1.How can we figure out what the interquartile range is?

Answer:

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

where Q1 is the first quartile and Q3 is the third quartile of the series.

2.What exactly is the value of the 5-number theory?

Answer: he five number summary provides this information using various descriptive statistics. The five statistics in this summary are the following, from highest to lowest data values:

Highest value in the dataset.

Third quartile (Q3)—greater than 75% of the values in the dataset

Median or second quartile (Q2)—splits the dataset in half.

First quartile (Q1)—greater than 25% of the values.

Lowest value in the dataset.

3.What is the relationship between standard deviation and variance?

Answer: Standard deviation is the square root of the variance

4. What does the difference between variance and standard deviation mean?

Variance is the average squared deviations from the mean, while standard deviation is the square root of this number. Both measures reflect variability in a distribution.

Mean is used to measure central tendency of dataset.

5. When is it appropriate to refer to a skewed data distribution?

n a skewed distribution, the median is often a preferred measure of central tendency, as the mean is not usually in the middle of the distribution. A distribution is said to be positively or right skewed when the tail on the right side of the distribution is longer than the left side.