Be a Data Leader: Analyzing AERIN Program Data Using Microsoft Excel

This interactive session is for program directors that want to learn how to use Excel to analyze their data. This session will provide program directors with basic/intermediate Microsoft Excel training and techniques for analyzing data. The session will be divided into three parts: instruction for using Excel for beginning and intermediate levels, downloading AERIN data into Excel and techniques for analyzing your AERIN data to make decisions. The underlying premise is that if program decisions are data informed, student learning will be positively impacted.

The **first** part of the session will cover Microsoft Excel training which will consist of the following: an overview, spreadsheet basics, sorting, modifying a worksheet, entering data in a worksheet, formatting, using formulas and charts.

In the **second** part of the session participants will export their AERIN data into Excel and reformat the data to begin analysis.

The **last** part of the session will focus on techniques for analyzing your AERIN data to make decisions. It contains practice exercises and links to relevant research. The session is designed to illustrate methods for analyzing data that do not require complex mathematics.

Microsoft Excel Training

1. Spreadsheet Basics
2. Sorting
3. Modifying a Worksheet
4. Entering Data in a Worksheet
5. Formatting
6. Formulas
7. Charts

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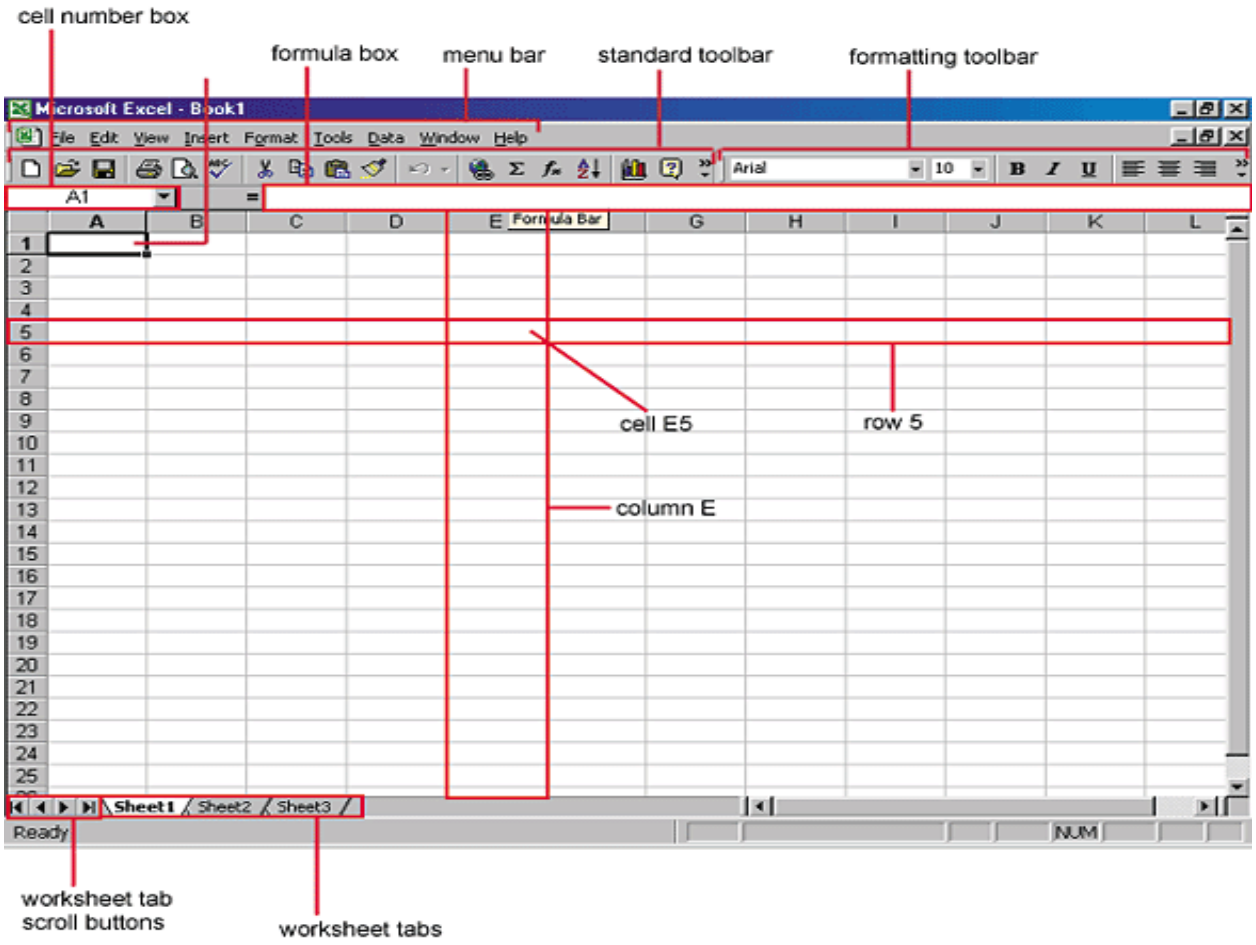
Opening Excel

