

Making Excel Work for Your Tribal Community

Basic Guide to
Excel Formulas



Capacity Building
CENTER FOR TRIBES

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Basic Guide to Excel Formulas

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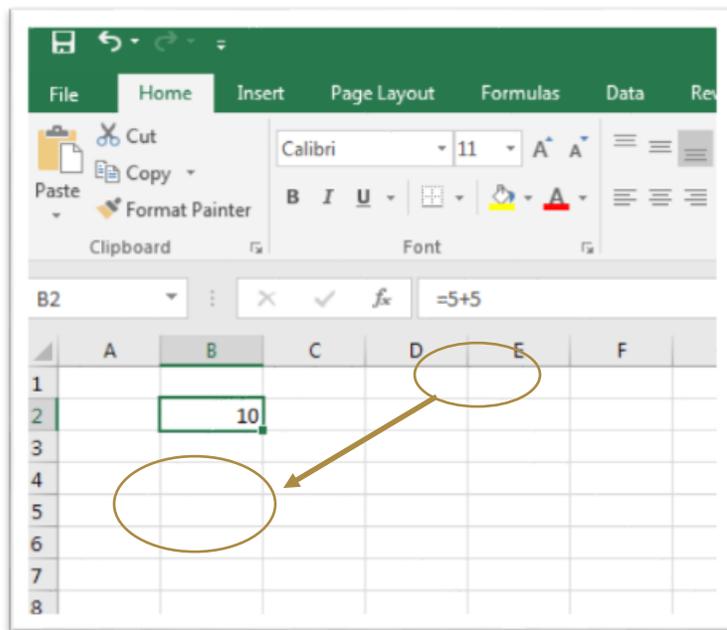
What's a Formula?

Excel can perform a lot of helpful tasks for you, if you know the right way to ask. It can do math calculations, do counts from your data, split information into different columns (like first and last names), etc. Formulas are the way you tell Excel what you want it to do.

It All Starts with An Equals Sign (=)

The equals sign (=) is how you get Excel's attention so it knows you want it to do something. Every formula will start with an equals sign. You can type the equals sign into the formula bar at the top of the spreadsheet or directly into the cell where you want to put the formula.

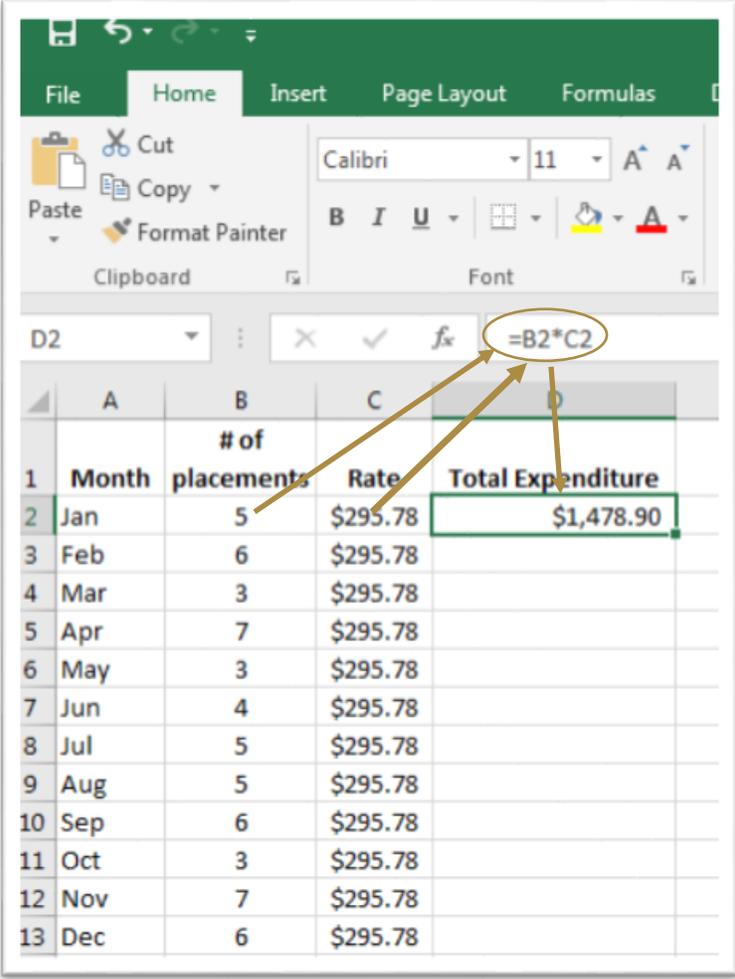
Then you can start telling Excel what it is you want it to do, like add two numbers together:



Mixing It Up with Cells

You probably wouldn't use Excel to do calculations that simple, of course. Where formulas start to get useful is when you take information from different cells in your spreadsheet and calculate it. Every cell has a unique name (called a "cell reference") that's made up of the letter of the column and the number of the row.

