

Managing Worksheets in Excel 2007

Bravo! Summer Institute 2010

Table of Contents

Using functions –Left, Right, MID.....	3
To Show Formulas.....	3
To Hide a sheet.....	4
To unhide the sheet.....	7
Converting Uppercase Letters to Lowercase.....	7
Grouping Worksheets together.....	9
Grouping Sheets.....	9
Grouping Sheets using the Select All Sheets option.....	9
Grouping Sheets using the using the Ctrl Key option.....	9
Transpose.....	11
Freeze Panes.....	12
Freeze Top Row.....	12
Freeze First Column.....	13
Pivot Tables.....	18
<i>What is a Pivot Table</i>	18
To Create a Pivot Table.....	18
Create a Pivot Chart.....	24
To create a PivotChart report.....	24

Using functions –Left, Right, MID

Type in Cell B1: 111-22-3333

Formula

=LEFT(b1,3)

Result

111

Formula

=RIGHT(b1,4)

Result

3333

Formula

= MID(b1,5,2)

Start number, how many characters

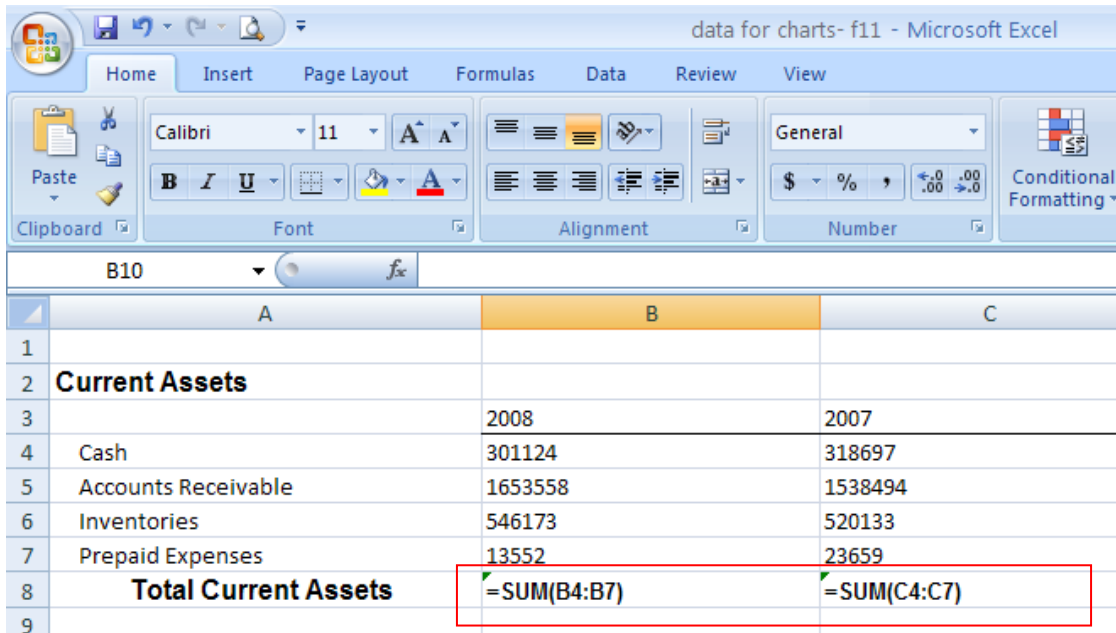
Result

2 2

To Show Formulas

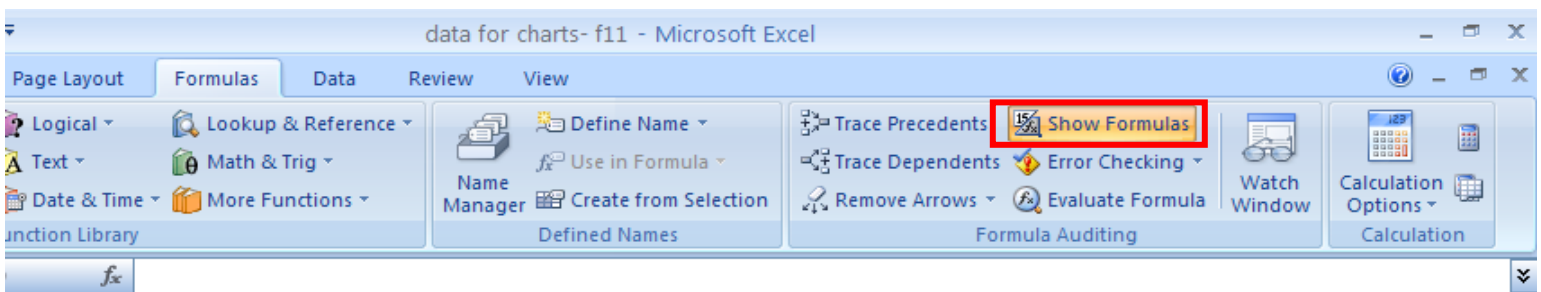
To quickly show all formulas in your Excel spreadsheet hold down the **CONTROL (Ctrl)** key on the keyboard and press the grave accent key also known as the Tilde (`).

This key is located next to the #1 key on the top left corner of the keyboard and looks like a backwards apostrophe.



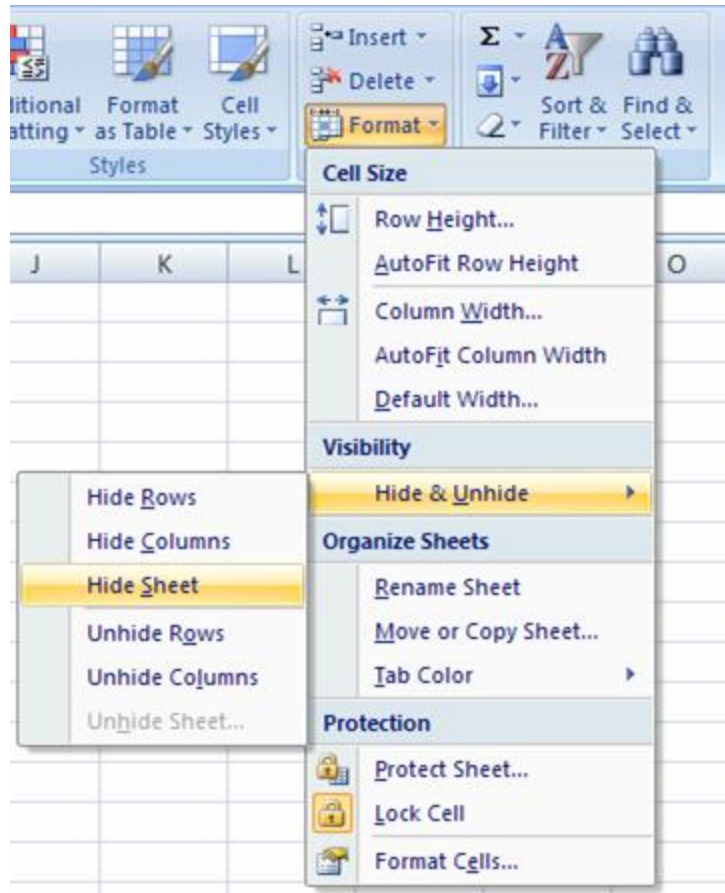
Or

Click on the Formulas tab, in the Formula Auditing group, click on Show Formulas.



To Hide a sheet

1. Click on the Sheet you want to hide.
2. On the Home tab, in the Cells group click on "Hide & Unhide" from the Format drop down menu as shown below.

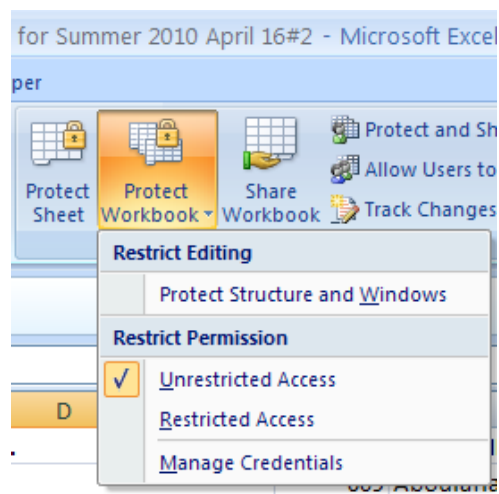


Or Right click on the Sheet tab and click on Hide.