- When Excel is opened, it opens a blank worksheet.
- An Excel worksheet file is called a workbook.
- A workbook is the Excel worksheet file in which related data and information for a specific project are stored.
- A workbook consists of many worksheets, or multiple layers, which are for listing and analyzing data.

1. From the *Start* menu,
   select ***All Programs » Microsoft Office » Microsoft Office Excel 2003***

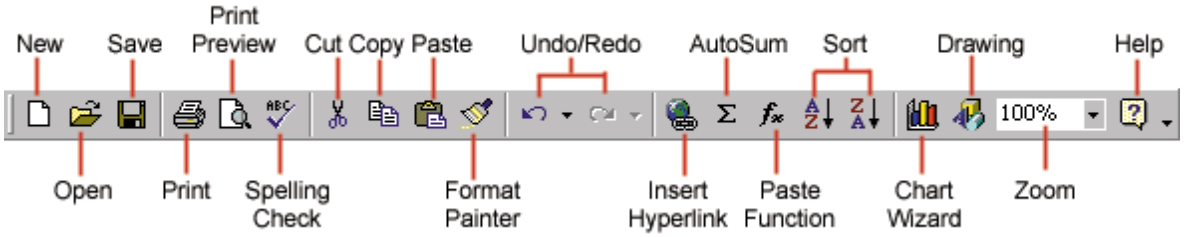
Spreadsheet Basics

- Each Excel file is a **workbook** that can hold many **worksheets**.
- The worksheet is a grid of **columns** (designated by letters) and **rows** (designated by numbers).
- The letters and numbers of the columns and rows (called **labels**) are displayed in gray buttons across the top and left side of the worksheet.
- The intersection of a column and a row is called a **cell**.
- Each cell on the spreadsheet has a **cell address** that is the column letter and the row number.
- Cells can either contain text, numbers, or mathematical formulas.



The Standard Toolbar

This toolbar is located just below the menu bar at the top of the screen and allows you to quickly access basic Excel commands.



New - Select **File » New** from the menu bar, press **CTRL+N**, or click the **New** button to create a new workbook.

Open - Click **File » Open** from the menu bar, press **CTRL+O**, or click the **Open** folder button to open an existing workbook.

Save - The first time you save a workbook, select **File »Save As** and name the file. After the file is named click **File » Save**, **CTRL+S**, or the Save button on the standard toolbar.

Print - Click the Print button to print the worksheet.

Print Preview - This feature will allow you to preview the worksheet before it prints.

Spell Check - Use the spell checker to correct spelling errors on the worksheet.

Cut, Copy, Paste, and Format Painter – Change the location of the cell content

Undo and Redo - Click the backward **Undo** arrow to cancel the last action you performed, whether it be entering data into a cell, formatting a cell, entering a function, etc. Click the forward **Redo** arrow to cancel the undo action.

Insert Hyperlink - To insert a hyperlink to a web site on the Internet, type the text into a cell you want to be the link that can be clicked with the mouse. Then, click the Insert Hyperlink button and enter the web address you want the text to link to and click **OK**.

Autosum, Function Wizard, and Sorting

Zoom - To change the size that the worksheet appears on the screen, choose a different percentage from the Zoom menu.

