How can I perform the NOT function in Excel?

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June 30, 2024

The NOT function in Excel is a logical function that allows users to reverse the logical value of a given statement or cell. This function can be performed by using the "NOT" keyword, followed by a logical expression or cell reference within the parentheses. The result of the NOT function will be either TRUE or FALSE, depending on the original value of the statement or cell. This function is useful for evaluating conditions and making decisions in spreadsheets. To perform the NOT function in Excel, users can simply enter the formula into a cell and press enter, or use the function wizard to guide them through the process.

Use the **NOT** function, one of the logical functions, when you want to make sure one value is not equal to another.

Example

	A	B	C
1	Formula	Description	Result
2	=NOT(FALSE)	Reverses FALSE	TRUE
3	=NOT(TRUE)	Reverses TRUE	FALSE
4	=NOT(1+1=2)	Reverses TRUE	FALSE
5	=NOT(2+2=5)	Reverses FALSE	TRUE

The **NOT** function reverses the value of its argument.

One common use for the **NOT** function is to expand the usefulness of other functions that perform logical tests. For example, the **IF** function performs a logical test and then returns one value if the test evaluates to TRUE and another value if the test evaluates to FALSE. By using the **NOT** function as the logical_test argument of the **IF** function, you can test many different conditions instead of just one.

Syntax

NOT(logical)

The **NOT** function syntax has the following arguments:

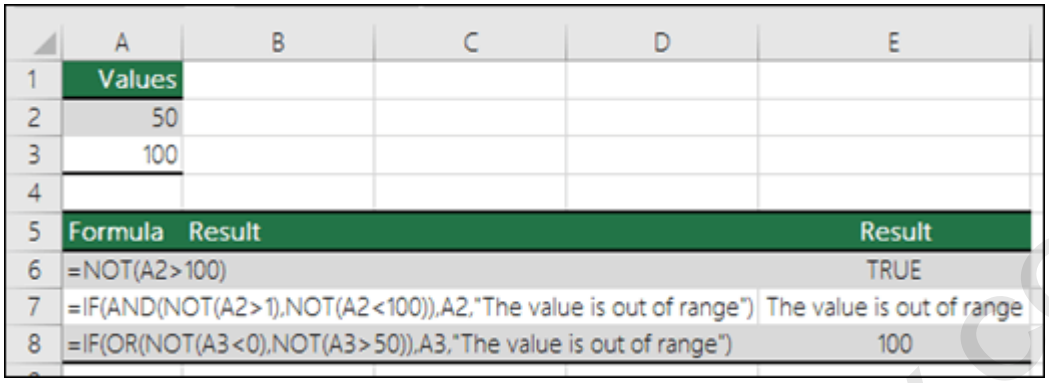
Logical Required. A value or expression that can be evaluated to TRUE or FALSE.

Remarks

If logical is FALSE, **NOT** returns TRUE; if logical is TRUE, **NOT** returns FALSE.

Examples

Here are some general examples of using **NOT** by itself, and in conjunction with **IF**, **AND** and **OR**.

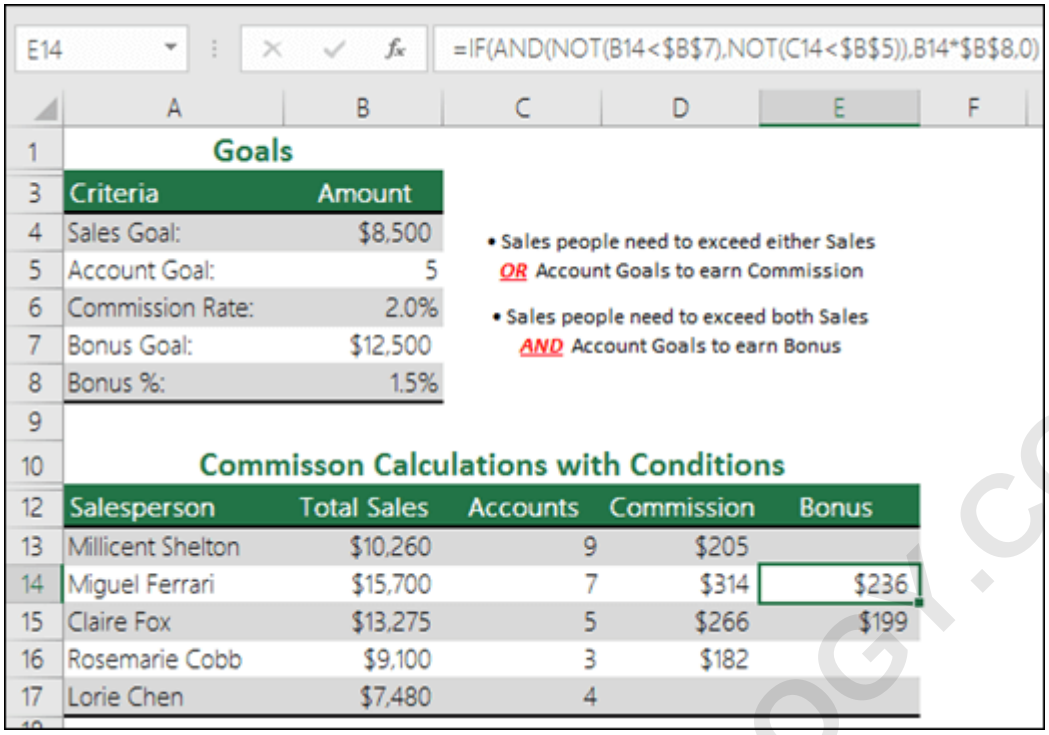


	A	B	C	D	E
1	Values				
2	50				
3	100				
4					
5	Formula	Result			Result
6	=NOT(A2>100)				TRUE
7	=IF(AND(NOT(A2>1),NOT(A2<100)),A2,"The value is out of range")				The value is out of range
8	=IF(OR(NOT(A3<0),NOT(A3>50)),A3,"The value is out of range")				100

Formula	Description
=NOT(A2>100)	A2 is **NOT** greater than 100
=IF(AND(NOT(A2>1),NOT(A2<100)),A2,"The value is out of range")	50 is greater than 1 (TRUE), **AND** 50 is less than 100 (TRUE), so **NOT** reverses both arguments to FALSE. **AND** requires both arguments to be TRUE, so it returns the result if FALSE.
=IF(OR(NOT(A3<0),NOT(A3>50)),A3,"The value is out of range")	100 is not less than 0 (FALSE), and 100 is greater than 50 (TRUE), so **NOT** reverses the arguments to TRUE/FALSE. **OR** only requires one argument to be TRUE, so it returns the result if TRUE.

Sales Commission Calculation

Here is a fairly common scenario where we need to calculate if sales people qualify for a bonus using **NOT** with **IF** and **AND**.



=IF(AND(NOT(B14<B7),NOT(C14<B5)),B14*B8,0)- **IF** Total Sales is **NOT** less than Sales Goal, **AND** Accounts are **NOT** less than the Account Goal, then multiply Total Sales by the Commission %, otherwise return 0.

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