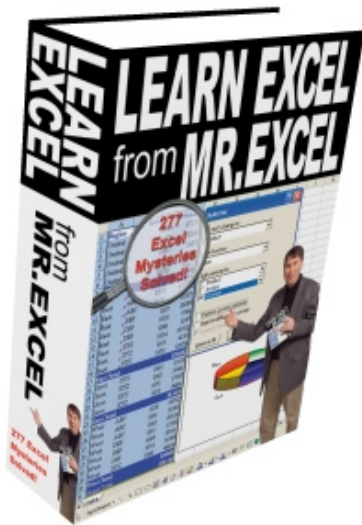




Free Preview – Week #6

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This Week: 3 Tips for adding
automatic subtotals.

Next Week: More on subtotals.

ADD SUBTOTALS TO A DATASET

Problem: You have a lengthy report with invoice detail by customer, as shown in Fig. 664. You need to add a subtotal at each change in customer.

	A	B	C	D
1	Acct	Customer	Invoice	Revenue
2	A4368	Ainsworth	1014	10,445
3	A4368	Ainsworth	1015	15,544
4	A4368	Ainsworth	1030	3,922
5	A4368	Ainsworth	1054	12,838
6	A4368	Ainsworth	1091	17,712
7	A3108	Air Canada	1057	5,859
8	A3108	Air Canada	1061	2,358
9	A3108	Air Canada	1090	17,856
10	A3108	Air Canada	1108	4,948
11	B4504	Bell Canada	1013	15,104
12	B4504	Bell Canada	1069	18,072
13	B4504	Bell Canada	1074	14,004
14	B4504	Bell Canada	1077	4,060
15	C9651	Chevron	1018	8,116
16	C9651	Chevron	1071	7,032

Fig. 664

Strategy: A gift from Microsoft in Excel 95, the Automatic Subtotals feature will solve this problem in seconds instead of minutes.

By design, the dataset shown above is optimized for using the Subtotals command. Be sure to read the remaining examples for more details.

- 1) Start with data in list format. Select a single cell in the dataset. From the menu, select Data – Subtotals, as shown in Fig. 665.

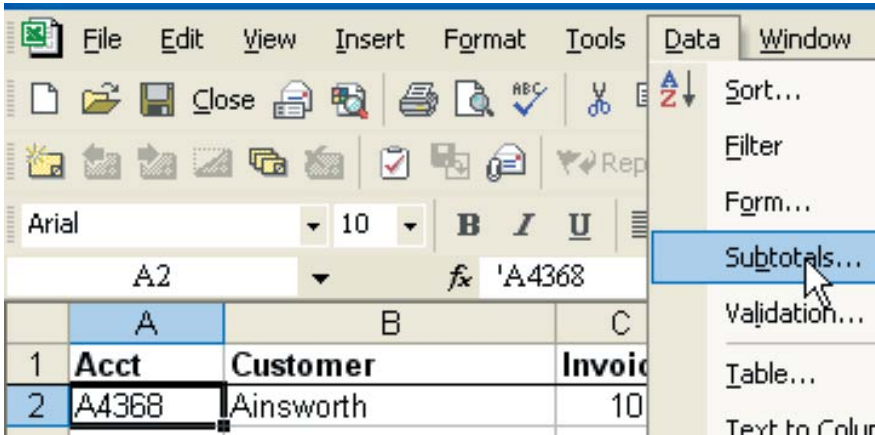


Fig. 665

- 2) The Subtotals dialog assumes that you want to subtotal by the field in the leftmost column of your data. It also assumes that you want to total the rightmost field. In the present example, shown in Fig. 666, this is correct, so you can choose OK.

Part
III

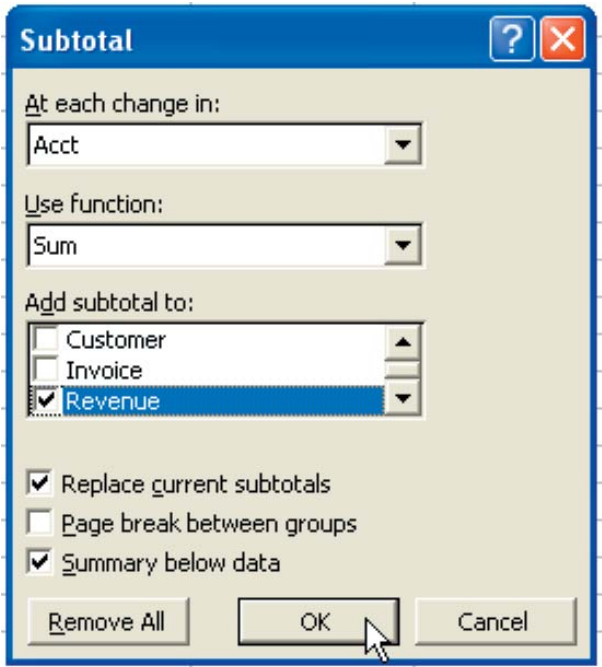


Fig. 666

In 1-2 seconds, subtotals will be inserted at each change in customer, as shown in Fig. 667.

