THE OHIO SOCIETY OF CPAs

May 14, 2014
Youngstown State University

YSU CPE Day

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Youngstown State University

Advanced Excel

Session #014

Upcoming Events

Cleveland Spring CPE Conference – May 23, 2014– Course #46375

A whole new CPE season starts with the beginning of spring, and our annual Cleveland Spring CPE Day Conference is a fantastic way to get all the latest news you can use on a variety of topics important to you and your profession. There is so much happening with new regulations, the new health care law and the competitive environment continues to be a strain on all businesses, and with the ability to get information from virtually anywhere, it's hard trying to cut through it all to get to what you need to know. Join us at the Cleveland Spring CPE Day conference and let us help make that easier by providing you with the information you need, from the experts you know, and the industry leaders you trust. Plus it's a great time to network with your peers and satisfy your three-hour ethics requirement. Being close to home with great topics and great speakers this event has it all.

Akron Spring CPE Day– June 27, 2014 – Course #46391

Join OSCPA for one of the most popular CPE events in Northeast Ohio. The 2014 Akron Spring CPE Day conference is coming soon and it's the place to be to get information on just about anything, anytime from a variety of sources. At this conference we're going to help make that process easier by providing you with the information you need on the topics important to you and your industry. This is a great opportunity to learn from the experts and industry leaders you know and trust, plus you can satisfy your three-hour ethics requirement and network with your peers.

· ***Be sure to visit the Events Catalog at store.ohioscpa.com for more continuing education opportunities.***

NOTICE TO READERS:

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Welcome to Youngstown CPE Day. May 14, 2014

Advanced Excel

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Objectives

- Group and ungroup data
- Subtotal data
- Create a PivotTable
- Change the values field
- Modify a PivotTable
- Sort, filter, and slice a PivotTable
- Create a calculated field
- Format a PivotTable
- Create a PivotChart

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Group and Ungroup Data

- Group rows or columns of related data into an outline
- Expand or collapse groups depending on your focus
- Excel will not create an outline or group data if the dataset does not contain a formula

If the dataset contains a **formula**, you can have Excel create an **automatic outline**:
Click the **Group arrow** in the **Outline** group on the **Data** tab.
Select **Auto Outline**.
If Excel cannot create the outline, or **you want more control creating groups**:
Select the rows or columns to be grouped.
Click **Group** in the **Outline** group on the **Data** tab.
If the Group dialog box opens, choose the option to **group by columns or rows**, and then click **OK**.
To **remove** groups:
Select all **columns or rows that were grouped**.
Click **Ungroup** in the **Outline** group on the **Data** tab.

Refer to Excel tab "Group&UngroupData".

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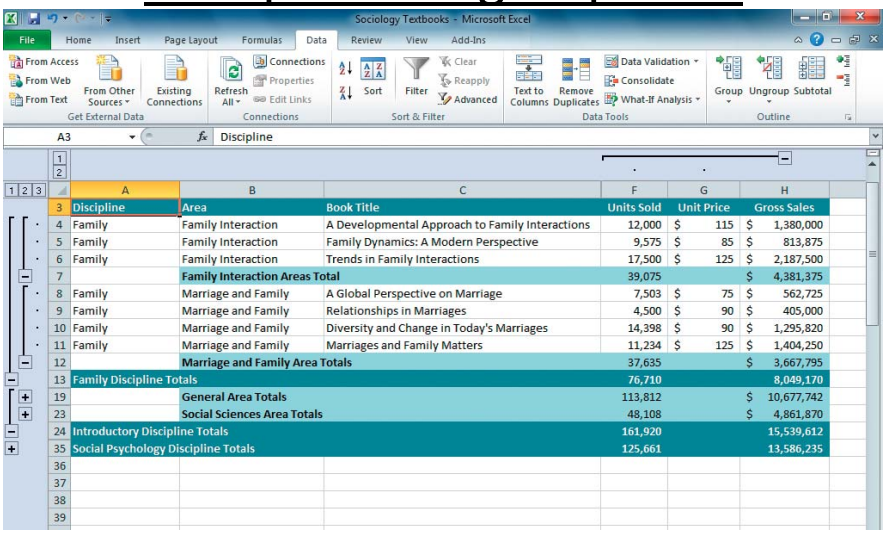
Group and Ungroup Data



