

Averages

The average of a set of numbers is the value which best represents it. There are three different types of averages. Mean This is also known as the arithmetic mean. It is found by dividing the sum of the set of numbers with the actual number of values. For example: Find the mean of 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10.

Sum of values: $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 = 55$

Number of values = 10

Mean of values = $55 / 10 = 5.5$ Median The median of a set of numbers is the middle number when the numbers are put in order, from the lowest value to the highest value. The median can be thought of as the $((\text{Number of Values} + 1) / 2)$ th value. For example: Find the median of 2, 4, 8, 7, 4, 6, 10, 8, and 5.

In order: 2, 4, 4, 5, 6, 7, 8, 8, 10

Middle value = $((9 + 1) / 2)$ th value = 5 th value

Middle value = 2, 4, 4, 5, 6, 7, 8, 8, 10

Median = 6 Mode The mode is the value which occurs most frequently in the set of values. The mode of the set of values is also known as the modal value. For example: Find the mode of 1, 2, 2, 3, 4, 4, 5, 5, 5, 5, 7, 8, 8 and 9.

Modal value = 5

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