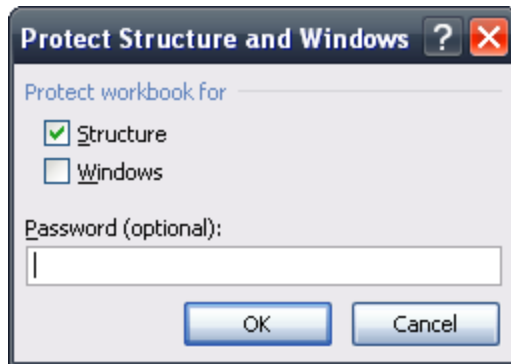
{The sheet disappears}

At this point the sheet is not complete hidden because all a user has to do is right click on the sheet tab and click on “Unhide”. So to permanently hide the sheet until you wish to view again you need to do some additional steps.

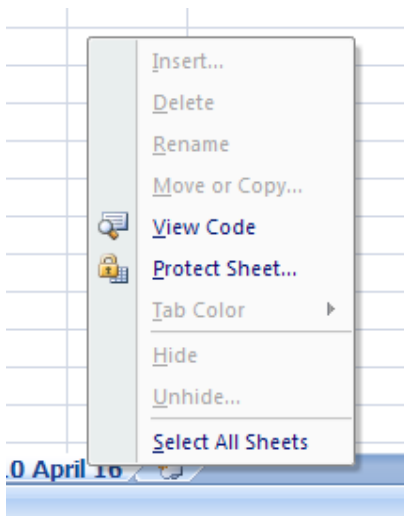
1. After hiding the sheet.
2. Then click on the Review tab.
3. Click on Protect Workbook.



4. Click on Protect Structure and Windows.
Protect Structure and Windows (popup window appears)

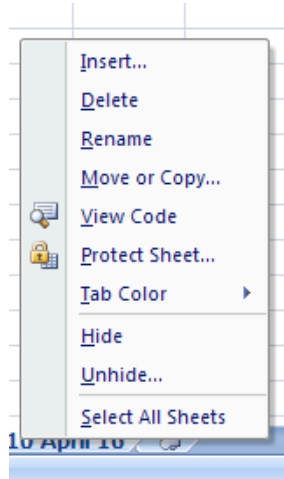


5. Leave the check mark in Structure.
6. Type in a password (however if you should forget the password then you will not be able to unhide that sheet).
7. Click OK.
 - ✚ You will be prompted to retype the same password as confirmation.
8. Click Ok.
 - ✚ At this point the sheet is hidden and cannot be unhide without using the password - Notice when you right click on the Sheet tab that “Unhide” is grayed out – non-operational.



To unhide the sheet

1. Click on the Review tab.
2. Click on Protect Workbook.
3. Click on Protect Structure and Window.
4. Type in the password.
5. Right click on the sheet tab and then click on Unhide.



Should wish to hide it again – repeat steps from “How to Hide a sheet”.

Converting Uppercase Letters to Lowercase

Use the LOWER function to convert all uppercase letters in a text string to lowercase.

Use the UPPPER function to convert all lowercase letters in a text string to uppercase.

Use the PROPER function to convert text to proper case where the first letter of each word is capitalized.

Examples: *All Examples are type in Cell A1 and the function in different Cell.*

Typed in as uppercase: JOHN JAY COLLEGE

The function: to convert text to all lowercase

=LOWER(A1)

Result: john jay college

Typed in as lowercase: john jay college

The function: to convert text to all uppercase

=UPPER(A1)

Result: JOHN JAY COLLEGE

Typed in as lowercase: john jay college

The function: to convert to proper case (grammatically the first letter of each word is capitalized)

=PROPER(A1)

Result: John Jay College

Grouping Worksheets together

Grouping Sheets

Grouping the sheets in your workbook together is a great feature. Although there are several benefits of using this function, it is very important to ungroup sheets after entering the data you wish each sheet to contain. Because if you don't, what you do in any of the group sheets affects the others.

The reason for ungrouping the sheets is when all sheets are selected whatever you do to one sheet affects all the sheets. That is, deleting a cell on the first sheet will delete the same cell on all the sheets.

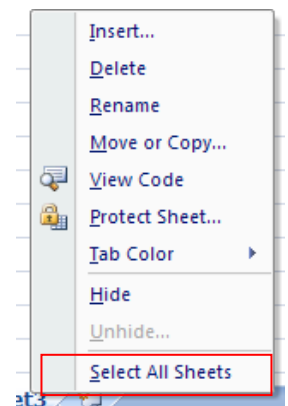
You can use this feature to your advantage, for example, when developing a new workbook. Suppose you'd like to put some standard text headings on all the sheets in your workbook. All you have to do is group together the sheets, enter the text on the first sheet, and then ungroup the sheets. The text you entered will appear in the same place on all the sheets in the workbook.

Grouping Sheets using the Select All Sheets option

For example, you want to check the spelling in all the sheets of a workbook:

1. **To Group sheets together:** Right-click on any sheet tab, click on Select All Sheets.
2. Click on the Review tab, in the Proofing group, click on Spelling.
3. **To Ungroup sheets:** Right-click on any sheet tab, Choose Ungroup Sheets.

OR



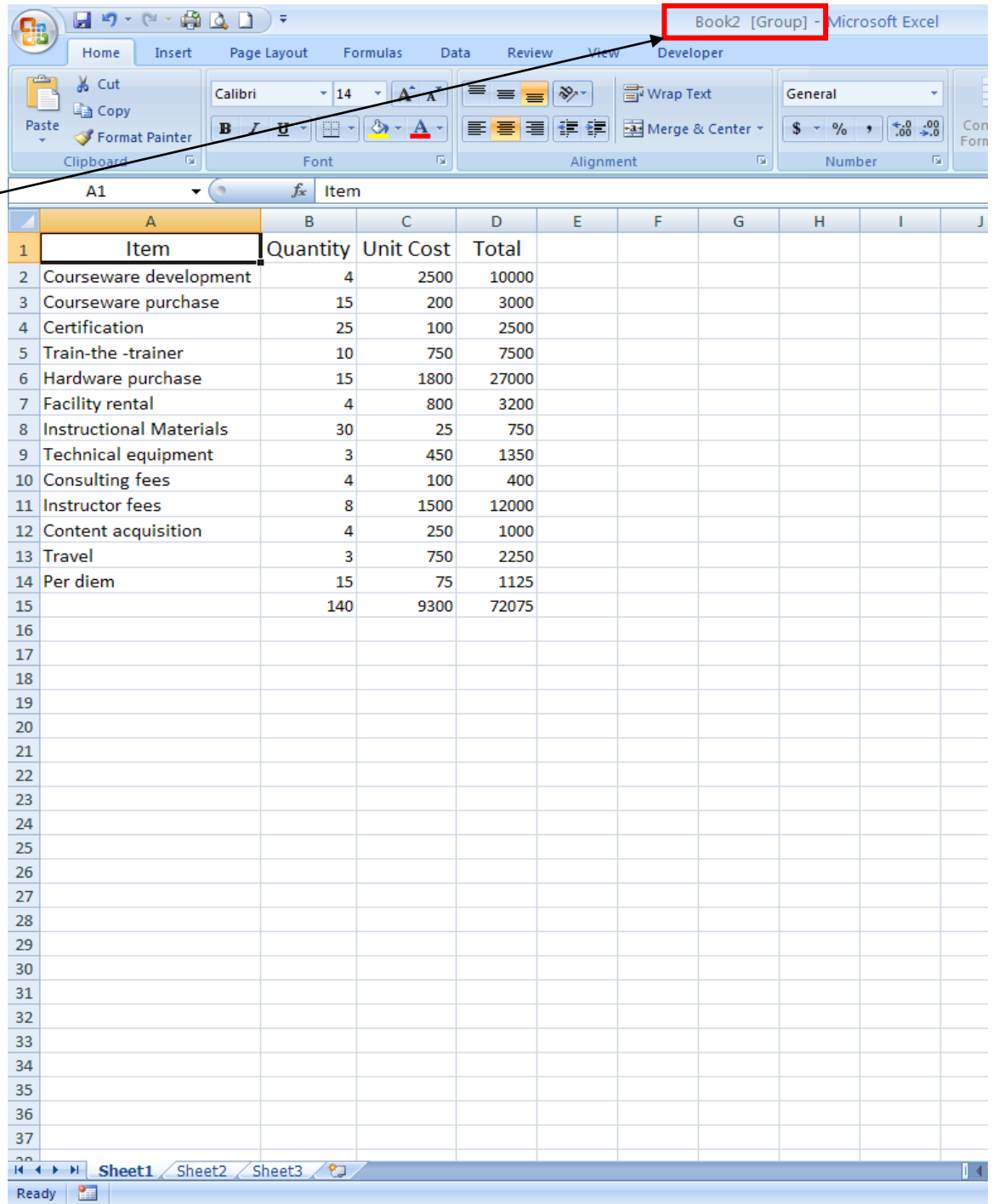
Grouping Sheets using the using the Ctrl Key option

You may click on selective Sheet tabs or all tabs

1. Click on Sheet1, while holding down the Ctrl key click on Sheet2 and Sheet3. Release the mouse and the Ctrl key once finished selecting tabs.