	A	B	C	F	G	H
3	Discipline	Area	Book Title	Units Sold	Unit Price	Gross Sales
4	Family	Family Interaction	A Developmental Approach to Family Interactions	12,000	$ 115	$ 1,380,000
5	Family	Family Interaction	Family Dynamics: A Modern Perspective	9,575	$ 85	$ 813,875
6	Family	Family Interaction	Trends in Family Interactions	17,500	$ 125	$ 2,187,500
7		Family Interaction Areas Total		39,075		$ 4,381,375
8	Family	Marriage and Family	A Global Perspective on Marriage	7,503	$ 75	$ 562,725
9	Family	Marriage and Family	Relationships in Marriages	4,500	$ 90	$ 405,000
10	Family	Marriage and Family	Diversity and Change in Today's Marriages	14,398	$ 90	$ 1,295,820
11	Family	Marriage and Family	Marriages and Family Matters	11,234	$ 125	$ 1,404,250
12		Marriage and Family Area Totals		37,635		$ 3,667,795
13	Family Discipline Totals			76,710		8,049,170
19		General Area Totals		113,812		$ 10,677,742
23		Social Sciences Area Totals		48,108		$ 4,861,870
24	Introductory Discipline Totals			161,920		15,539,612
35	Social Psychology Discipline Totals			125,661		13,586,235
36						
37						
38						
39						

Refer to Excel tab "Group&UngroupData".

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Subtotal Data

- Use Subtotal command to insert subtotal rows at each designated field change in a sorted range of data
  - Subtotals calculated using summary functions
  - Grand totals displayed after each group
  - Additional levels of subtotals can be inserted

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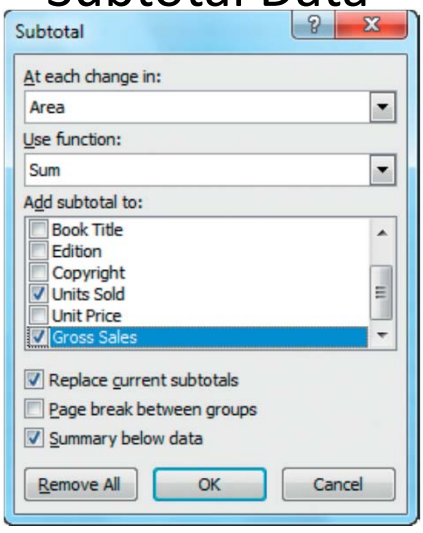
Subtotal Data



The above display is the Subtotal dialog box .
Note you can replace current subtotals, or include multiple subtotal levels.

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Create a PivotTable

- A PivotTable allows you to summarize, analyze, and explore large amounts of data
- Data can be dynamically arranged to view it from different angles
- One column must have duplicate values to create categories for organizing and summarizing data
- Another column must have numeric values
- Create a PivotTable by clicking PivotTable in the Tables group on the Insert tab

Refer to Excel tab "PivotTable Data".

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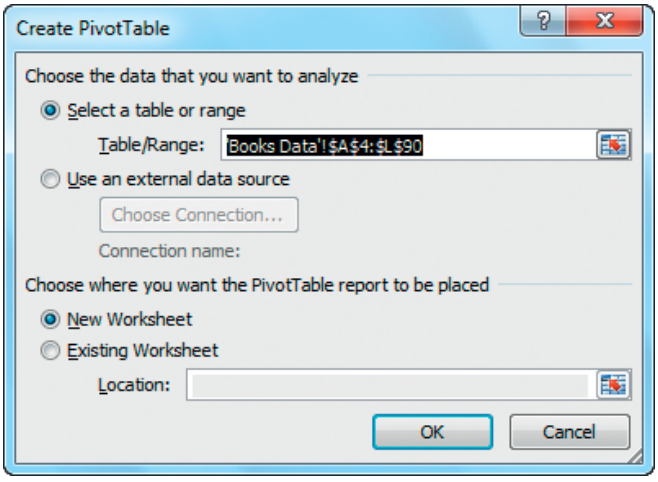
Create a PivotTable



Refer to Excel tab "PivotTable Data".