Here we want to multiply the number of foster care placements open during January (cell B2) by the case rate (cell C2) to get our total expenditure for the month. Excel recognizes the asterisk (*) as the symbol for multiplication, so we put the formula (=B2*C2) into cell D2, where we want the total to show up.



	A	B	C	D
		# of	Rate	Total Expenditure
1	Month	placements		
2	Jan	5	\$295.78	\$1,478.90
3	Feb	6	\$295.78	
4	Mar	3	\$295.78	
5	Apr	7	\$295.78	
6	May	3	\$295.78	
7	Jun	4	\$295.78	
8	Jul	5	\$295.78	
9	Aug	5	\$295.78	
10	Sep	6	\$295.78	
11	Oct	3	\$295.78	
12	Nov	7	\$295.78	
13	Dec	6	\$295.78	

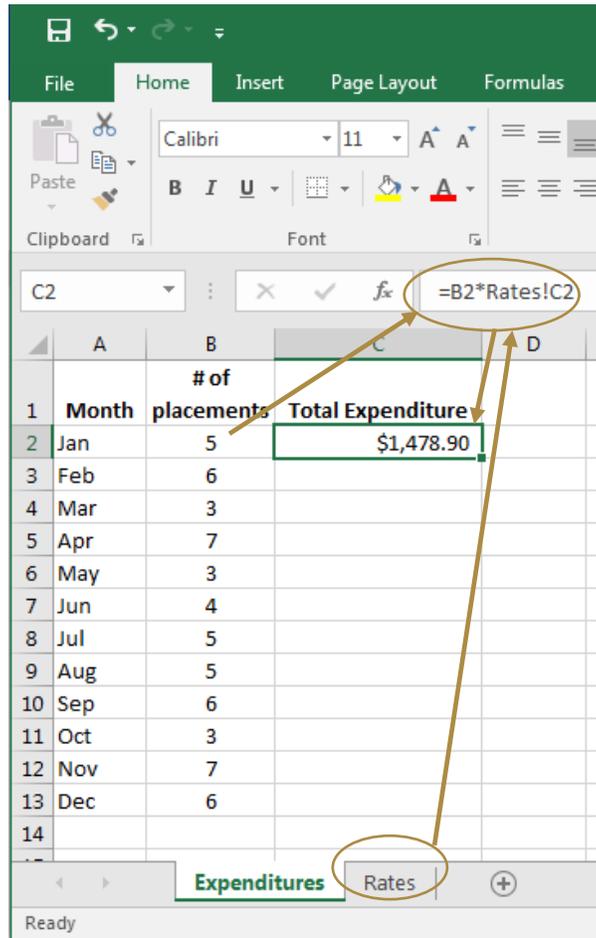
Crossing the Line (Between Worksheets)

Let's say that in the previous example, you actually have the rate stored in another worksheet in the same Excel file. We don't need to waste time copying it – we can just tell Excel to grab it from the other sheet and use it for the calculations. All we need to do is tell Excel where it is.

In this example, the case rate is in a worksheet named “Rates” in cell C2. In Excel’s language, we would write this as “Rates!C2” and write our formula telling Excel to multiply cell B2 in this worksheet with cell C2 from the Rates worksheet.

$$=B2*Rates!C2$$

To fill in the rest of the months, we would change the first cell name for each new row, but keep “Rates!C2” constant.



Cell Ranges

Excel can also look at a larger range of cells, such as a whole column. Using our example from above, let’s say you wanted to add up your entire year of foster care expenditures. You can use the SUM function to add up the range of cells between January (cell C2) and December (cell C13):

$$=SUM(C2:C13)$$

The screenshot shows the Microsoft Excel interface with the **Formulas** tab selected. The **Function Library** includes **Insert Function**, **AutoSum**, **Recently Used**, **Financial**, **Logical**, **Text**, and **Date & Time**. The formula bar displays `=SUM(C2:C13)`. The spreadsheet data is as follows:

	A	B	C	D
		# of		
1	Month	placements	Total Expenditure	
2	Jan	5	\$1,478.90	
3	Feb	6	\$1,774.68	
4	Mar	3	\$887.34	
5	Apr	7	\$0.00	
6	May	3	\$0.00	
7	Jun	4	\$0.00	
8	Jul	5	\$0.00	
9	Aug	5	\$0.00	
10	Sep	6	\$0.00	
11	Oct	3	\$0.00	
12	Nov	7	\$0.00	
13	Dec	6	\$0.00	
14			<code>=SUM(C2:C13)</code>	
15			SUM(number1, [number2], ...)	
16				

Locking It In

As soon as you finish typing your formula, hit “Enter” or “Tab”. This locks in your formula and keeps Excel from getting confused when you click on another cell. If you do accidentally click somewhere else before you lock in your formula, just hit Ctrl+Z to undo it.

[VIEW THE COMPANION VIDEO](#)