2. Begin typing in your information.
3. Don't forget to ungroup your sheets once finished.
4. Click on each sheet that was group together or use Step 3 from **Grouping Sheets using the Select All Sheets option.**

In the Title bar of the worksheet would display the name of the file and the Group which indicates at least 2 or more sheets have been group together. After you ungroup the sheets the word Group will no longer display.

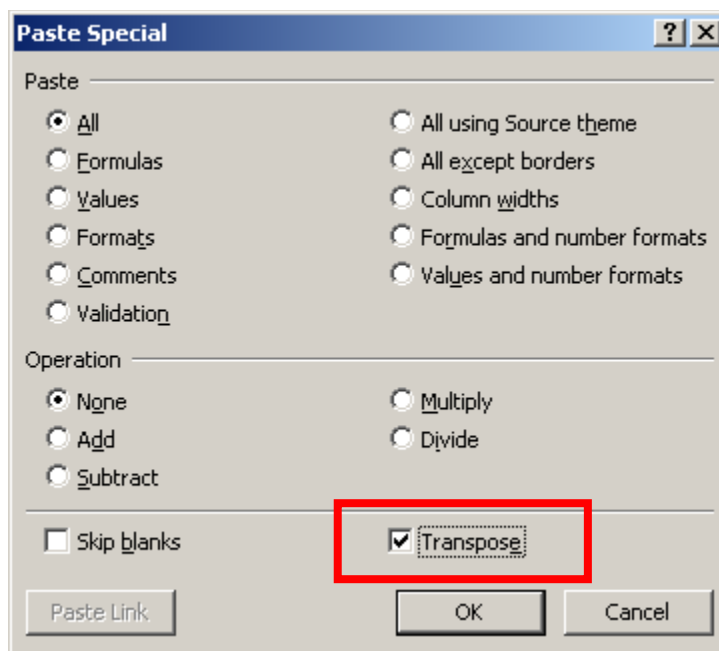


Transpose

Use Transpose if you want to transpose your columns to rows or rows to columns.

OPEN FILE THAT CONTAINS DATA TO TRANSPOSE

1. Highlight text.
2. Click on Copy on the Home tab in the Clipboard group.
3. Click the down arrow on Paste in the Clipboard group.
4. Click Paste Special.
5. Click on Transpose.
Or
6. Right click with the Mouse.
7. Click on Paste Special.
8. Click on Transpose.



	A	B	C	D	E
1					
2	Months	RENT	GAS	FOOD	
3	January	200	100	300	
4	February	300	50	350	
5	March	400	70	470	
6	April	500	90	590	
7	May	600	105	705	
8	June	700	30	730	
9					

Figure 1: BEFORE DATA WAS TRANSPOSE.

15								
16								
17	Months	January	February	March	April	May	June	
18	RENT	200	300	400	500	600	700	
19	GAS	100	50	70	90	105	30	
20	FOOD	300	350	470	590	705	730	
21								
22								
23								

Figure 2: AFTER THE DATA IS TRANSPOSE

Freeze Panes

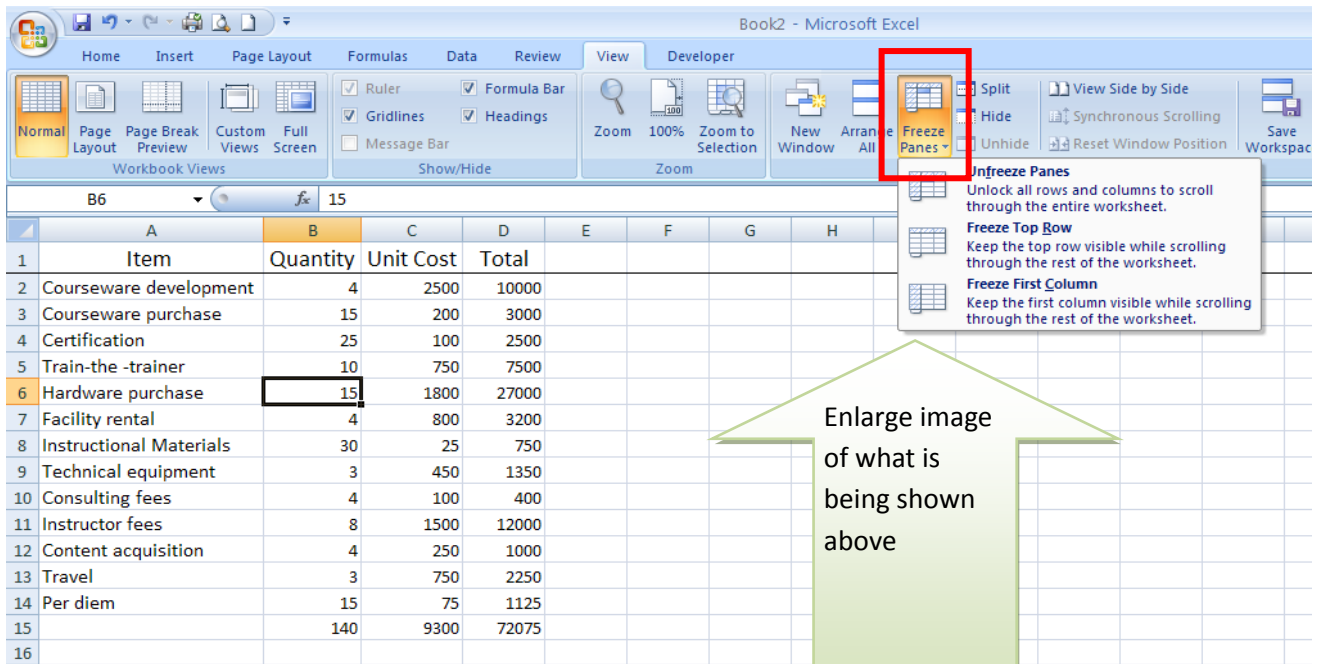
OPEN FILE THAT CONTAINS DATA TO FREEZE PANES

Freeze Top Row

The most common use of Excel's Freeze Pane feature is to freeze the top row that contains the column headings in the spreadsheet.

To freeze the top row

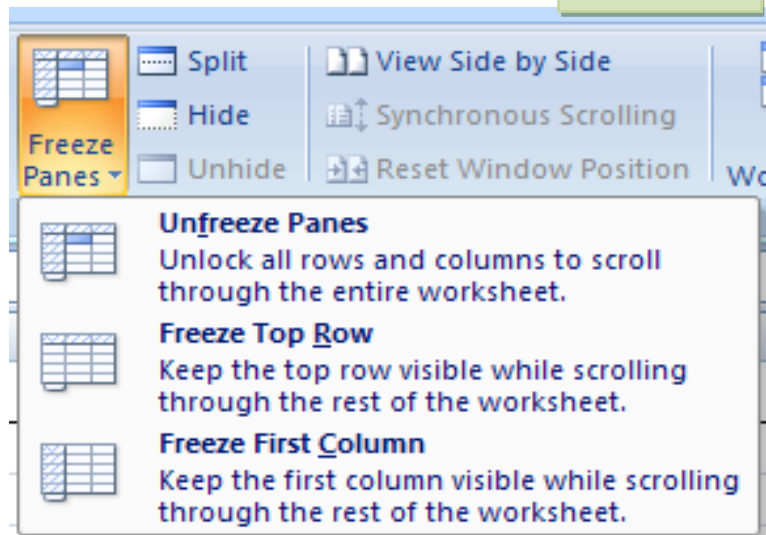
Clicking on the View tab, in the Window group, click on Freeze Panes and then click on Freeze Top Row.



The screenshot shows the Microsoft Excel interface with the View tab selected. The Freeze Panes dropdown menu is open, showing three options: Unfreeze Panes, Freeze Top Row, and Freeze First Column. A red box highlights the Freeze Panes button in the ribbon. A green arrow points from the text 'Enlarge image of what is being shown above' to the dropdown menu.

