

# How can I use the BYCOL function in Excel?

Authored by  
**stats writer**

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## RECOMMENDED CITATION

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The BYCOL function in Excel allows users to organize data in a spreadsheet by columns. This function can be used to quickly rearrange data and perform calculations, making it a useful tool for data analysis and organization. By selecting a range of cells and using the BYCOL function, users can easily group and manipulate data based on specific columns. This function can save time and improve efficiency when working with large amounts of data in Excel.

Applies a LAMBDA to each column and returns an array of the results. For example, if the original array is 3 columns by 2 rows, the returned array is 3 columns by 1 row.

## Syntax

=BYCOL (array, lambda(column))

The BYCOL function syntax has the following arguments and parameters:

**array** An array to be separated by column.

**lambda** A LAMBDA that takes a column as a single parameter and calculates one result. The LAMBDA takes a single parameter:

**column** A column from array.

## Errors

Providing an invalid LAMBDA function or an incorrect number of parameters returns a #VALUE! error called "Incorrect Parameters".

Not providing a LAMBDA function or anything but a single value returned from the LAMBDA function returns a #CALC error.

## Examples

### Example 1: Return the maximum value of each column

Enter the sample data into cells A1: C2, and then copy the formula into cell D4:

=BYCOL(A1:C2, LAMBDA(array, MAX(array)))

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	1	2	3										
2	4	5	6										
3													
4				4	5	6							

**Example 2: Return the sum of the squared value of each array element in each column**

Enter the sample data into cells A1: C2, and then copy the formula into cell D4:

=BYCOL(A1:C2,LAMBDA(array,SUMSQ(array)))

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	1	2	3										
2	4	5	6										
3													
4				17	29	45							