

**tip****It is often easier to add calculated fields to the source data**

In: *Lesson 5-4: Use an external data source*, you learned how to connect a pivot table to an Access database.

When working with external data sources it is often not possible to add calculated fields to the data source itself. Calculated fields provide a useful solution to this problem.

When the data source is a worksheet (as is the case in this lesson) it is usually faster and more efficient to add the calculated field to the source data on the worksheet.

You will see the new field appear in the *Pivot Table Fields* list when you refresh the pivot table.

You learned how to refresh a pivot table in: *Lesson 5-5: Understand the PivotTable data cache*.

## Lesson 5-17: Add a calculated field to a pivot table

- 1 Open *Transactions-13* from your sample files folder (if it isn't already open).
- 2 Remove the *Average of Total2* and *Max of Total3* Fields.

You learned how to do this in: *Lesson 5-3: Understand pivot table rows and columns*.

	A	B
3		
4	Employee	Sum of Total
5	Armstrong, Dan	7880.51
6	Spears, Julie	10683.14
7	West, Chuck	6847.74
8	Grand Total	25411.39

- 3 Format the *Sum of Total* field to show a comma thousand separator.

1. Right-click any of the values in column B within the pivot table.
2. Click *Number Format...* on the shortcut menu.
3. Click the *Number* category.
4. Check the *Use 1000 Separator (,)* check box.
5. Click OK.

- 4 Add a calculated field called *Bonus* that will calculate 3% of total sales.

1. Click: *PivotTable Tools*→*Analyze*→*Calculations*→*Fields, Items & Sets*→*Calculated Field...*

The *Insert Calculated Field* dialog appears.

2. Type **Bonus** into the *Name* text box.

The dialog box has a title bar 'Insert Calculated Field'. Below it is a 'Name' field with a dropdown arrow, containing the text 'Bonus'.

3. Click in the *Formula* text box and remove the zero, leaving only an = sign.

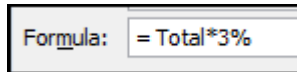
The 'Formula' text box contains the text '='.

4. Select *Total* in the *Fields* list and then click the *Insert Field* button.

5. The word **Total** is added to the Formula.

The 'Formula' text box contains the text '= Total'.

6. Type **\*3%** to complete the formula.



- Click the OK button.

A new field called *Bonus* has now appeared in the *PivotTable Field List* and a *Sum of Bonus* field has appeared in column C.

	A	B	C
4	Employee	Sum of Total	Sum of Bonus
5	Armstrong,Dan	7,880.51	236.42
6	Spears,Julie	10,683.14	320.49
7	West,Chuck	6,847.74	205.43
8	Grand Total	25,411.39	762.34

## tip

### Creating a custom header row

In this lesson, you switched off the field headers in order to remove the filter button from cell B4.

This had the side-effect of also removing the word *Employee* from cell A4.

It isn't possible to type any text into cell A4.

	A	B
3		
4	Sales	
5	Armstrong,Dan	7,880.51

If you wanted to keep the *Employee* label but suppress the filter button you would need to hide row 4 and then re-create the headers in row 3. Here's how you could do this:

- Copy cells A4:C4 into cells A3:C3.
- To hide row 4, right-click the row header (the number 4 on the left of the row) and then click *Hide* from the shortcut menu.
- Type: **Employee** into cell A3.

	A	B
2		
3	Employee	Sales
5	Armstrong,Dan	7,880.51
6	Spears,Julie	10,683.14
7	West,Chuck	6,847.74
8	Grand Total	25,411.39

- Change the names at the top of columns B and C to *Sales* and *Bonus Due*.

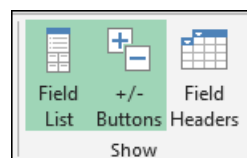
- Click cell B4.
- Type the new name **Sales**.
- Press the <Tab> key to save the value and move to cell C4.
- Type: **Bonus Due** into cell C4.

- Remove the *Field Header* (this is currently shown in row 4).

The pivot table looks untidy because cell A4 includes a filter button. If you wanted to print the pivot table you would also want to remove the filter button.

	A	B	C
3			
4	Employee	Sales	Bonus Due
5	Armstrong,Dan	7,880.51	236.42

Click: PivotTable Tools→Analyze→Show→Field Headers.



The three items in the *Show* group are toggle buttons which allow you to add and remove different pivot table artefacts.

The pivot table is now well formatted.

	A	B	C
3			
4		Sales	Bonus Due
5	Armstrong,Dan	7,880.51	236.42
6	Spears,Julie	10,683.14	320.49
7	West,Chuck	6,847.74	205.43
8	Grand Total	25,411.39	762.34

The *Values* label has disappeared but so has the *Employee* label.

- Save your work as *Transactions-14*.