	A	B	C	D	E	F	G	H
1	Item	Quantity	Unit Cost	Total				
2	Courseware development	4	2500	10000				
3	Courseware purchase	15	200	3000				
4	Certification	25	100	2500				
5	Train-the-trainer	10	750	7500				
6	Hardware purchase	15	1800	27000				
7	Facility rental	4	800	3200				
8	Instructional Materials	30	25	750				
9	Technical equipment	3	450	1350				
10	Consulting fees	4	100	400				
11	Instructor fees	8	1500	12000				
12	Content acquisition	4	250	1000				
13	Travel	3	750	2250				
14	Per diem	15	75	1125				
15		140	9300	72075				
16								

Enlarge image
of what is
being shown
above



This is a close-up of the Freeze Panes dropdown menu. It shows three options with their respective icons and descriptions:

- Unfreeze Panes**: Unlock all rows and columns to scroll through the entire worksheet.
- Freeze Top Row**: Keep the top row visible while scrolling through the rest of the worksheet.
- Freeze First Column**: Keep the first column visible while scrolling through the rest of the worksheet.

Notice that Excel indicates the freezing of the top row with a solid black line between rows 1 and 2. You should also notice that as you scroll down the spreadsheet, the top row stays where it is while all of the other rows scroll.

To unfreeze the top row

Clicking on the View tab (if not already on that tab), in the Window group click on Freeze Panes.

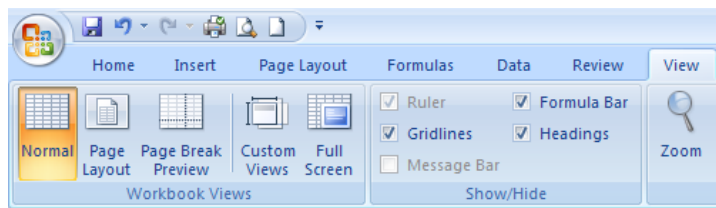
Click on the Unfreeze Panes button.

Freeze First Column

Not only can freeze the top row, you can also freeze the first column in the same way.

To freeze the First Column

Clicking on the View tab, in the Window group, click on Freeze Panes and then click on Freeze First Column.



The screenshot shows the Microsoft Excel interface with the View tab selected. In the 'Window' group, the 'Freeze First Column' button is highlighted. The spreadsheet below shows a table with columns A through E and rows 1 through 15. The first column (A) is frozen, indicated by a solid black line between columns A and B.

	A	B	C	D	E
1	Item	Quantity	Unit Cost	Total	
2	Courseware development	4	2500	10000	
3	Courseware purchase	15	200	3000	
4	Certification	25	100	2500	
5	Train-the -trainer	10	750	7500	
6	Hardware purchase	15	1800	27000	
7	Facility rental	4	800	3200	
8	Instructional Materials	30	25	750	
9	Technical equipment	3	450	1350	
10	Consulting fees	4	100	400	
11	Instructor fees	8	1500	12000	
12	Content acquisition	4	250	1000	
13	Travel	3	750	2250	
14	Per diem	15	75	1125	
15		140	9300	72075	
16					
17					
18					

Notice, again, that Excel indicates the frozen pane with a black line but this time you will find it between columns 1 and 2.(in the example on previous page between A and B) Also notice that as you scroll left and right, the first column stays where it is while all of the other columns scroll.

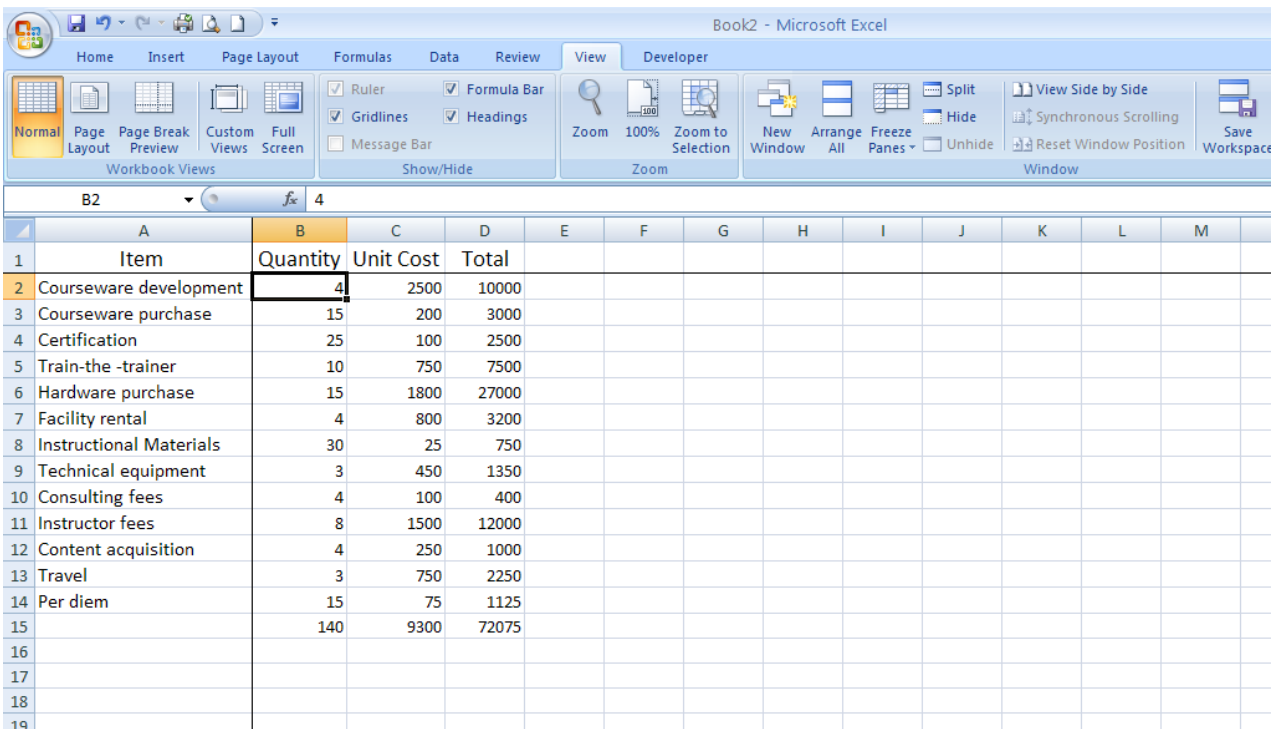
To unfreeze the First Column, follow the same steps you used to “To unfreeze the top row”.

You can even freeze a combination of both rows and columns. You can actually freeze any cells you want to create custom panes.

To Freeze both rows and columns and create a custom frozen pane

Click on any cell in your spreadsheet.

Then clicking on the View tab, in the Window group, click on Freeze Panes and then click on Freeze Panes.



You will notice that Excel froze the cells to the left and above the active cell. Using this method, you can simultaneously freeze both the rows and columns you

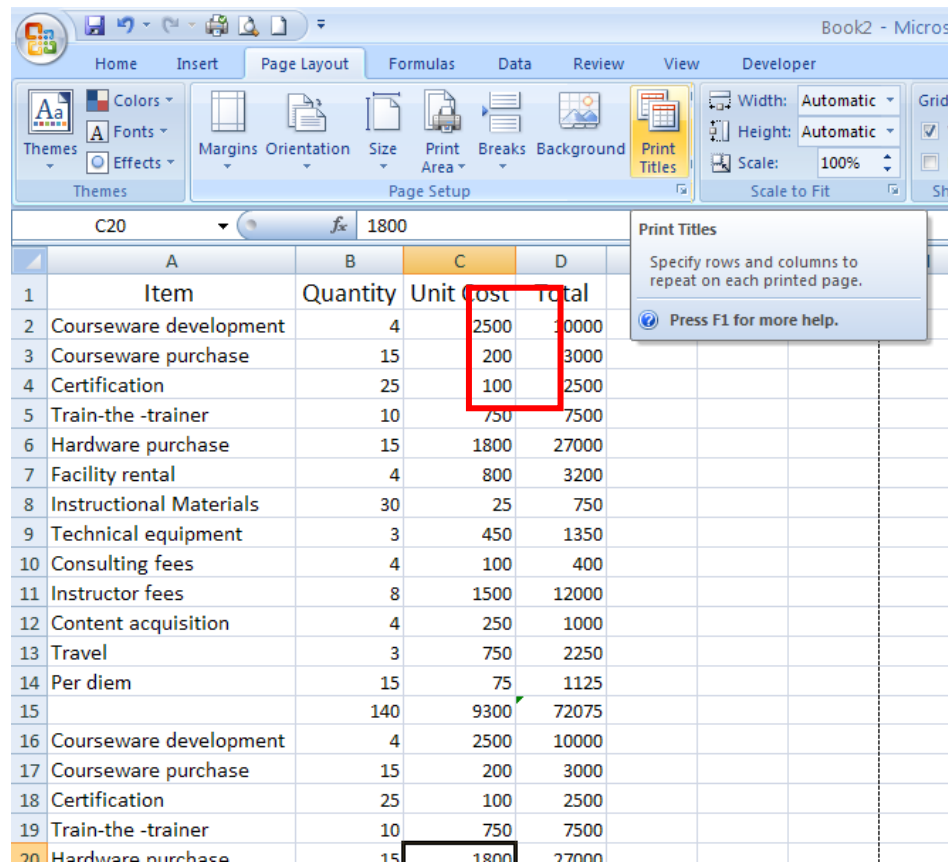
want. Freezing panes in Excel can help make large spreadsheets more management by eliminating the need to constantly scroll to the top or left to see the headings of the cells in which you are working.

