“How can I use the IFS function in Excel to evaluate multiple conditions and return different results based on the conditions?”

Authored by

stats writer

June 30, 2024

ARABPSYCHOLOGY.COM

RECOMMENDED CITATION

stats writer (2024). *“How can I use the IFS function in Excel to evaluate multiple conditions and return different results based on the conditions?”*. PSYCHOLOGICAL SCALES. Retrieved from https://scales.arabpsychology.com/?p=160757

The IFS function in Excel allows users to evaluate multiple conditions and return different results based on those conditions. This function is particularly useful for organizing data and performing calculations based on specific criteria. By using the IFS function, users can easily create logical statements and specify different outcomes for each condition, providing a more efficient and organized way to analyze and manipulate data. This feature is especially helpful for complex data sets and can save time and effort in performing calculations and data analysis tasks.

The IFS function checks whether one or more conditions are met, and returns a value that corresponds to the first TRUE condition. IFS can take the place of multiple nested IF statements, and is much easier to read with multiple conditions.

Note: This feature is available on Windows or Mac if you have Office 2019, or if you have a Microsoft 365 subscription. If you are a Microsoft 365 subscriber, make sure you have the latest version.

Simple syntax

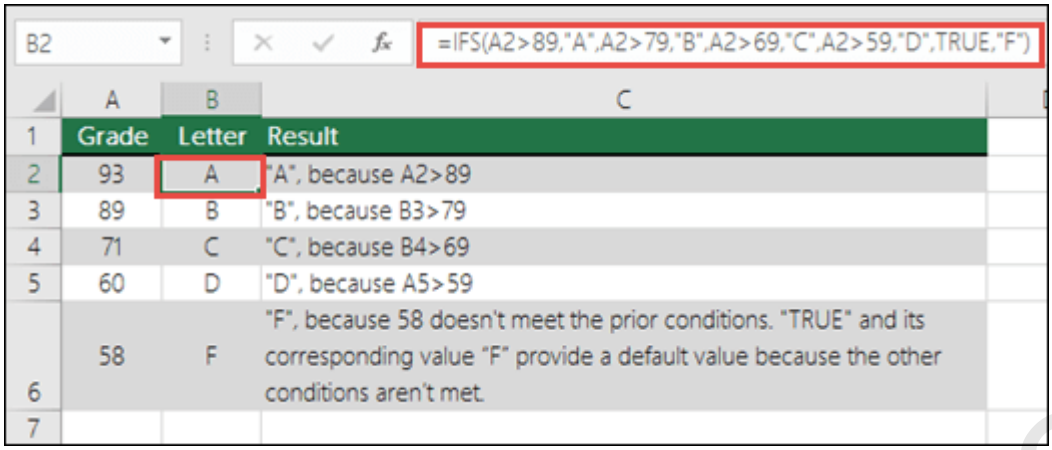
Generally, the syntax for the IFS function is:

=IFS(, ,...)

Argument	Description
logical_test1 (required)	Condition that evaluates to TRUE or FALSE.
value_if_true1 (required)	Result to be returned if logical_test1 evaluates to TRUE. Can be empty.
logical_test2...logical_test127 (optional)	Condition that evaluates to TRUE or FALSE.
value_if_true2...value_if_true127 (optional)	Result to be returned if **logical_testN** evaluates to TRUE. Each **value_if_trueN** corresponds with a condition **logical_testN**. Can be empty.

Example 1

ARABPSYCHOLOGY.COM



	A	B	C
1	Grade	Letter	Result
2	93	A	"A", because A2>89
3	89	B	"B", because B3>79
4	71	C	"C", because B4>69
5	60	D	"D", because A5>59
6	58	F	"F", because 58 doesn't meet the prior conditions. "TRUE" and its corresponding value "F" provide a default value because the other conditions aren't met.
7			

The formula for cells A2:A6 is:

=IFS(A2>89,"A",A2>79,"B",A2>69,"C",A2>59,"D",TRUE,"F")

Which says IF(A2 is Greater Than 89, then return a "A", IF A2 is Greater Than 79, then return a "B", and so on and for all other values less than 59, return an "F").

Remarks

To specify a default result, enter TRUE for your final logical_test argument. If none of the other conditions are met, the corresponding value will be returned. In Example 1, rows 6 and 7 (with the 58 grade) demonstrate this.

If a logical_test argument is supplied without a corresponding value_if_true, this function shows a "You've entered too few arguments for this function" error message.

If a logical_test argument is evaluated and resolves to a value other than TRUE or FALSE, this function returns a #VALUE! error.

If no TRUE conditions are found, this function returns #N/A error.

Need more help?

You can always ask an expert in the Excel Tech Community or get support in Communities.

Related Topics

IF function
Advanced IF functions - Working with nested formulas and avoiding pitfalls

ARABPSYCHOLOGY.COM

Training videos: Advanced IF functions
The COUNTIF function will count values based on a single criteria
The COUNTIFS function will count values based on multiple criteria
The SUMIF function will sum values based on a single criteria
The SUMIFS function will sum values based on multiple criteria
AND function
OR function
VLOOKUP function
Overview of formulas in Excel
How to avoid broken formulas
Detect errors in formulas
Logical functions
Excel functions (alphabetical)
Excel functions (by category)

ARABPSYCHOLOGY.COM