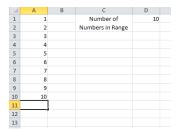# 8 Excel Formulas You Need To Know

1. SUM

Formula: =SUM(4,4) or =SUM(A1,A2) or =SUM(A1:A7)

Does exactly what you would think it allows you to adds two or more numbers together. Whether 2 numbers or 2 particular cells separated by a comma or a range of cells separated by a colon.
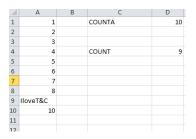
2. COUNT

Formula: =COUNT(A1:A14)

It counts the number of numerical values in the range.

	A	B	C	D
1	1		Number of	10
2	2		Numbers in Range	
3	3			
4	4			
5	5			
6	6			
7	7			
8	8			
9	9			
10	10			
11				
12				
13				

3. COUNTA

Formula: =COUNTA(A1:A10)

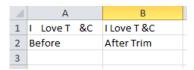It counts all cell values in the range compared to COUNT which only counts numerical values.

	A	B	C	D
1	1		COUNTA	10
2	2			
3	3			
4	4		COUNT	9
5	5			
6	6			
7	7			
8	8			
9	IloveT&C			
10	10			
11				
12				

4. LEN

Formula: =LEN(A2)

This counts the number of characters in an cell, it also includes spaces.

	A	B	C	D
1	I Love T&C		With Spaces	10
2				
3				
4	IloveT&C		With Out	8
5				
6				

5. TRIM

Formula: =TRIM(A2)

Gets rid of extra spaces in a cell; leaving only a single space between characters.

	A	B
1	I Love T &C	I Love T &C
2	Before	After Trim
3		

6. VS LOOKUP

Formula: =VLOOKUP(lookup_value, table_array, col_index_num, range_lookup)
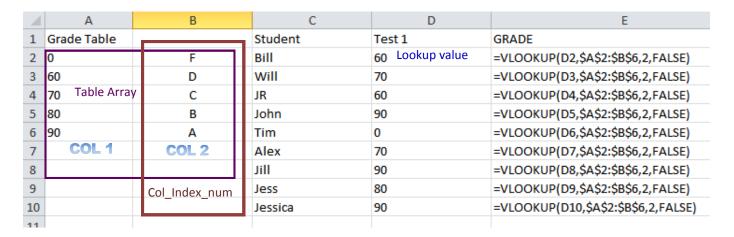
=VLOOKUP(D2,$A$2:$B$6,2,FALSE)

Lookup Value= Value you are matching to the table

Table Array= The range of data you are matching to the look up value (always use an Absolute Value, hight the cell and click F4 will change it)

Col Index Num= The Colum from the data table that you want to appear in the cell (in this case Colum 2 be cause that is the letter grade is)

Range Lookup: False=Exact values **True**= Close Values

Used to compare data fast from left to right data must be in Acceding order.

	A	B	C	D	E
1	Grade Table		Student	Test 1	GRADE
2	0	F	Bill	60 Lookup value	=VLOOKUP(D2,$A$2:$B$6,2,FALSE)
3	60	D	Will	70	=VLOOKUP(D3,$A$2:$B$6,2,FALSE)
4	70 Table Array	C	JR	60	=VLOOKUP(D4,$A$2:$B$6,2,FALSE)
5	80	B	John	90	=VLOOKUP(D5,$A$2:$B$6,2,FALSE)
6	90	A	Tim	0	=VLOOKUP(D6,$A$2:$B$6,2,FALSE)
7	COL 1	COL 2	Alex	70	=VLOOKUP(D7,$A$2:$B$6,2,FALSE)
8			Jill	90	=VLOOKUP(D8,$A$2:$B$6,2,FALSE)
9		Col_Index_num	Jess	80	=VLOOKUP(D9,$A$2:$B$6,2,FALSE)
10			Jessica	90	=VLOOKUP(D10,$A$2:$B$6,2,FALSE)
11					

A	B	C	D	E
Grade Table		Student	Test 1	GRADE
0	F	Bill	60.00	D
60	D	Will	70.00	C
70	C	JR	60.00	D
80	B	John	90.00	A
90	A	Tim	0.00	F
		Alex	70.00	C
		Jill	90.00	A
		Jess	80.00	B
		Jessica	90.00	A