To unfreeze the both rows and columns, follow the same steps you used to “To unfreeze the top row”

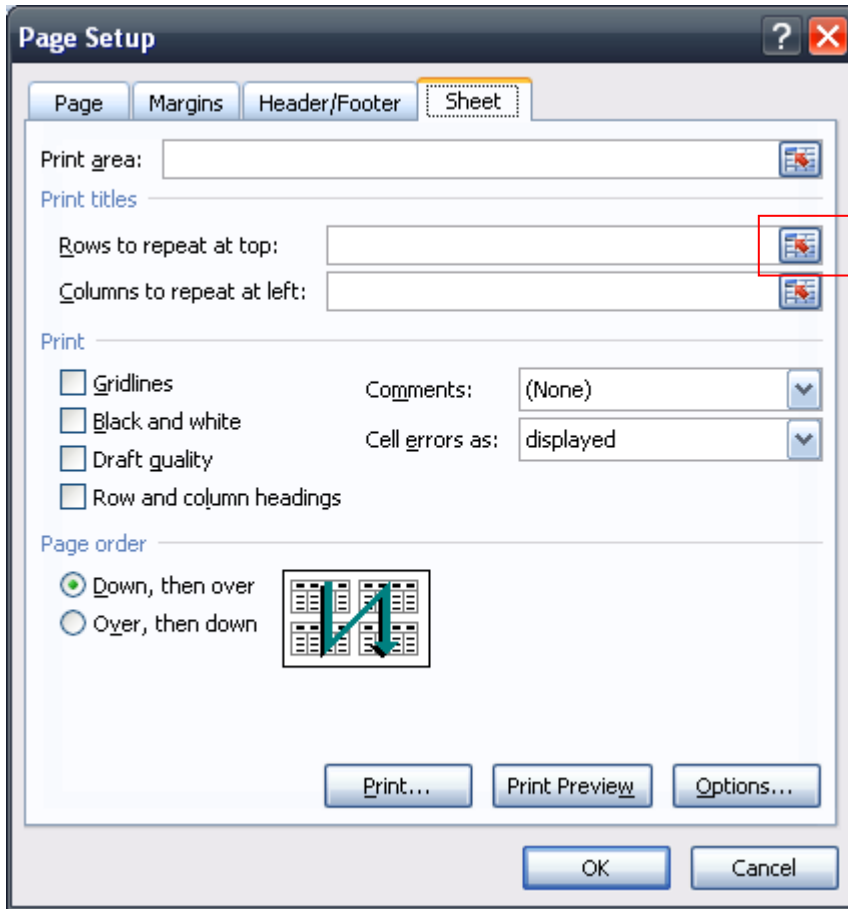
If a worksheet extents over more than one page, you can print row and column headings or labels (also called print titles) on every page to ensure that the data is properly labeled.

To print header row or first row on each and every page

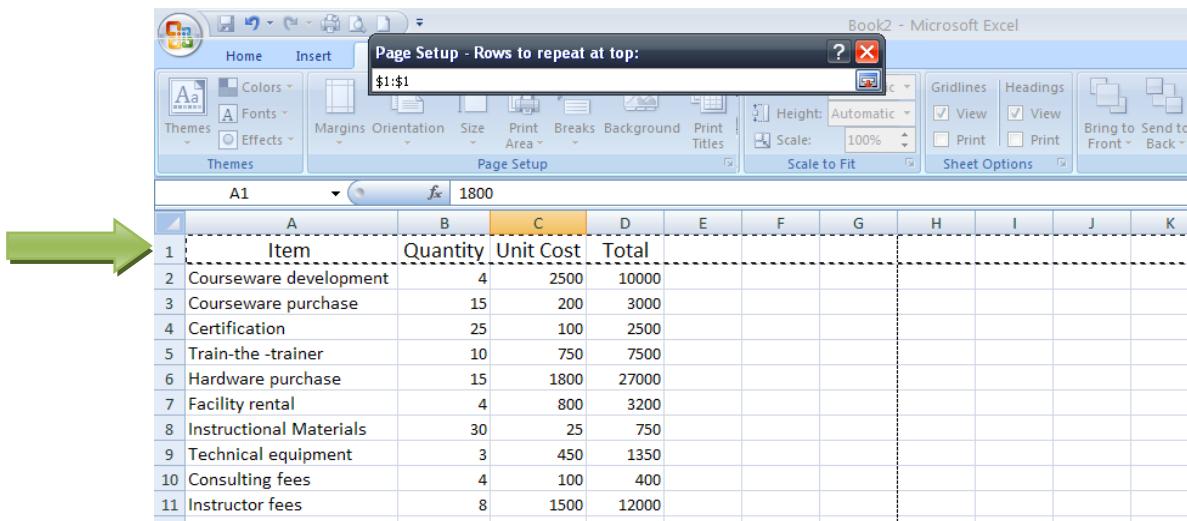
Click on the Layout tab, in Page Setup group, click on Print Titles.

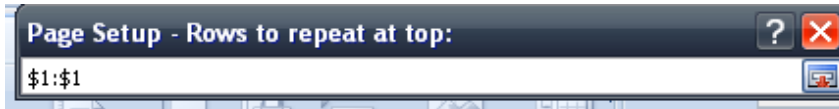


Click the collapse button (red arrow icon) next to Rows to repeat at top.



Use the mouse to select the first row or the row that you want to repeat in each and every page that is printed.





Click the collapse button (red arrow icon) next to Rows to repeat at top to return back to Page Setup window.

Page 1

Item	Quantity	Unit Cost	Total
Courseware development	4	2500	10000
Courseware purchase	15	200	3000
Certification	25	100	2500
Train-the-trainer	10	750	7500
Hardware purchase	15	1800	27000
Facility rental	4	800	3200
Instructional Materials	30	25	750
Technical equipment	3	450	1350
Consulting fees	4	100	400
Instructor fees	8	1500	12000
Content acquisition	4	250	1000
Travel	3	750	2250
Per diem	15	75	1125
	140	9300	72075
Courseware development	4	2500	10000
Courseware purchase	15	200	3000
Certification	25	100	2500
Train-the-trainer	10	750	7500
Hardware purchase	15	1800	27000
Facility rental	4	800	3200
Instructional Materials	30	25	750
Technical equipment	3	450	1350
Consulting fees	4	100	400
Instructor fees	8	1500	12000
Content acquisition	4	250	1000
Travel	3	750	2250
Per diem	15	75	1125
	140	9300	72075
Courseware development	4	2500	10000
Courseware purchase	15	200	3000
Certification	25	100	2500
Train-the-trainer	10	750	7500
Hardware purchase	15	1800	27000
Facility rental	4	800	3200
Instructional Materials	30	25	750
Technical equipment	3	450	1350
Consulting fees	4	100	400
Instructor fees	8	1500	12000
Content acquisition	4	250	1000
Travel	3	750	2250
Per diem	15	75	1125
	140	9300	72075
Courseware development	4	2500	10000

Page 2

Item	Quantity	Unit Cost	Total
Courseware purchase	15	200	3000
Certification	25	100	2500
Train-the-trainer	10	750	7500
Hardware purchase	15	1800	27000
Facility rental	4	800	3200
Instructional Materials	30	25	750
Technical equipment	3	450	1350
Consulting fees	4	100	400
Instructor fees	8	1500	12000
Content acquisition	4	250	1000
Travel	3	750	2250
Per diem	15	75	1125
	140	9300	72075

Pivot Tables

What is a Pivot Table?

A pivot table creates an interactive summary from many records.

For example, you may have hundreds of invoice entries in a list on your worksheet. A pivot table can total the invoices by customer, product or date. You create the pivot table by using a wizard -- no need for complicated formulas.