Formatting Toolbar

- The contents of a highlighted cell can be formatted in many ways.
- Font and cell attributes can be added from shortcut buttons on the formatting bar.
- If this toolbar is not already visible on the screen,

  select **View » Toolbars » Formatting** from the menu bar.

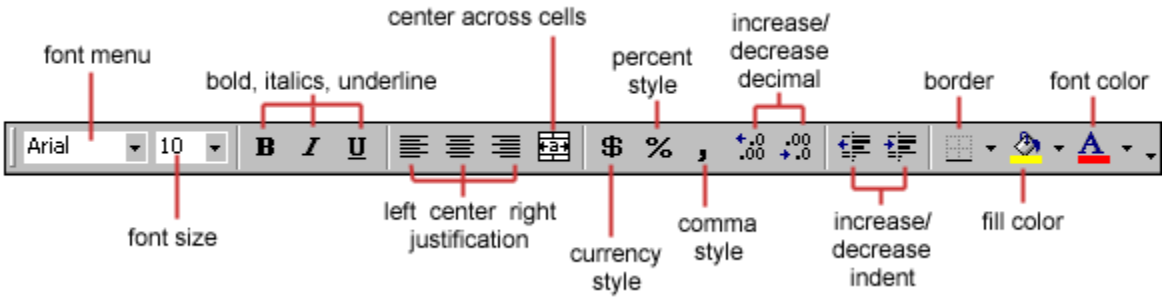


Chart Formatting Toolbar

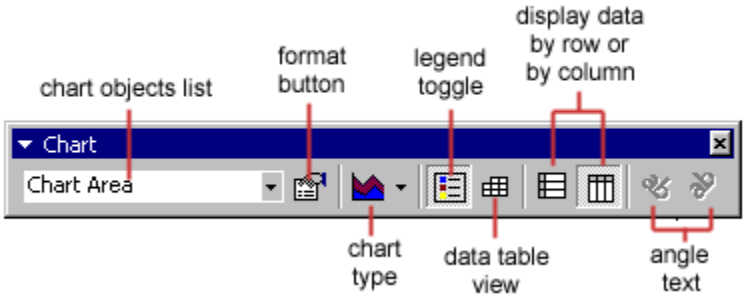


Chart Objects List - To select an object on the chart to format, click the object on the chart or select the object from the **Chart Objects List** and click the **Format button**. A window containing the properties of that object will then appear to make formatting changes.

Chart Type - Click the arrowhead on the chart type button to select a different type of chart.

Legend Toggle - Show or hide the chart legend by clicking this toggle button.

Data Table view - Display the data table instead of the chart by clicking the Data Table toggle button.

Display Data by Column or Row - Charts the data by columns or rows according to the data sheet.

Angle Text - Select the category or value axis and click the **Angle Downward** or **Angle Upward** button to angle the selected by +/- 45 degrees.

Opening a Toolbar

1. Click View >> Toolbars >> click to activate the desired toolbar

Selecting Cells

Before a cell can be modified or formatted, it must first be selected (highlighted). Refer to the table below for selecting groups of cells.

Cells to select	Mouse action
One cell	click once in the cell
Entire row	click the row label
Entire column	click the column label
Entire worksheet	click the whole sheet button
Cluster of cells	drag mouse over the cells or hold down the **SHIFT** key while using the arrow keys
Array of cells	Click first row and hold down ctrl key while selecting other rows or cells

To activate (type in the cell) the contents of a cell, double-click on the cell or click once and press F2.

Adding and Renaming Worksheets

By default, three worksheets are included in each workbook.

Adding Worksheet

1. The worksheets in a workbook are accessible by clicking the worksheet tabs.
   Hint: located at bottom left of screen).
2. To add a sheet, select **Insert,** select **Worksheet** from the menu bar.

Renaming Worksheet

1. To rename the worksheet tab, right-click on the Sheet 1 tab with the mouse and select **Rename** from the shortcut menu.
2. Type Practice and press the **ENTER** key.
3. Right-click on the Sheet 2 tab with the mouse and select **Rename** from the shortcut menu.
4. Type **ABE ASE** and press the **ENTER** key.

Deleting Worksheet

1. To delete the worksheet tab, right-click on the Sheet 3 tab with the mouse and select **Delete** from the shortcut menu.