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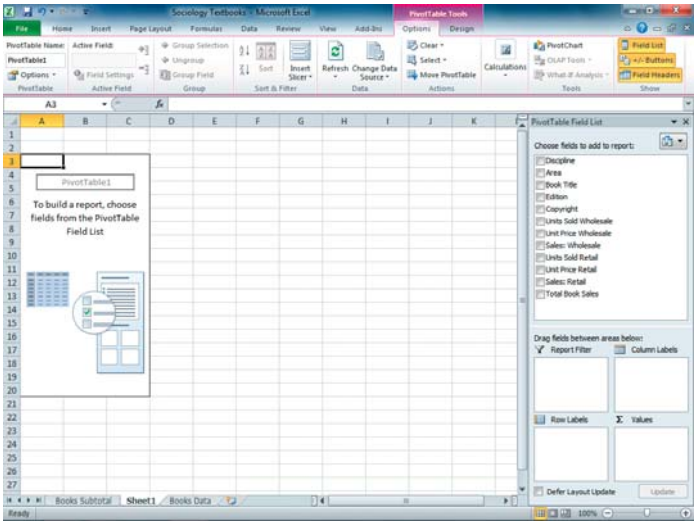
Create a PivotTable



The above example displays an empty PivotTable on the left side of the worksheet, and the PivotTable Field List on the right side. A field section at the top of the Field List is used to add or remove fields. A layout section at the bottom is used to arrange and reposition fields.
Refer to Excel tab "PivotTable One".

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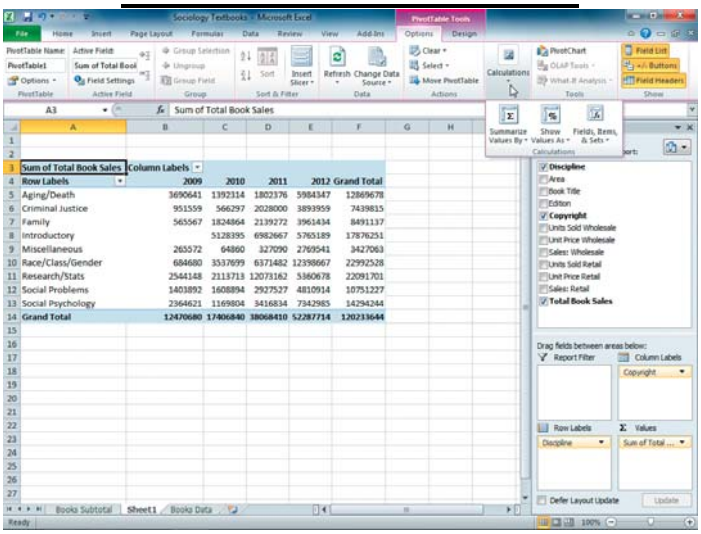
Create a PivotTable



The above example shows how you can change PivotTable fields.
Refer to Excel tab "PivotTable Two".

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Change the Values Field

- Select the function used to calculate summary statistics
- Default is:
  - Sum for values
  - Count for text fields
- Specify a custom column heading
- Apply number formatting

The above example shows how you can change PivotTable value fields.
Refer to Excel tab "PivotTable Formats&Sorts".

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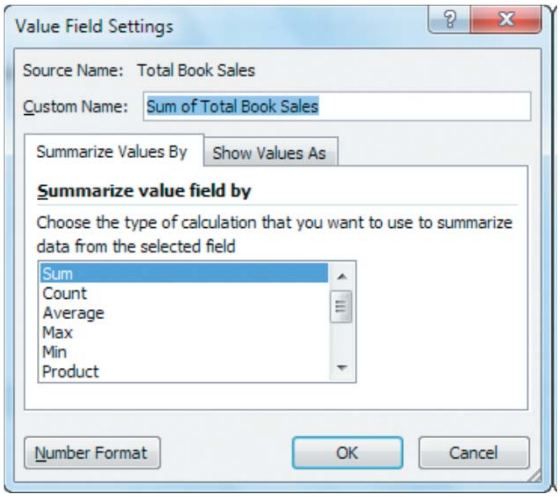
Change the Values Field



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Modify a PivotTable

- Add, remove, or rearrange fields to get a different perspective of the data
- Be careful not to make the data overwhelming with too many details
- Excel does not automatically update PivotTables – be sure to use the Refresh function within the PivotTable Tools – Options area.

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Sort, Filter, and Slice a PivotTable

- Sort data in a PivotTable
  - Default is alphabetical by row label text
- To quickly rearrange data, click in a cell in the column you want to sort, and then click Sort Smallest to Largest (Sort A to Z for text) or Sort Largest to Smallest (Sort Z to A for text) in the Sort & Filter group on the Options tab
- For specialized sorting, click Sort in the Sort & Filter group on the Options tab
  - If you click in a row label or column label first, you get a dialog box that has slightly different options than if you click on a value first

Refer to Excel tab "PivotTable Formats&Sorts".

