appropriate to refer to a skewed data distribution.