

# How can I use the BYROW function in Excel to return a row-wise calculation or operation on a range of cells?

Authored by  
**stats writer**

June 29, 2024

## RECOMMENDED CITATION

stats writer (2024). *How can I use the BYROW function in Excel to return a row-wise calculation or operation on a range of cells?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=157363>

The BYROW function in Excel is a useful tool that allows users to perform row-wise calculations or operations on a range of cells in a spreadsheet. This function takes an array of values and evaluates them one row at a time, returning the result of the calculation or operation for each row. This allows for efficient and accurate data analysis, as it eliminates the need for manual calculations and reduces the risk of errors. By utilizing the BYROW function, users can easily perform complex calculations or operations on multiple rows of data at once, saving time and increasing productivity. Additionally, this function can be combined with other Excel functions to further enhance its capabilities.

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

## Syntax

=BYROW(array, lambda(row))

The BYROW function syntax has the following arguments:

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

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

**row** A row 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: Returns the maximum value of each row of data

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

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

	A	B	C	D	E	F	G	H
1	1	2	3					
2	4	5	6					
3								
4				3				
5				6				

**Example 2: returns the maximum value of each squared value of an array using the SUMSQ function**

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

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

	A	B	C	D	E	F	G	H
1	1	2	3					
2	4	5	6					
3								
4				14				
5				77				