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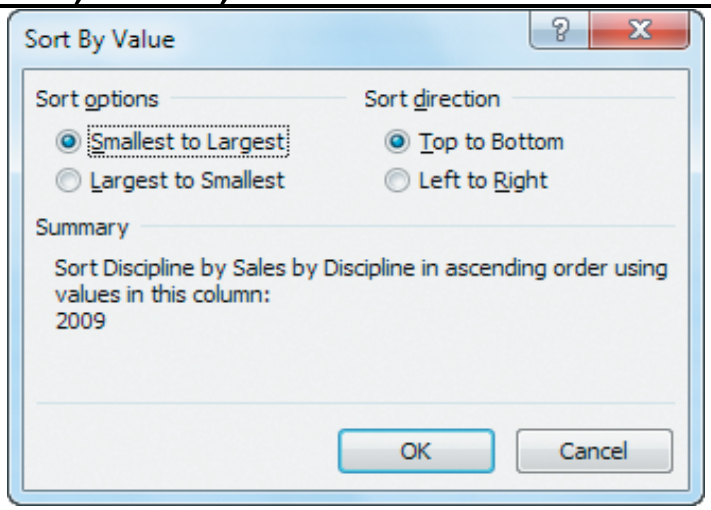
Sort, Filter, and Slice a PivotTable



The above example displays the **Sort By Value dialog box**.. If you click on a value before clicking Sort, this is the dialog box that will open.
Notice that there is an option to sort from left to right.

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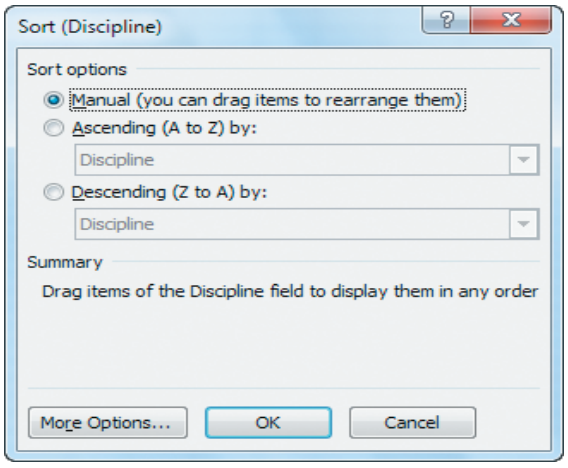
Sort, Filter, and Slice a PivotTable



The above example displays the **Sort dialog box**. If you click on a text label before clicking Sort, this is the dialog box that will open.
Notice that the title bar displays the name of the field in parentheses–Sort (Discipline).

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Sort, Filter, and Slice a PivotTable

- Apply filters to show a subset of data in a PivotTable
- Two types of filters:
  - A report filter sets the overall conditions for aggregating data
  - A group filter filters out data based on a row or column category
- Filter by one or multiple items, as well as by entering a search condition

When you drag a field to the Report Filter area, Excel displays the field name in cell A1 with a filter arrow in cell B1.
To remove the filter entirely, remove it from the Report Filter area.
To apply group filters, click the Row labels or Column Labels arrow, and then specify the settings for the filter.
You can collapse and expand categories in the PivotTable, similar to collapsing or expanding categories in an outline.

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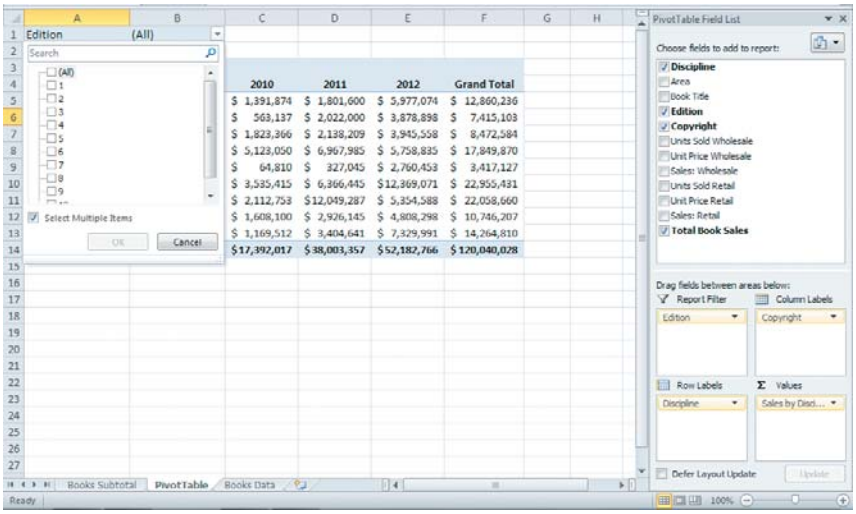
Sort, Filter, and Slice a PivotTable



Refer to Excel tab "PivotTable Filter".
The example above displays a Report Filter.