You can quickly rearrange the information in the pivot table by dragging the buttons to a new position.

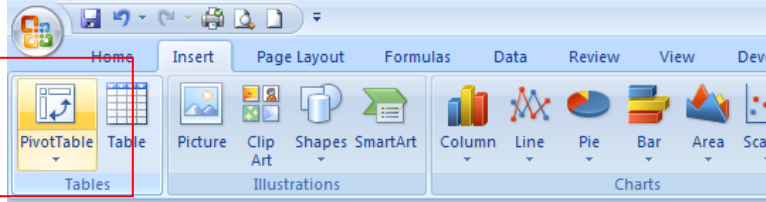
To Create a Pivot Table

OPEN FILE THAT CONTAINS DATA TO A PIVOT TABLE

Select any cell in the source data table.

On the Ribbon, click the Insert tab.

In the Tables group, click PivotTable.



The screenshot shows the Microsoft Excel interface. The 'Insert' tab is selected on the ribbon. In the 'Tables' group, the 'PivotTable' button is highlighted with a red box. Below the ribbon, a data table is visible with the following columns: Name, Department, and Number of Students. The table contains 25 rows of data, with the first row highlighted in orange. The 'Number of Students' column contains numerical values ranging from 5 to 40.

	Name	Department	Number of Students
3	Spring	Smith	5
4	Spring	Browning	39
5	Spring	Browning	26
6	Spring	Davidson	10
7	Spring	Davidson	55
8	Summer	Smith	18
9	Summer	Smith	22
10	Summer	Browning	16
11	Summer	Browning	40
12	Summer	Davidson	20
13	Summer	Davidson	10
14	Fall	Smith	21
15	Fall	Smith	14
16	Fall	Browning	17
17	Fall	Browning	35
18	Fall	Davidson	40
19	Fall	Davidson	25
20	Winter	Smith	20
21	Winter	Smith	6
22	Winter	Browning	19
23	Winter	Browning	10
24	Winter	Davidson	20
25	Winter	Davidson	30

The Create Pivot Table pop-up window appears.

Depending if you wish to place the Pivot Table report in New Worksheet or in the Existing Worksheet, click the desired option.

Click OK once finished.

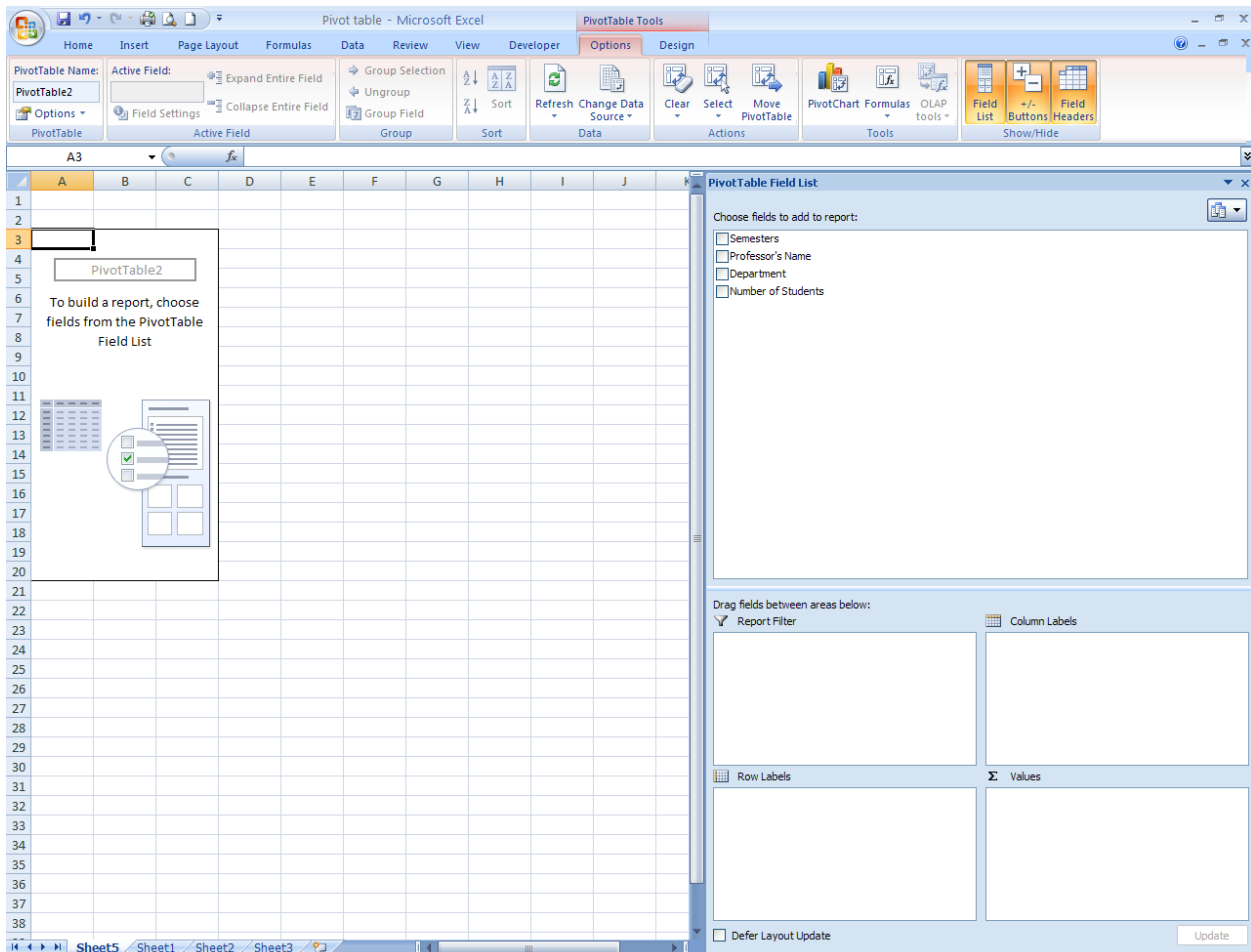
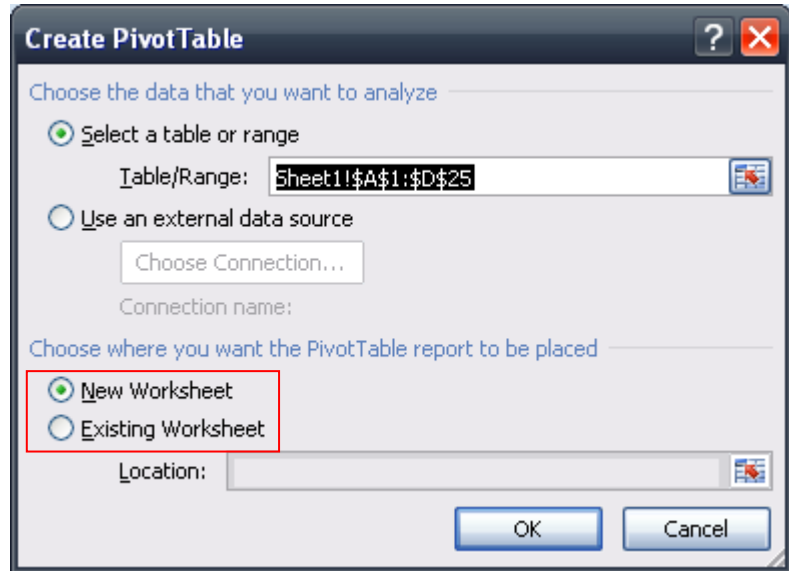


Figure 1: A blank Pivot Worksheet is displayed.