1	2	3	A	B	C	D
	1		Acct	Customer	Invoice	Revenue
	2	•	A4368	Ainsworth	1014	10,445
	3	•	A4368	Ainsworth	1015	15,544
	4	•	A4368	Ainsworth	1030	3,922
	5	•	A4368	Ainsworth	1054	12,838
	6	•	A4368	Ainsworth	1091	17,712
	7	-	A4368 Total			60,461
	8	•	A3108	Air Canada	1057	5,859
	9	•	A3108	Air Canada	1061	2,358
	10	•	A3108	Air Canada	1090	17,856
	11	•	A3108	Air Canada	1108	4,948
	12	-	A3108 Total			31,021
	13	•	B4504	Bell Canada	1013	15,104
	14	•	B4504	Bell Canada	1069	18,072
	15	•	B4504	Bell Canada	1074	14,004
	16	•	B4504	Bell Canada	1077	4,060
	17	-	B4504 Total			51,240

Fig. 667

If you scroll to the end of the dataset, you will notice that Excel added a grand total of all customers, as shown in Fig. 668.

D137			fx =SUBTOTAL(9,D2:D135)			
1	2	3	A	B	C	D
	1		Acct	Customer	Invoice	Revenue
	130	•	V6841	Verizon	1058	6,309
	131	•	V6841	Verizon	1072	11,922
	132	-	V6841 Total			35,367
	133	•	W1645	Wal-Mart	1004	7,180
	134	•	W1645	Wal-Mart	1039	10,385
	135	•	W1645	Wal-Mart	1100	8,970
	136	-	W1645 Total			26,535
	137	-	Grand Total			1,235,966

Fig. 668

As shown in Fig. 668, the inserted rows are using the somewhat new SUBTOTAL function. This function will total all of the cells in the range except for cells that contain other SUBTOTAL functions.

Additional Details: In order to remove subtotals, select a cell in the dataset. From the menu, select Data – Subtotals. In the Subtotals dialog, choose the Remove All button, as shown in Fig. 669.

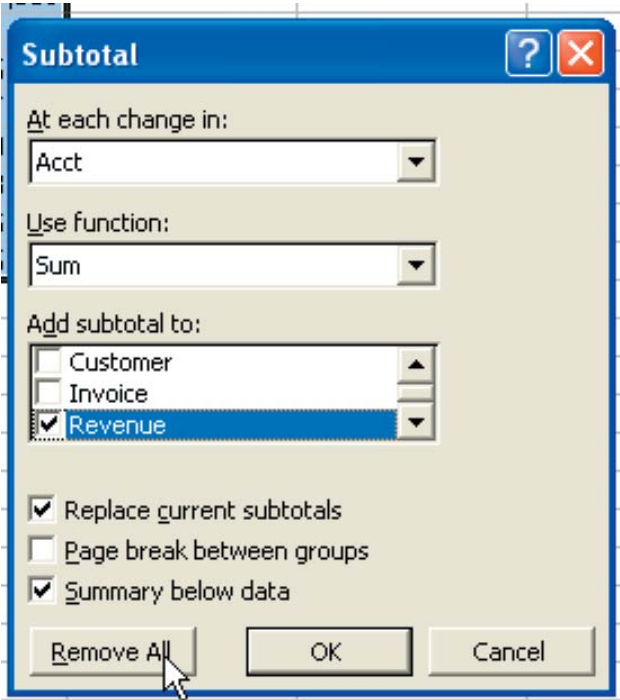


Fig. 669

Gotcha: This example worked because the data was sorted by Account Number. If the data had been sorted by Invoice Number instead, the result would have been fairly meaningless, as shown in Fig. 670.