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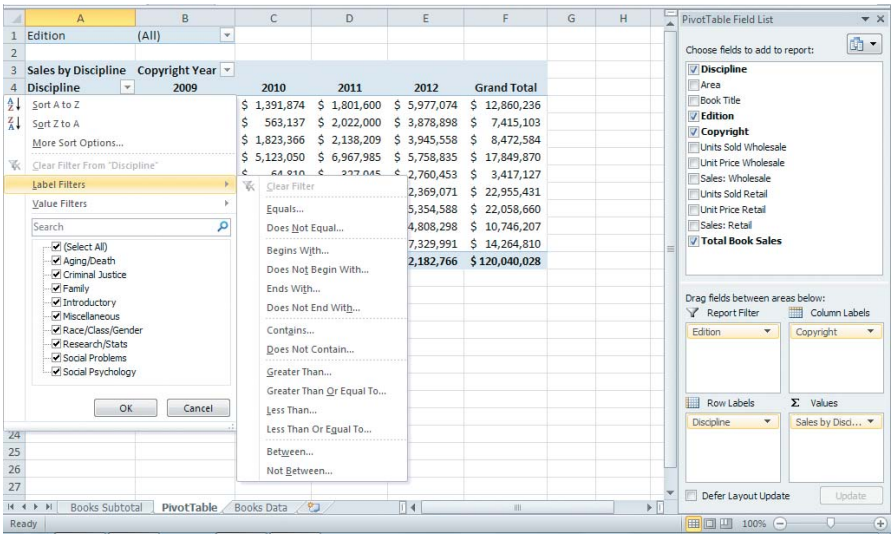
Sort, Filter, and Slice a PivotTable



Refer to Excel tab "PivotTable Group Filter".
The example above displays a Group Filter.

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Sort, Filter, and Slice a PivotTable

- Use slicers to filter data in a PivotTable
- Slicers:
  - Are graphical
  - Provide buttons that you can click for quick filtering
  - Indicate the current filtering state
- To insert slicer, click the Options tab, click the Insert Slicer button in the Sort & Filter group, click one or more field check boxes for which you want to create a slicer, and then click OK
- To use slicer, click a button to filter data

Slicers are new to Excel 2010 and may be helpful to new users of PivotTables, or those not adept at Excel.
Refer to Excel tab "PivotTable Slicer"

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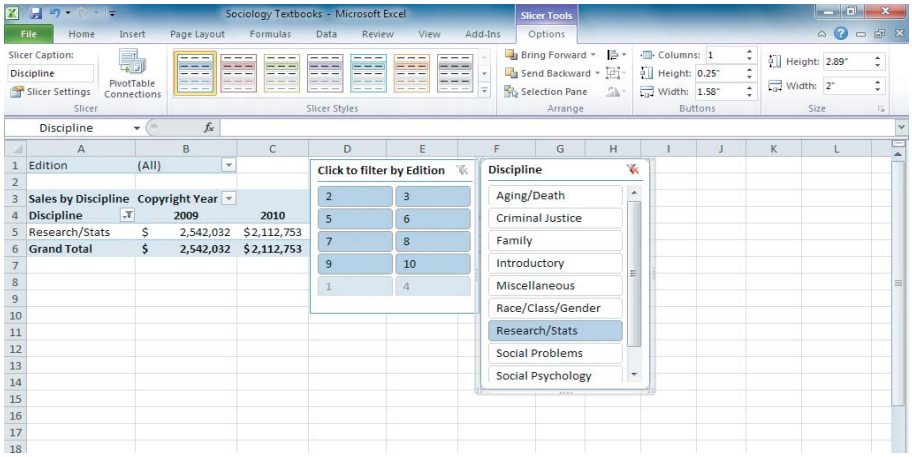
Sort, Filter, and Slice a PivotTable



Click on the Options tab within the PivotTable Tools section.
Click the top half of Insert Slicer to display the dialog box.
Click on one or more check boxes to display one or more slicers and click OK.
You can move the slicer boxes so as not to impair the view of the Pivot Table. Slicers are dynamic.

