How can I use the MEDIAN function in Excel to find the middle value in a set of data?

Authored by

stats writer

June 30, 2024

The MEDIAN function in Excel is a useful tool for finding the middle value in a set of data. This function takes the data set as its input and returns the value that falls in the middle of the range. It is particularly helpful when working with large data sets, as it eliminates the need to manually sort the data and find the middle value. By using the MEDIAN function, users can quickly and accurately identify the median value in their data, making it a valuable tool for data analysis and decision-making. To use the MEDIAN function, simply select the cell where you want the result to appear, enter "=MEDIAN(" and then select the range of data you want to analyze. Press enter and the median value will be displayed. This function can also be combined with other functions and formulas to perform more complex calculations. Overall, the MEDIAN function in Excel is a time-saving and efficient way to find the middle value in a set of data.

This article describes the formula syntax and usage of the **MEDIAN** function in Microsoft Excel.

Description

Returns the median of the given numbers. The median is the number in the middle of a set of numbers.

Syntax

MEDIAN(number1, , ...)

The MEDIAN function syntax has the following arguments:

Number1, number2, ... Number1 is required, subsequent numbers are optional. 1 to 255 numbers for which you want the median.

Remarks

If there is an even number of numbers in the set, then MEDIAN calculates the average of the two numbers in the middle. See the second formula in the example.

Arguments can either be numbers or names, arrays, or references that contain numbers.

Logical values and text representations of numbers that you type directly into the list of arguments are counted.

If an array or reference argument contains text, logical values, or empty cells, those values are ignored; however, cells with the value zero are included.

Arguments that are error values or text that cannot be translated into numbers cause errors.

Note: The MEDIAN function measures central tendency, which is the location of the center of a group of numbers in a statistical distribution. The three most common measures of central tendency are:

Average which is the arithmetic mean, and is calculated by adding a group of numbers and then dividing by the count of those numbers. For example, the average of 2, 3, 3, 5, 7, and 10 is 30 divided by 6, which is 5.

Median which is the middle number of a group of numbers; that is, half the numbers have values that are greater than the median, and half the numbers have values that are less than the median. For example, the median of 2, 3, 3, 5, 7, and 10 is 4.

Mode which is the most frequently occurring number in a group of numbers. For example, the mode of 2, 3, 3, 5, 7, and 10 is 3.

For a symmetrical distribution of a group of numbers, these three measures of central tendency are all the same. For a skewed distribution of a group of numbers, they can be different.