#### COVAR

[Syntax](Syntax.docx):

COVAR ( array-1 , array-2 )

Description: Computes covariance; that is, the average of the products of deviations for each data point pair in the two [cell](cell.docx) ranges designated by array-1 and array-2.

Mathematical Formula:

The covariance is:



where x and y are the sample means AVERAGE(array-1) and AVERAGE(array-2), and [n](n.docx) is the sample size.

Arguments:

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| array-1 | number, name, array, [reference](reference.docx) to number | If an array or [reference](reference.docx) argument contains text, logical values, or empty cells, those values are ignored; however, cells with the value 0 are included. |
| array-2 |

Return Type and Value: number – The covariance.

However, if

* array-1 and array-2 have a different number of data points, the return value is unspecified.
* array-1 or array-2 is empty, the return value is unspecified.

[Example:

COVAR({2.532,5.621;2.1,3.4},{5.32,2.765;5.2,6.7}) results in -1.375374

end example]