

Maths and Trigonometric - SUMIF Function

Description: You can use the SUMIF Function to sum the values in a range that meet criteria that you specify.

Syntax

SUMIF (range, criteria, [sum-range])

Applicability:

Excel 2007, Excel 2010, Excel 2013, Excel 2016.

Example:

Function Usage

Item	Cost	Criteria	Result
Notebooks	300	Notebooks	=SUMIF(B3:B10, E3, C3:C10)
Pens	150	Pens	=SUMIF(B3:B10, E4, C3:C10)
Notebooks	100	<300	=SUMIF(B3:C10, E5, C3:C10)
Stickers	50		
Stickers	75		
Pens	100		
Pens	125		
Stickers	80		

Criteria	Result
Notebooks	400
Pens	375
<300	680

IFERROR SUM Combination

Although the IFERROR can sometimes be used on its own, it is often combined with another function. This is known as 'nesting' a function inside of the first IFERROR argument. For example, below we combine

the IFERROR function with the SUM function.

=IFERROR(SUM(B3:B6), 'Sum not working')

	A	B	C	D	E
2		Revenue		Total Revenue	Formula Used
3		\$50		Sum not Working	= IFERROR(SUM(B3:B6), 'Sum not working')
4		#DIV/0!			
5		\$10			

IFERROR VLOOKUP Combination

When looking for a value in a range, it is common to use the VLOOKUP function. However, if the VLOOKUP function doesn't find a value in the specified range, it will return a #N/A error. To work around this, we can combine the IFERROR with the VLOOKUP.

fx = IFERROR(VLOOKUP(E3, B3:C6, 2, FALSE), 'Not in the list')

	A	B	C	D	E	F
1		Name	Revenue		Name	Revenue
2		Sam	\$50		Mike	Not in the list
3		John	\$20			
4		Sara	\$10			
5		Anna	\$65			

IFERROR XLOOKUP Combination

Using an XLOOKUP, we can also consider adding an IFERROR as shown in the image below.

fx = IFERROR(XLOOKUP(E3, B3:B6, C3:C6), 'Not there')

	A	B	C	D	E	F
2		Name	Revenue		Name	Revenue
3		Sam	\$50		Mike	Not there
4		John	\$20			
5		Sara	\$10			
6		Anna	\$65			

Excel COUNTIF function

COUNTIF function

The COUNTIF function is a premade function in Excel, which counts cell as specified.

It is typed = **COUNTIF**

Note: The COUNTIF function can have basic or more advanced uses. This covers the basic use for how to count specific numbers and words.

Apply the COUNTIF function to range B2:B21, to count how many Pokemons we have in the different types:

= COUNTIF (B2: B21;
COUNTIF (range, criteria))

INDEX MATCH

The INDEX MATCH formula is the combination of two functions in Excel: INDEX and MATCH.

= INDEX() returns the value of a cell in a table based on the column and row number.

= MATCH() returns the position of cell in a row or column.

combined, the two formulas can look up and return the value of a cell in a table based on vertical and horizontal criteria. For short, this is referred to as just the Index Match function.

Below is a table showing people's name, height, and weight. We want to use the INDEX formula to look up Kevin's height... here is an example of how to do it.

Follow these steps:

- ① Type "=INDEX(" and select the area of the table, then add a comma
- ② Type the row number for Kevin, which is "4," and add a comma.
- ③ Type the column number for Height, which is "2," and close the bracket.
- ④ The result is "5.8".

	A	B	C	D	E	F
1						
2			1	2	3	
3		1	Name	Height	Weight	
4		2	Sally	6.2	185	
5		3	Tom	5.9	170	
6		4	Kevin	5.8	175	
7		5	Amand	6.5	145	
8		6	Carl	6.1	210	
9		7	Ned	6.0	180	
10		8				

= INDEX(C3:E9, 4, 2)