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Create a Calculated Field

- Calculated field:
  - Is a user-defined field
  - Does not exist in the original dataset
- Use basic arithmetic operations, but not cell references or range names
- Use built-in calculations

To create a calculated field (refer to Excel tab "CalculatedField"):
Click any cell within the PivotTable.
On the **Options** tab, click **Fields, Items, & Sets** in the Calculations group and then click **Calculated Field**.
In the **Name** box, type a meaningful name for the field.
In the **Formula** box, enter the formula for the field.
To use the data from another field in the formula, click the field in the Fields box, and then click Insert Field. For example, to calculate a 7% royalty on each value in the Total Book Sales field, you could enter = , then click on Total Book Sales and then Insert Field and then *.07.
Click **Add**.

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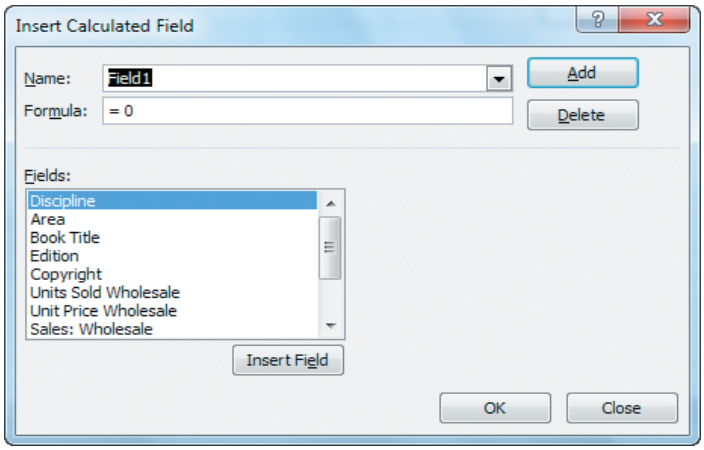
Create a Calculated Field



The above example displays the **Insert Calculated Field** dialog box.

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Format a PivotTable

- Basic formatting applied to PivotTables:
  - Primary row labels formatted in bold
  - Subtotals are bold
- Use PivotTable Tools Design tab to apply a PivotTable style and control:
  - Font color
  - Fill color
  - Bolding
  - Border lines

To change the PivotTable style, on the **Design** tab, click the **More** button in the **PivotTable Styles** group and then use the drop-down box to choose a style from the gallery.

You can select check boxes in the **PivotTable Style Options** group to modify the formatting as desired.

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Format a PivotTable

The above example displays the **PivotTable Styles gallery** dialog box.

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Create a PivotChart

- A PivotChart is a graphical representation of data in a PivotTable.
- You can create a PivotChart from a PivotTable or at the same time you create a PivotTable.
- Creating and customizing PivotCharts is similar to the methods used on regular charts.
- A PivotChart is interactive, meaning changes made in the associated PivotTable are immediately reflected in the PivotChart.

To create a **PivotChart** (refer to Excel tab "PivotChart-A"), click inside the PivotTable, click the **Options** tab, and then click **PivotChart** in the **Tools** group. Choose a **chart type**, and then click **OK.**
In the **PivotTable Field List**, the Row Labels area changes to Axis Fields, and the Column Labels area changes to Legend Fields when you select the PivotChart.

To create the **PivotTable and PivotChart at the same time**, (refer to Excel tab "PivotChart-B"), click the **Insert** tab, click the **PivotTable arrow** in the **Tables** group, and then select **PivotChart**. Select the **desired options**, and then click **OK. Create the PivotTable** and Excel builds the PivotChart as you create the PivotTable.

