How can I use the AVEDEV function in Excel to calculate the average absolute deviation of a set of data?

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June 28, 2024

The AVEDEV function in Excel is a useful tool for calculating the average absolute deviation of a set of data. It allows users to easily determine the amount of variation in a data set by measuring the average distance of each data point from the mean. This function can be accessed through the "Formulas" tab in Excel and can be applied to a range of data by inputting the appropriate cells or selecting the data with the mouse. By using the AVEDEV function, users can quickly and accurately analyze the spread of their data and make informed decisions based on its variability.

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

Description

Returns the average of the absolute deviations of data points from their mean. AVEDEV is a measure of the variability in a data set.

Syntax

AVEDEV(number1, , ...)

The AVEDEV function syntax has the following arguments:

Number1, number2, ... Number1 is required, subsequent numbers are optional. 1 to 255 arguments for which you want the average of the absolute deviations. You can also use a single array or a reference to an array instead of arguments separated by commas.

Remarks

AVEDEV is influenced by the unit of measurement in the input data.

Arguments must either be numbers or be 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.

The equation for average deviation is:

$$\frac{1}{n}\sum|x-\bar{x}|$$