How can I use the SUMX2PY2 function in excel to calculate the sum of squares of two sets of data and then add them together?

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The SUMX2PY2 function in Excel is a mathematical formula that allows users to calculate the sum of squares of two sets of data and then add them together. This function is particularly useful for analyzing the relationship between two variables and determining the total variability in a dataset. By inputting the two sets of data into the formula, users can easily obtain the sum of squares for each set, and then add them together to get the overall sum of squares. This can help in various applications such as statistical analysis, forecasting, and data visualization. Overall, the SUMX2PY2 function provides a convenient and efficient way to calculate the total sum of squares of two datasets in Excel.

This article describes the formula syntax and usage of the **SUMX2PY2** function in Microsoft Excel.

Description

Returns the sum of the sum of squares of corresponding values in two arrays. The sum of the sum of squares is a common term in many statistical calculations.

Syntax

SUMX2PY2(array_x, array_y)

The SUMX2PY2 function syntax has the following arguments:

Array_x Required. The first array or range of values.

Array_y Required. The second array or range of values.

Remarks

The arguments should be either numbers or names, arrays, or references that contain numbers.

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.

If array_x and array_y have a different number of values, SUMX2PY2 returns the #N/A error value.

The equation for the sum of the sum of squares is:

$$SUMX2PY2 = \sum (x^2 + y^2)$$