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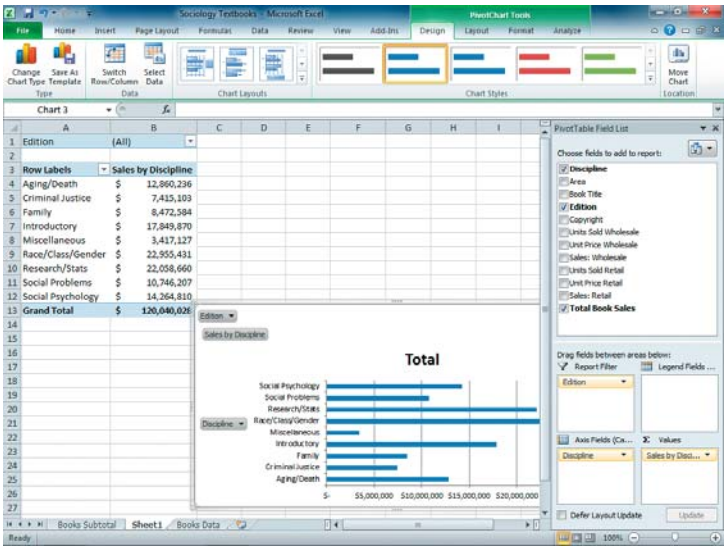
Create a PivotChart



The above example displays the **PivotTable** and **Pivot Chart**, simultaneously.

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Summary

- In this hour, we reviewed the tools that help you manage large amounts of data and translate that data into useful information. These include:
  - Grouping and ungrouping data.
  - Using subtotals.
  - Creating and modifying a PivotTable.
  - Sorting, filtering, and slicing a PivotTable.
  - Creating a PivotChart.

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Excel Function Keys

F1) Displays the Excel **Help** task pane.
- **CTRL+F1** displays or hides the ribbon.
- **ALT+F1** creates an embedded chart of the data in the current range.
- **ALT+SHIFT+F1** inserts a new worksheet.

F2) **Edits** the active cell and positions the insertion point at the end of the cell contents. It also moves the insertion point into the Formula Bar when editing in a cell is turned off.
- **SHIFT+F2** adds or edits a cell comment.
- **CTRL+F2** displays the print preview area on the Print tab in the Backstage view.

F3) Displays the **Paste Name** dialog box. Available only if there are existing names in the workbook.
- **SHIFT+F3** displays the Insert Function dialog box.

F4) **Repeats** the last command or action, if possible. When a cell reference or range is selected in a formula, F4 cycles through all the various combinations of absolute and relative references.
- **CTRL+F4** closes the selected workbook window.
- **ALT+F4** closes Excel.

F5) Displays the **Go To** dialog box.
- **CTRL+F5** restores the window size of the selected workbook window.

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Excel Function Keys

F6) Switches between the worksheet, ribbon, task pane, and Zoom controls. In a worksheet that has been split (**View** menu, **Manage This Window**, **Freeze Panes**, **Split Window** command), F6 includes the split panes when switching between panes and the ribbon area.
- **SHIFT+F6** switches between the worksheet, Zoom controls, task pane, and ribbon.
- **CTRL+F6** switches to the next workbook window when more than one workbook window is open.

F7) Displays the **Spelling** dialog box to check spelling in the active worksheet or selected range.
- **CTRL+F7** performs the Move command on the workbook window when it is not maximized. Use the arrow keys to move the window, and when finished press ENTER, or ESC to cancel.

F8) Turns extend mode on or off. In extend mode, **Extended Selection** appears in the status line, and the arrow keys extend the selection.
- **SHIFT+F8** enables you to add a nonadjacent cell or range to a selection of cells by using the arrow keys.
- **CTRL+F8** performs the Size command (on the Control menu for the workbook window) when a workbook is not maximized.
- **ALT+F8** displays the Macro dialog box to create, run, edit, or delete a macro.

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Excel Function Keys

F9) **Calculates** all worksheets in all open workbooks.
SHIFT+F9 calculates the active worksheet.
CTRL+ALT+F9 calculates all worksheets in all open workbooks, regardless of whether they have changed since the last calculation.
CTRL+ALT+SHIFT+F9 rechecks dependent formulas, and then calculates all cells in all open workbooks, including cells not marked as needing to be calculated.
CTRL+F9 minimizes a workbook window to an icon.

F10) Turns **key tips** on or off. (Pressing ALT does the same thing.)
SHIFT+F10 displays the shortcut menu for a selected item.
ALT+SHIFT+F10 displays the menu or message for an Error Checking button.
CTRL+F10 maximizes or restores the selected workbook window.

F11) Creates a **chart** of the data in the current range in a separate Chart sheet.
SHIFT+F11 inserts a new worksheet.
ALT+F11 opens the Microsoft Visual Basic For Applications Editor, in which you can create a macro by using Visual Basic for Applications (VBA).

F12) Displays the **Save As** dialog box.

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If a flash drive was provided to you,
I will need these for future classes.

Please leave the flash drive in the computer.
Thanks!!!

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Questions

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