How can I create a XOR function in Excel?

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July 1, 2024

A XOR function, also known as exclusive OR, can be created in Excel using the logical operator function. This function compares two values and returns a TRUE value only if one of the values is TRUE and the other is FALSE. To create a XOR function, the IF function can be used with the logical operators "XOR" or "^". By following the proper syntax and selecting the appropriate cell references, a XOR function can be easily created in Excel to perform logical operations. This allows for efficient and accurate data analysis and decision making in spreadsheet applications.

The **XOR** function returns a logical **Exclusive Or** of all arguments.

Syntax

XOR(logical1, ,...)

The XOR function syntax has the following arguments.

Logical1, logical2,... Logical 1 is required, subsequent logical values are optional. 1 to 254 conditions you want to test that can be either TRUE or FALSE, and can be logical values, arrays, or references.

Remarks

The arguments must evaluate to logical values such as TRUE or FALSE, or in arrays or references that contain logical values.

If an array or reference argument contains text or empty cells, those values are ignored.

If the specified range contains no logical values, XOR returns the #VALUE! error value.

You can use an XOR array formula to see if a value occurs in an array.

Note: If you have a current version of Microsoft 365, then you can simply enter the formula in the top-left-cell of the output range, then press **ENTER** to confirm the formula as a dynamic array formula. Otherwise, the formula must be entered as a legacy array formula by first selecting the output range, entering the formula in the top-left-cell of the output range, and then pressing **CTRL+SHIFT+ENTER** to confirm it. Excel inserts curly brackets at the beginning and end of the formula for you. For more information on array formulas, see Guidelines and examples of array formulas.

The result of XOR is TRUE when the number of TRUE inputs is odd and FALSE when the number of TRUE inputs is even.

Example

Copy the example data in the following table, and paste it in cell A1 of a new Excel worksheet. For formulas to show results, select them, press F2, and then press Enter.

Formula	Description	Result
=XOR(3>0,2<9)	Because both of the two tests evaluates to TRUE, FALSE is returned.	FALSE
=XOR(3>12,4>6)	Because all test results evaluate to FALSE, FALSE is returned. At least one of the test results must evaluate to TRUE to return TRUE.	FALSE