7. IF Statements

Formula =IF(logical_statement, return this if logical statement is true, return this if logical statement is false)

=IF(B3>C3,"Did Meet Quota","Did Not Meet Quota")

Used to get a true or false statement for the intended column

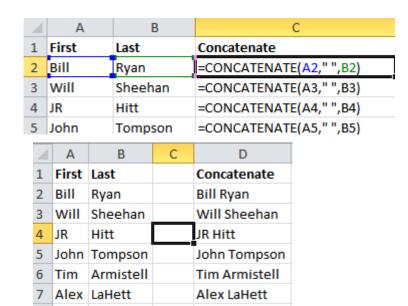| Name	Sales This Month	Quota	Did They Meet Quota
Bill	403431	500000	=IF(B3>C3,"Did Meet Quota","Did Not Meet Quota"
Will	616007	500000	=IF(B4>C4,"Did Meet Quota","Did Not Meet Quota"
JR	351477	500000	=IF(B5>C5,"Did Meet Quota","Did Not Meet Quota"
John	668590	500000	=IF(B6>C6,"Did Meet Quota","Did Not Meet Quota"
Tim	640779	500000	=IF(B7>C7,"Did Meet Quota","Did Not Meet Quota"
Alex	440779	500000	=IF(B8>C8,"Did Meet Quota","Did Not Meet Quota"

	Name	Sales This Month	Quota	Did They Meet Quota
2	Name	Sales This Month	Quota	Did They Meet Quota
3	Bill	$ 403,431.00	$500,000.00	Did Not Meet Quota
4	Will	$ 616,007.00	$500,000.00	Did Meet Quota
5	JR	$ 351,477.00	$500,000.00	Did Not Meet Quota
6	John	$ 668,590.00	$500,000.00	Did Meet Quota
7	Tim	$ 640,779.00	$500,000.00	Did Meet Quota
8	Alex	$ 440,779.00	$500,000.00	Did Not Meet Quota
9				
10				

8. CONCATENATE

Formula: concatenate(A1, " ", B1)

" " Adds a space between the concatenate

Places to strings of text together into one cell

	A	B	C
1	First	Last	Concatenate
2	Bill	Ryan	=CONCATENATE(A2," ",B2)
3	Will	Sheehan	=CONCATENATE(A3," ",B3)
4	JR	Hitt	=CONCATENATE(A4," ",B4)
5	John	Tompson	=CONCATENATE(A5," ",B5)

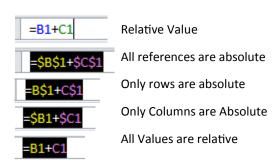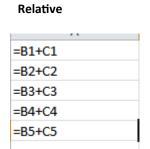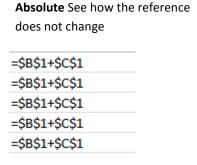|	A	B	C	D
1	First	Last		Concatenate
2	Bill	Ryan		Bill Ryan
3	Will	Sheehan		Will Sheehan
4	JR	Hitt		JR Hitt
5	John	Tompson		John Tompson
6	Tim	Armistell		Tim Armistell
7	Alex	LaHett		Alex LaHett

A Couple of Shortcuts in Excel

Absolute Value

An Absolute value is when you move the cells the referenced cells, columns or rows such as A1 will not change

Highlight Cells you want changed **+** Click F4

Relative

Absolute See how the reference does not change

=B1+C1 — Relative Value

=$B$1+$C$1 — All references are absolute

=B$1+C$1 — Only rows are absolute

=$B1+$C1 — Only Columns are Absolute

=B1+C1 — All Values are relative

Relative
=B1+C1
=B2+C2
=B3+C3
=B4+C4
=B5+C5

Absolute
=$B$1+$C$1
=$B$1+$C$1
=$B$1+$C$1
=$B$1+$C$1
=$B$1+$C$1

Auto Sum

Automatically adds *By default, averages, count, max or min the selected values

A
5
7
5
4
7
6
=SUM(A1:A6)

Σ
- Σ Sum
- Average
- Count Numbers
- Max
- Min