How can I use the function VARA in Excel?

Authored by

stats writer

July 1, 2024

The function VARA in Excel is a statistical tool that calculates the variance of a given set of numerical data. It can be used to measure the spread or variability of the data points from the average. To use the VARA function, enter the data values in a column or row and then select the desired cells. Then, type "=VARA(" followed by the cell range containing the data and close the parentheses. Press enter to calculate the variance. This function can be useful in analyzing and interpreting data in various industries such as finance, economics, and science. It provides a quick and efficient way to obtain the variance value without having to manually calculate it.

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

Description

Estimates variance based on a sample.

Syntax

VARA(value1, , ...)

The VARA function syntax has the following arguments:

Value1, value2, ... Value1 is required, subsequent values are optional. 1 to 255 value arguments corresponding to a sample of a population.

Remarks

VARA assumes that its arguments are a sample of the population. If your data represents the entire population, you must compute the variance by using VARPA.

Arguments can be the following: numbers; names, arrays, or references that contain numbers; text representations of numbers; or logical values, such as TRUE and FALSE, in a reference.

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

Arguments that contain TRUE evaluate as 1; arguments that contain text or FALSE evaluate as 0 (zero).

If an argument is an array or reference, only values in that array or reference are used. Empty cells and text values in the array or reference are ignored.

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

If you do not want to include logical values and text representations of numbers in a reference as part of the calculation, use the VAR function.

VARA uses the following formula:

$$\frac{\sum(x-\bar{x})^2}{(n-1)}$$

where x is the sample mean AVERAGE(value1,value2,...) and n is the sample size.