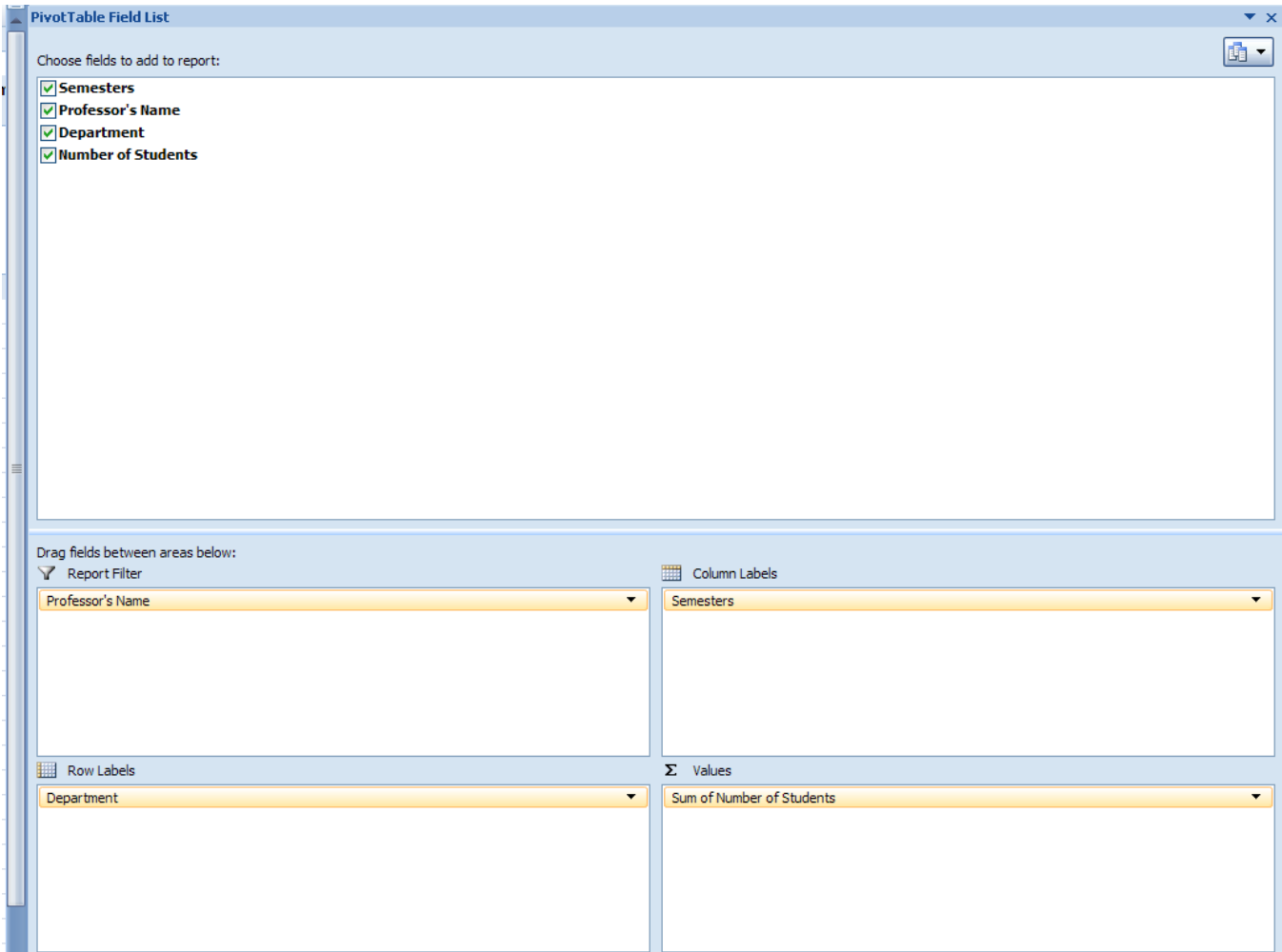
The screenshot shows a PivotTable in Microsoft Excel with the following data:

Row Labels	Fall	Spring	Summer	Winter	Grand Total
English	63	114	44	39	260
History				30	30
Law & Police Science			20		20
Math		31		20	51
Psychology	14	10	22	16	62
Science	75		40		115
Grand Total	152	155	126	105	538

The PivotTable Field List task pane is configured as follows:

- Choose fields to add to report:**
 - Semesters
 - Professor's Name
 - Department
 - Number of Students
- Report Filter:** Professor's Name
- Column Labels:** Semesters
- Row Labels:** Department
- Values:** Sum of Number of Students

Using the drag and drop method – hold the mouse and click on Field name from “Choose fields to add to report” and drag it to one of the quadrants: **Report Filter, Column Labels, Row Labels and Values.**



	A	B	C	D	E	F
1	Professor's Name	(All)				
2						
3	Sum of Number of Students	Column Labels				
4	Row Labels	Fall	Spring	Summer	Winter	Grand Total
5	English	63	114	44	39	260
6	History				30	30
7	Law & Police Science			20		20
8	Math		31		20	51
9	Psychology	14	10	22	16	62
10	Science	75		40		115
11	Grand Total	152	155	126	105	538
12						
13						
14						

Figure 2: Pivot Table is now complete. You may the Filter to change the data to display. As well as you can move the fields around by dragging and dropping

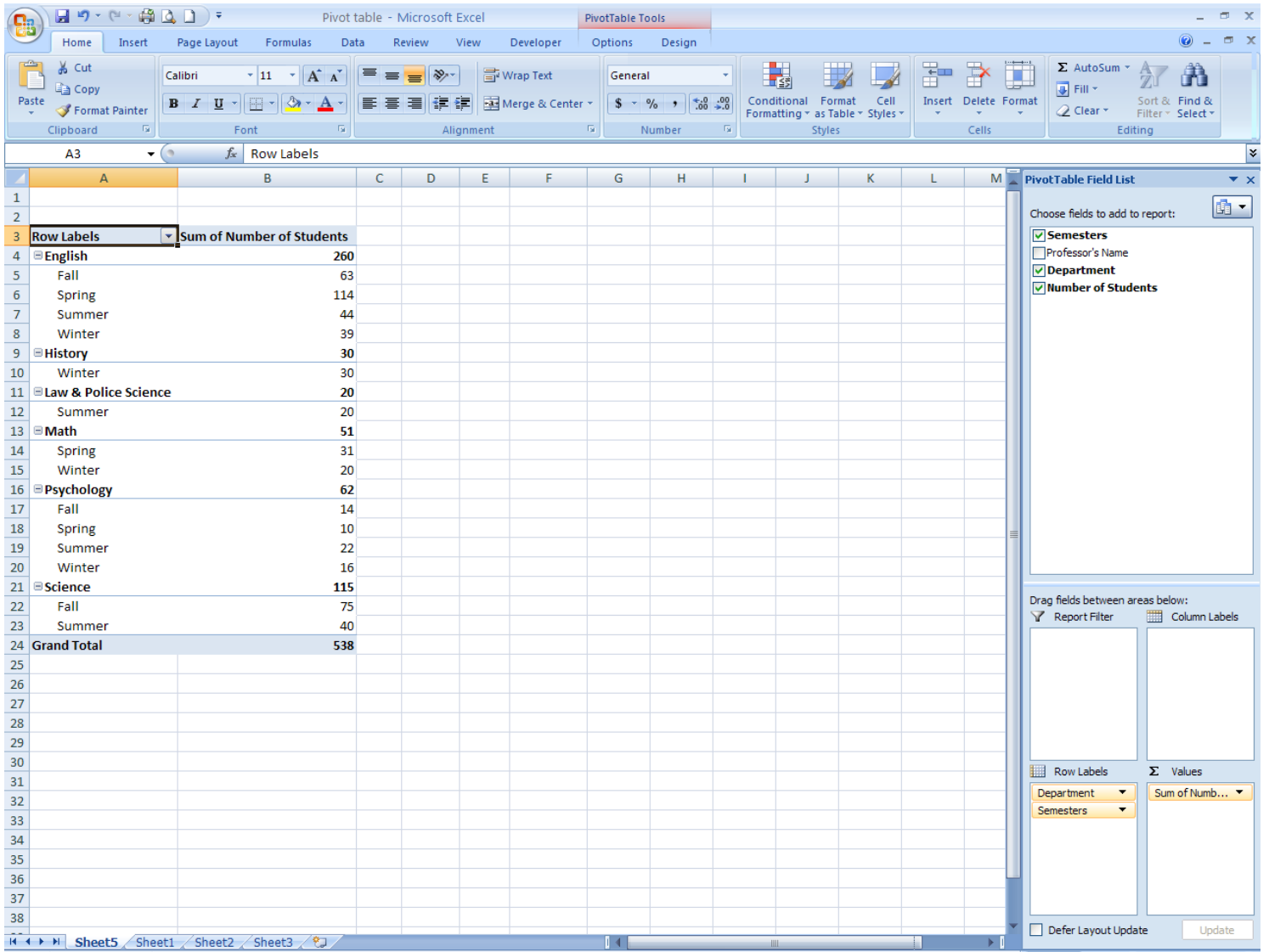


Figure 3: Same file. Different outcome by moving the field names around

	A	B
1		
2		
3	Row Labels	Sum of Number of Students
4	English	260
5	Fall	63
6	Spring	114
7	Summer	44
8	Winter	39
9	History	30
10	Winter	30
11	Law & Police Science	20
12	Summer	20
13	Math	51
14	Spring	31
15	Winter	20
16	Psychology	62
17	Fall	14
18	Spring	10
19	Summer	22
20	Winter	16
21	Science	115
22	Fall	75
23	Summer	40
24	Grand Total	538
25		
26		

If you don't want to include a field in the Pivot table uncheck from the Field list window.

