COUNTIF()

As a business consultant who works heavily with Excel, I find many people do not know how to use some of the useful functions in Excel (there are also some less useful ones). The COUNTIF() is very useful and rarely used by Excel users.

Like any 'IF' statement SUMIF first has a criteria that must be met (the IF part). If the value in the cell included in the range matches the criteria, (the 'IF' is True) then it adds the corresponding number in the sum_range to its cumulative total for that criteria.

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E14		•	fx			
	Α	В	С	D	E	
1		15				
2		15	200	200	=IF(B2=\$B\$1, C2,0)	
3		16	200	0	=IF(B3=\$B\$1, C3,0)	

Just a short review of IF statements:

A simple 'IF' statement says if a condition is true (in this example B2=B) then do something. This statement puts the value that is in C2 in D2 (D2 is where the formula is). If this statement is not true then put a '0' in D2. The dollar sign makes the reference absolute. You need to understand absolute vs. relative addresses to use Excel functions effectively.

The COUNTIF is a modified version of the IF and Count Functions that can be useful for specific purposes.

COUNTIF(range,criteria) Range = the range of cells you want to count Criteria = How to determine whether to count or not.

In the sample below, I am using the countif function in four different ways.

In the first, I am counting all of the cells in column C that contain a Y.

In the second, I am counting all of the cells in column C that have what is referenced in E9. In this case, it is again Y.

			1		
	E29 🗸	f _x			
	A	В	С	D	E
1			Include		
2	1/31/2005	\$521,389			
3	12/16/2004	\$936,772	Y		
4	11/1/2001	\$990,770			
5	8/1/2003	\$767,467	Y		
6	7/1/2002	\$719,298		7	=COUNTIF(C2:C17,"=Y")
7	1/31/2005	\$452,747			
8	12/16/2004	\$280,927	Y		
9	11/1/2001	\$974,904		7	Y
10	8/1/2003	\$214,270			=COUNTIF(C2:C17,E7)
11	7/1/2002	\$490,162	Y		
12	1/31/2005	\$695,253			
13	12/16/2004	\$689,211	Y	11	=COUNTIF(B2:B17,">400000")
14	11/1/2001	\$915,435			
15	8/1/2003	\$134,383	Y		=COUNTIF(A2:A17,">"&E16)
16	7/1/2002	\$329,245		7	8/1/2003
17	1/31/2005	\$83,663	Y		
18					

One of the things to notice about the COUNTIF() function is that the criteria in three of the formulas are surrounded in quotes"". In the first the = sign and the Y are combined as "=Y". This is necessary so the function knows what the criterion is. In the second one since we refer to a cell the '=' is assumed.

In the third example we combine the > with 400000 to create our condition. So we need the quotes ">40000" in the around the criteria. You can put a comma in but best not.

In the fourth example I am combining a greater than ">" operator with a reference to a date. Notice since the ">" operator is not a reference but a condition it needs to be placed in "".

Perhaps you can begin to see how the use of COUNTIF() can be used by you at work.

The following formula will not work.

=COUNTIF(B2:B17,>E15)

You must surround the > with quotes and use the concatenate symbol to create the criteria.

'COUNTIF(B2:B17, ">"&E15)

Since we are referring to a cell, we need to combine or concatenate the operator with the value in Cell E15. This is done by ">"&E15. This tells Excel to look for criteria that is greater than the value in cell E15.

If you have not used the concatenate operator "&" before you might want to look at my Playbook on "Including live numbers in text". Also, see the Playbook on SUMIF() a cousin of the COUNTIF() function.

Learning some the many functions and there use can be daunting. One way to get specific help is to have a trainer set-up training classes, on specific subjects, at your Company. Check my website (<u>http://www.lwmweb.com/</u>) for upcoming seminars or contact me (<u>LWM@LWMWEB.COM</u>) for in-house seminars for your company. On the other hand, you can study the many Excel books currently available.

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