

## Formulas, Part 1: Creating an Excel Formula

This short guide will show you how to create a formula in an Excel spreadsheet. Learning this basic Excel function will allow you to come up with more useful spreadsheets. The guide shows how to create addition, subtraction, multiplication and division formulas.

1.) The first step is to open up an existing Excel sheet or create a new one. Notice column **C** in my example. I am going to apply the math functions shown in column **C** to the numbers in columns **A** and **B**.

	A	B	C	D
1	8	7	Add	
2	5	6	Subtract	
3	3	4	Multiply	
4	30	5	Divide	
5				

2.) I want to have the sum of 8 plus 7 show up automatically in column **C**, row 1 ( $8+7=15$ ). I start by double-clicking on the cell where I want the total to appear, then pressing the "=" key. This lets Excel know that I'm entering a formula into the cell.

	A	B	C	D
1	8	7	=	
2	5	6		
3	3	4		
4	30	5		
5				

3.) Next, I add an opening parenthesis character. Then I have to enter the first cell name. In my example, the first cell is **A1**, which corresponds to the number 8.

**Note:** when I type a formula into a cell, the same formula also appears in the Formula Bar, above the letter column indicators.

(Notice that Excel shows cell names in formulas in distinctive **colors**, and puts boxes of the same **color** around the corresponding cells. I can use this to ensure that I select the right cells to include in my formulas.)

	A	B	C	D
1	8	7	=(A1	
2	5	6		
3	3	4		
4	30	5		
5				

4.) Next, I press the "+" key to add an addition symbol and follow this up with the name of the second cell, in this case **B1**. I finish the formula by entering an ending parenthesis character. (Again, note the **color correspondence** between cell **B1** and its name in the formula.)

	A	B	C	D	E
1	8	7	=(A1+B1)		
2	5	6			
3	3	4			
4	30	5			
5					

5.) I have now completed a basic addition formula in cell **C1**. When I change focus to any other cell, either by using the **Tab** key, or clicking in any cell other than the one that has the formula, the computed answer appears automatically in **C1** — in this example, the number 15, since  $8+7=15$ .

	A	B	C	D	E
1	8	7	15		
2	5	6			
3	3	4			
4	30	5			
5					

6.) Now try to enter the remaining formulas for rows two through four yourself. This is what the formulas should look like:

- Subtract: “=(A2-B2)”
- Multiply: “=(A3\*B3)”
- Divide: “=(A3/B3)”

	A	B	C	D	E
1	8	7	15		
2	5	6	-1		
3	3	4	12		
4	30	5	6		
5					