Click on the X to close the Field list window.

To return back to your original data, click on the sheet tab that contains the data (i.e. sheet1).

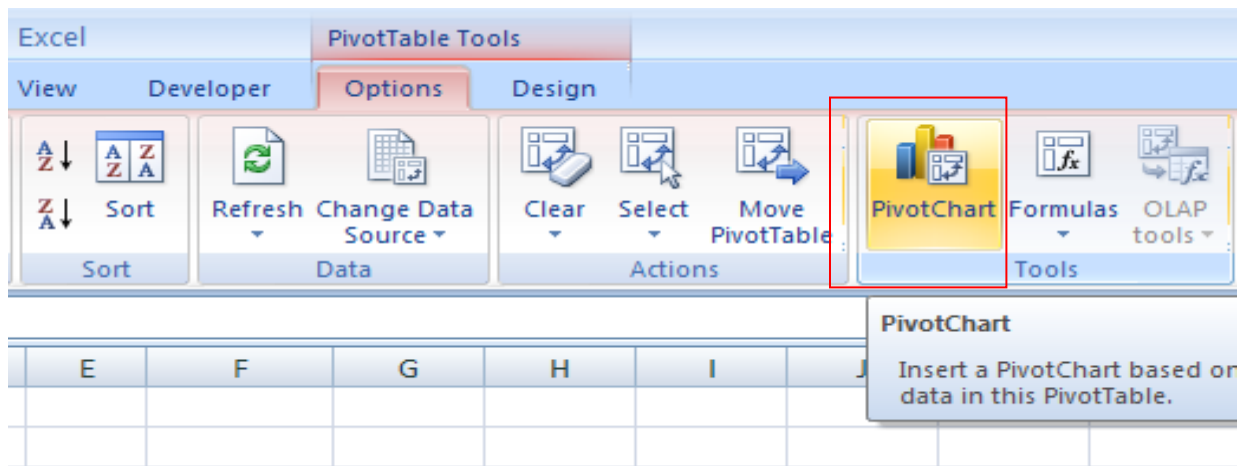
Create a Pivot Chart

To create a PivotChart report

Select the PivotTable report that contains the data you want to convert to a PivotChart report.

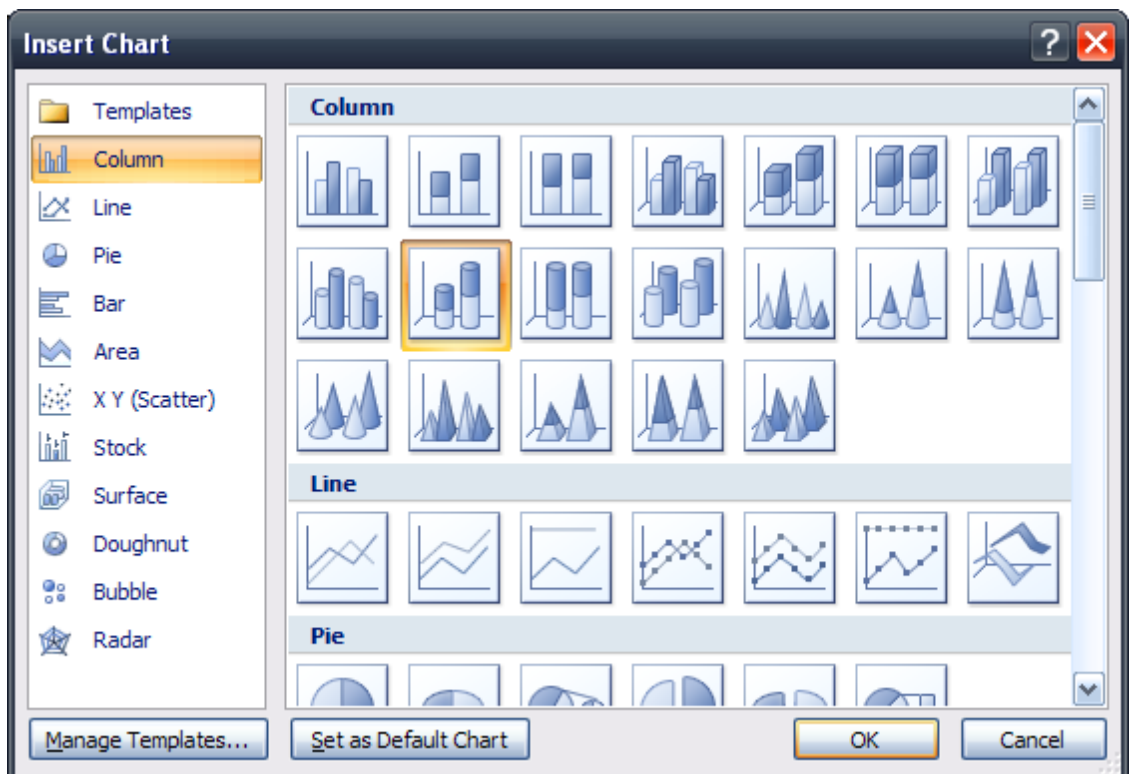
On the PivotTable Tools tab, click the Options tab.

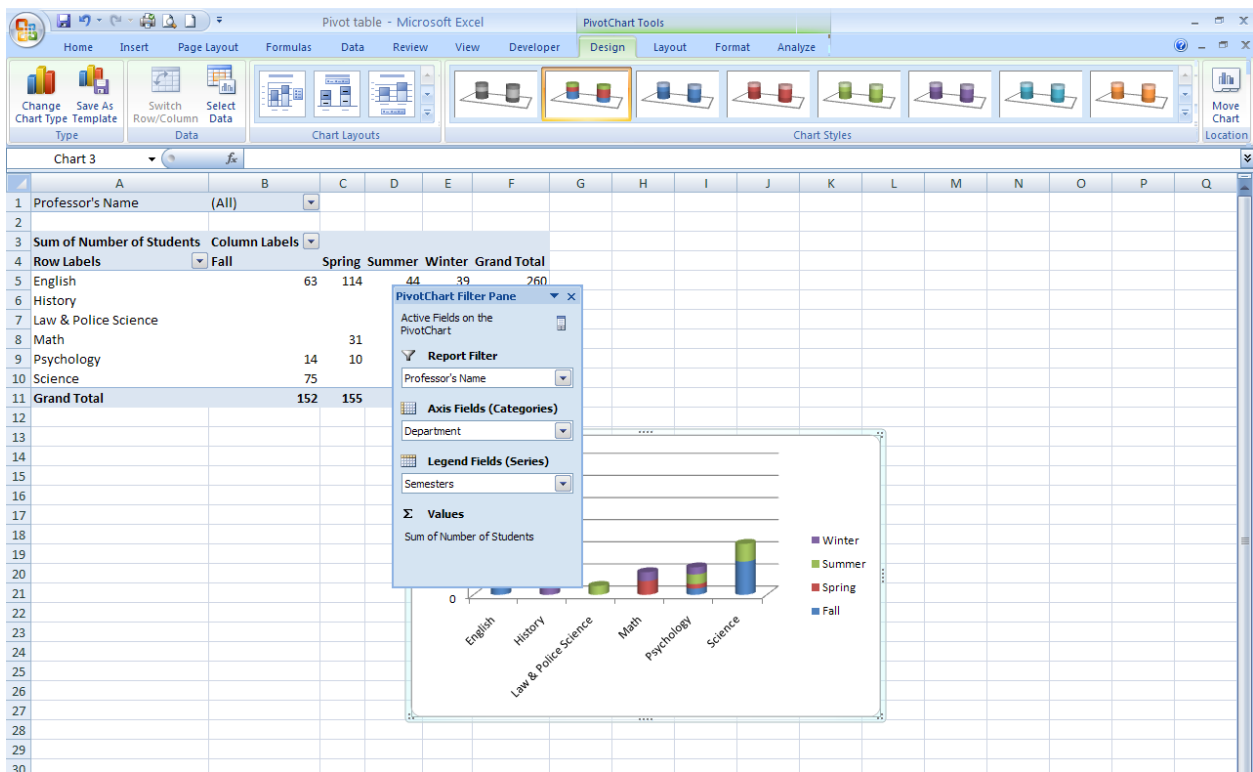
Click on PivotChart.



Choose Chart type.

Click OK.





Close the PivotChart Filter pane if necessary by clicking on the X to close the window.

Then you may format the chart just would any other chart.

