

Excel- the IFS Function

What is the IFS function?

The **IFS** function (available in Excel 2016 onwards) checks whether a condition (or series of conditions) is true, and returns a value (numeric, text or a calculation) for the first true result it finds. It can check up to **127** conditions. If none of the condition are true, the function will return a #N/A value.

Why would I use it?

You can use it to account for different possibilities, instead of nesting multiple IF functions.

What is the syntax for it?

=IFS([Test for True1, Value if True1], [Test for True2, Value if True2],...[Test for True127, Value if True127])

Example

Employees receive a different bonus percentage, depending on which department they work in. You can use an IFS function to calculate the correct percentage rate for each employee.

	A	B	C	D	E	F	G	H
1	Last Name	Gender	Date of Birth	Salary	Department		Whatif	
2	Andrew	male	04/06/1982	£ 33,000	Engineering		Department is	Bonus
3	Dossanov	male	15/09/1982	£ 25,000	Finance		Finance	7.5%
4	Davies	male	10/11/1982	£ 15,000	Engineering		Engineering	5%
5	Dai	female	19/12/1982	£ 16,500	Marketing		Otherwise	2.5%
6	Ewing	male	13/05/1983	£ 16,500	Finance			
7	Ferrie	male	20/05/1983	£ 19,000	Marketing			
8	Cooper	female	06/09/1983	£ 30,000	Admin			
9	Bird	male	28/10/1983	£ 27,000	Finance			
10	Bruce	female	27/02/1984	£ 21,000	Finance			

=IFS(E2=\$G\$2,\$H\$3,E2=\$G\$3,\$H\$4,TRUE,\$H\$5)

	A	B	C	D	E	F	G	H
1	Last Name	Gender	Date of Birth	Salary	Department	Bonus	Whatif	
2	Andrew	male	04/06/1982	£ 33,000	Engineering	5.0%	Department is	Bonus
3	Dossanov	male	15/09/1982	£ 25,000	Finance	7.5%	Finance	7.5%
4	Davies	male	10/11/1982	£ 15,000	Engineering	5.0%	Engineering	5%
5	Dai	female	19/12/1982	£ 16,500	Marketing	2.5%	Otherwise	2.5%
6	Ewing	male	13/05/1983	£ 16,500	Finance	7.5%		
7	Ferrie	male	20/05/1983	£ 19,000	Marketing	2.5%		
8	Cooper	female	06/09/1983	£ 30,000	Admin	2.5%		
9	Bird	male	28/10/1983	£ 27,000	Finance	7.5%		
10	Bruce	female	27/02/1984	£ 21,000	Finance	7.5%		



The final part of the formula (TRUE) is what you want to function to do if it has already ruled out all the preceding possibilities. In this example, if an employee works in any department other than Finance or Engineering, they will receive a 2.5% bonus, so we don't need to set individual conditions for Admin or Marketing.