		A	B	C	D
	1	Acct	Customer	Invoice	Revenue
	2	M3105	Molson, Inc	1001	7,520
	3	M3105 Total			7,520
	4	S1939	State Farm	1002	4,754
	5	S1939 Total			4,754
	6	M3105	Molson, Inc	1003	8,016
	7	M3105 Total			8,016
	8	W1645	Wal-Mart	1004	7,180
	9	W1645 Total			7,180
	10	T3756	Texaco	1005	4,270
	11	T3756 Total			4,270

Fig. 670

Summary: The Subtotals command on the data menu quickly automates the monotonous job of adding subtotals.

Commands Discussed: Data – Subtotals

Functions Discussed: =Subtotal()

USE GROUP & OUTLINE BUTTONS TO COLLAPSE SUBTOTALLED DATA

Problem: After using the Subtotal command in the previous example, you want to just print the total rows in order to create a summary report for your manager.

Strategy: Look to the left of column A, above cell A1. A series of three small numbers appear, as shown in Fig. 671. These are the Group & Outline buttons.

1	2	3		A
			1	Acct
			2	A3108

Fig. 671

Using the mouse, choose the small 2 button. You will see just the customer totals, as shown in Fig. 672.

1	2	3		A	B	C	D
			1	Acct	Customer	Invoice	Revenue
+	6			A3108 Total			31,021
+	12			A4368 Total			60,461
+	17			B4504 Total			51,240
+	22			C4904 Total			39,250
+	27			C8082 Total			31,369
+	32			C9651 Total			54,048

Fig. 672

As shown in Fig. 673, choose the small 1 button to see just the grand total (which seems a bit pointless).

1	2	3	A	B	C	D
	1		Acct	Customer	Invoice	Revenue
+	137		Grand Total			1,235,966

Fig. 673

Choose the 3 button to go back to the detail view, with all records, as shown in Fig. 674.

1	2	3	A	B	C	D
	1		Acct	Customer	Invoice	Revenue
	2		A3108	Air Canada	1057	5,859
	3		A3108	Air Canada	1061	2,358
	4		A3108	Air Canada	1090	17,856
	5		A3108	Air Canada	1108	4,948
-	6		A3108 Total			31,021
	7		A4368	Ainsworth	1014	10,445
	8		A4368	Ainsworth	1015	15,544

Fig. 674

Additional Details: In the 2 button view, you can explode a single customer's detail records by clicking the + next to the customer total, as shown in Fig. 675.

+	27		C8082 Total			31,369
	28		C9651	Chevron	1018	8,116
	29		C9651	Chevron	1071	7,032
	30		C9651	Chevron	1084	18,290
	31		C9651	Chevron	1098	20,610
-	32		C9651 Total			54,048
+	38		E9872 Total			68,200

Fig. 675

Use the minus sign next to A32, as shown in Fig. 675, to collapse the detail again. Or, select the 2 button to collapse all.

Summary: After using the Subtotals command, the Group & Outline buttons allow you to create multiple views of the data.

Commands Discussed: Data – Subtotals; Group & Outline

COPY JUST TOTALS FROM SUBTOTALLED DATA

Problem: Your manager wants just the total rows sent to him in a file. You've added subtotals and then chosen the #2 Group & Outline button to see just the data that you want, as shown in Fig. 676.

	A	B	C	D
1	Acct	Customer	Invoice	Revenue
6	A3108 Total			31,021
12	A4368 Total			60,461
17	B4504 Total			51,240
22	C4904 Total			39,250

Fig. 676

However, when you copy this view and paste to a new workbook, all of the detail rows come along as well, as shown in Fig. 677.

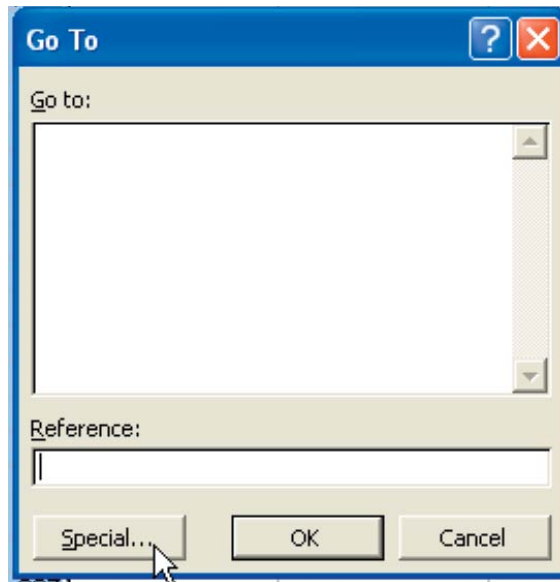
	A	B	C	D
1	Acct	Customer	Invoice	Revenue
2	A3108	Air Canad	1057	5,859
3	A3108	Air Canad	1061	2,358
4	A3108	Air Canad	1090	17,856
5	A3108	Air Canad	1108	4,948
6	A3108 Total			31,021
7	A4368	Ainsworth	1014	10,445
8	A4368	Ainsworth	1015	15,544
9	A4368	Ainsworth	1030	3,922
10	A4368	Ainsworth	1054	12,838
11	A4368	Ainsworth	1091	17,712
12	A4368 Total			60,461
13	B4504	Bell Canad	1013	15,104

