TECHNOLOGY



Showing Other Data on Subtotal Rows

The Subtotal command in Excel allows you to quickly add subtotals to a data set. This month, I'll address two questions centered on adding other data to the subtotal rows. The first question is how to add a count to the subtotal row. The second question is how to bring text from a nonsubtotal row down to the subtotal row.

Counting Records

Normally, the Subtotal command will allow you to specify "At each change in Customer, use the Sum function on the Revenue, COGS, and Profit columns." It's possible to perform a second Subtotal function—by unchecking "Replace current subtotals" in the Subtotal dialog box—and to specify that you want to count another column. This solution rarely works as desired because the sum will be on one row and the count will be on the next row. Most people want them on the same row.

A better solution is to also sum a text field as well. For example, specify that you want to sum the Region field in addition to the numeric fields (Revenues, COGS, and Profit). Excel will add a formula in the Region column of each subtotal row. The initial problem is that the calculation will result in zero since the sum of East+East+East+East is zero.

The Subtotal command was introduced back in Excel 97. The Excel team has now added a brand new function called =SUBTOTAL() to work in conjunction with the Subtotal command. This new function will perform a calculation on the cells in a range and leave out the cells that contain a SUBTOTAL formula. Rather than only support the ability to sum, the function actually allows 11 dif-

Table 1. Calculations for SUBTOTAL() Function

- 1 Average
- 2 Count (counts numeric cells)
- 3 CountA (counts numeric and text cells)
- 4 Max
- 5 Min
- 6 Product
- 7 StdDev (StdDev.S in Excel 2010)
- 8 StdDevP (StdDev.P in Excel 2010)
- 9 Sum
- 10 Var (Var.S in Excel 2010)

11 VarP (Var.P in Excel 2010)

ferent calculations. The first argument in the SUBTOTAL function is a number between 1 and 11. Table 1 shows the 11 different calculations.

Consider this formula: =SUBTOTAL (9,A2:A5). The initial argument of 9 tells Excel to SUM. If you instead wanted Excel to count nonblank cells, you would change the 9 to a 3 in order to use COUNTA instead of SUM.

See the example in Figure 1. We began with the subtotals of the three data fields. Then we added a subtotal of the Region column, resulting in a sum of 0. Now we select column A and type Ctrl+H to display the Find and Replace dialog. As the figure shows, we want to change every occurrence of "(9," to "(3,". Once we click Replace All, it will edit every subtotal formula in column A to show a count instead of a sum. The end result will be both a sum and count total on one row.

Showing a Text Value on the Subtotal Rows

Sometimes you might choose to add a subtotal at each change in customer number, but then you'll want to show the customer name associated with that customer number on the subtotal row.

Figure 1												
A6 • fx =SUBTOTAL(9,A2:A5)												
Ŀ	1 2	3	1	А		В	С	D	E	F	G	Н
			1	Region		Invoice	Date	Customer	Revenue	COGS	Profit	
I	Г	•	2	East		18021	11/1/10	Amazing Pasta	24701	12598	12103	
		•	3	East		18025	11/8/10	Amazing Pasta	44180	24299	19881	
		•	4	East		18033	11/23/10	Amazing Pasta	14537	7850	6687	
		•	5	East		18035	11/29/10	Amazing Pasta	28553	14277	14276	
	-		6		0			Amazing Pasta Total	111971	59024	52947	
	Г	•	7	West		1802	Condinand Day	Thereing Balances			2	X
		•	8	West		1802	ind and kep	Diace	100.00	Saurian.		
		•	9	West		1803	Find	Boolace				
		•	10	West		1803	Fing	Replace				
		•	11	West		1803	Find what:	(9,				-
	-		12		0		Deelessui	4. (2				
	ſ		13	East		1802	Replace wi	m: (3,				
			14	East		1802					Ontions	>>
			15	East		1803					opiona	
	-		16		0							
	Г	•	17	West		1802	Replace <u>A</u>	Replace F	ind All	Eind Next	Clos	se
• 18 West 1802												
		•	19	West		18028	11/10/10	Delite Feather	37985	18233	19752	
		•	20	West		18030	11/16/10	Delite Feather	34472	17236	17236	
		•	21	West		18037	11/29/10	Delite Feather	20208	10912	9296	
	-		22		0			Delite Feather Total	146840	75869	70971	
-	-		23		0			Grand Total	603075	311580	291495	

You might have to do this when the customer name has different spellings from order to order. You don't need to subtotal "Amazing Pasta" separately from "Amazing Pasta Co." Since the easiest technique is going to copy the last customer name for the subtotal row, try sorting the data by customer number and then by invoice date. This will ensure that the most recent (and theoretically the correct) name is at the bottom of each customer number's data.

First, add the subtotals. In the Subtotal dialog, specify "At each change in Customer number, use the Sum function on the Quantity, Revenue, COGS, and Profit columns."

You will now have several blank cells in the customer columns. Select the first blank cell down to the last blank cell. It's important to note the cell that contains the first blank cell and to note the cell address immediately above the first blank cell. In Figure 2, the first blank cell in the Customer Name column is cell E6. The cell above that one is E5.

To get the final customer name repeated on each subtotal row, follow these steps:

- Select from the first blank cell in the Customer Name column to the last blank cell.
- Display the Go To dialog by pressing F5 or Ctrl+G.
- Click on the Special button in the lower-left corner of the Go To Dialog. This will display the Go To Special dialog.
- As shown in Figure 2, in the Go To Special dialog, choose Blank and click OK. This will select only the blank cells within the selection.
- 5. Since the first blank cell in Figure 2 isE6, type =E5 to point to the cell

Fi	gure 2					
	D	E		F	G	
1	Cust #	Customer	Re	venue	COGS	
2	C114	Amazing Pasta		24701	12598	
3	C114	Amz. Pasta	1	Go To Sr	ecial	
4	C114	Amazing Pasta		CO TO Special		
5	C114	Amazing Pasta Co.		Select -		
6	C114 Total			© <u>C</u> omments © C <u>o</u> nstants		
7	C208	Better Butter				
8	C208	Better Butter, Inc.				
9	C208	Better Butter			muids	
10	C208	Better Butter, Inc.		V	Numbers	
11	C208	Better Butter		V	Text	
12	C208 Total			1	Logicals	
13	C399	Clever Cutlery		1	arrors	
14	C399	CC		💿 Bla	nks	
15	C399	Clever Cutlery Co.		🔘 Cu	rent region	
16	C399 Total			Cu	rent array	
17	C444	Delite Feather		Oh	iects	
18	C444	Delite Feather Ltd.			jeeus	
19	C444	Delite Feather				
20	C444	Delite Feather Ltd.				
21	C444	Delite Feather				
22	C444 Total					
23	Grand Total			603075	311580	

above the first blank cell.

6. Press Ctrl+Enter to replicate this formula in all of the selected cells.

If you need to get the customer name from the first record for the customer number, you would combine both techniques in this article. Add a record count to column A as described in the first half of this article. Then the formula in the blank customer cells would be =OFFSET (E6,-A6,0). Since the record count in A6 says that there are four records for this customer, the OFFSET function goes -4 rows and over 0 columns from the blank customer cell E6. This will grab the first record from this customer. **SF**

Bill Jelen is the host of MrExcel.com. His Power Excel seminar for Excel 2010 is now available from QUE: LiveLessons Power Excel 2010. Send questions for future articles to IMA@MrExcel.com.