Fig. 677

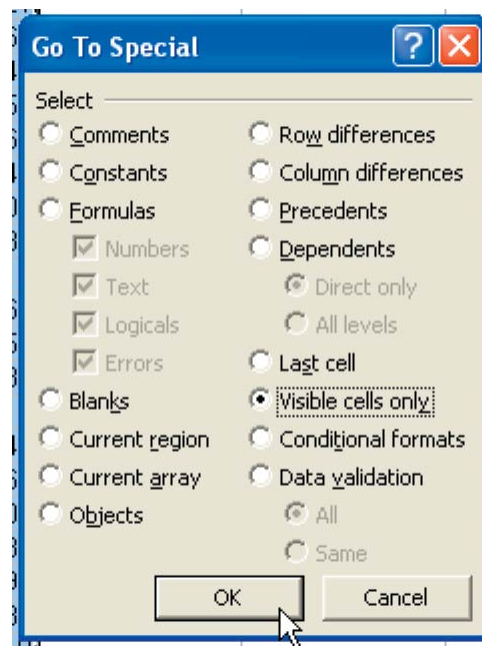
Strategy: There is an obscure command on the Go To Special dialog box to assist with this task. Follow these steps.

- 1) Choose the #2 Group & Outline button to put the data in subtotal view.
- 2) Select everything from the headings to the grand total by selecting one cell with data and hitting Ctrl+* (you can use the * key on the numeric keypad).

- 3) Bring up the Go To dialog by choosing Edit – Go To or by hitting the F5 key on the keyboard. As shown in Fig. 678, choose the Special button in the lower left corner of the Go To dialog.

*Fig. 678*

- 4) In the Go To Special dialog, select Visible Cells Only and choose OK, as shown in Fig. 679.

*Fig. 679*

The change will be almost imperceptible and may not even be noticeable in the printed resolution of this book. Amongst the blue highlighting, you will see fine white lines above and below each subtotal, as shown in Fig. 680. This is Excel's way of saying, "Hey – there are hidden rows back there which are not part of the selection."

	A	B	C	D
1	Acct	Customer	Invoice	Revenue
6	A3108 Total			31,021
12	A4368 Total			60,461
17	B4504 Total			51,240
22	C4904 Total			39,250
27	C8082 Total			31,369

Fig. 680

- 5) Next, copy with Ctrl+C. Switch to a new workbook. Paste with Ctrl+V. You will have just the subtotal rows, as shown in Fig. 681.

	D2			f _x 31021
	A	B	C	D
1	Acct	Customer	Invoice	Revenue
2	A3108 Total			31,021
3	A4368 Total			60,461
4	B4504 Total			51,240
5	C4904 Total			39,250
6	C8082 Total			31,369
7	C9651 Total			54,048
8	E9872 Total			68,200

Fig. 681

You might think that you would have to do a Paste Special – Values instead of just a paste. However, the Paste command works OK. As you can see in the formula bar above, the SUBTOTAL function, which used to be in the cell, is converted to a value.

Additional Details: The process of selecting Go To – Special – Visible Cells Only can be reduced to holding down Alt while hitting EGSY and then Enter. Alt+E opens the Edit menu. Alt+G selects Go To. Alt+S presses the Special button. Alt+Y selects Visible Cells Only (note that the “y” is underlined in the GoTo Special dialog in Fig. 679). Enter selects the default OK button.

Summary: This is a fairly obscure trick. I think it is more obscure because no one in his or her right mind uses the Go To dialog. If you are at cell A10 and need to go to cell A100, it is pretty easy to just hit PgDn a few times. Considering how seemingly useless the Go To dialog is, the fact that it houses the Special button is ironic.

Commands Discussed: Edit – Go To – Special – Visible Cells Only