Entering Text

A cell containing text and numbers or only text cannot be used in formulas, even if numbers exist with the alphabetic characters.

Moving Through Cells

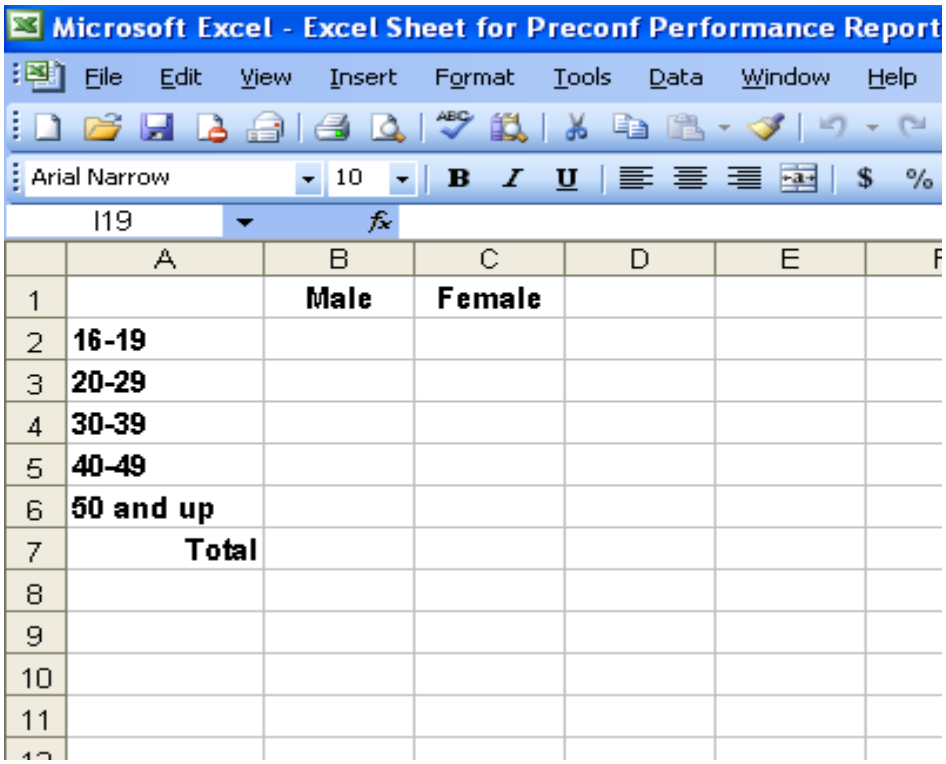
Use the keyboard strokes listed in the table below to move through the cells of a worksheet.

Movement	Key stroke
One cell up	up arrow key
One cell down	down arrow key or **ENTER**
One cell left	left arrow key
One cell right	right arrow key or **TAB**
Top of the worksheet (cell A1)	**CTRL + HOME**
End of the worksheet (last cell containing data)	**CTRL + END**
End of the row	**CTRL +** right arrow key
End of the column	**CTRL +** down arrow key
Any cell	**Select File, select Go To** menu bar command

Entering Text

1. Select the cell where you want to enter text
2. Type **Male** in cell B1
3. To accept the information, press [**Enter**] or an [**Arrow**] key
4. Type the following text in the corresponding cells:

TEXT	CELL ADDRESS
Female	**C1**
16-19	**A2**
20-29	**A3**
30-39	**A4**
40-49	**A5**
50 and up	**A6**
Total	**A7**



Entering Data

Entering Numbers

Numeric cells can be used for calculations and functions (prewritten formula). A numeric cell may contain numbers, plus (+), minus (-), currency ($).

1. Select the cell (B2) where you want to start entering numbers
2. Type the numeric information that should be in the cell

   HINT: To enter a fraction, type **0** and press [**Space**] before the fraction; otherwise, Excel will interpret the fraction as a date.

3. To accept the information, press [**Enter**] or an [**Arrow**] key

Entering Numbers as Text

Text formatted cells are treated as text even when a number is in the cell. The cell is displayed as it is entered.

1. From the *Format* menu, select ***Cells...***
   Select the ***Number*** tab
2. From the *Category* scroll list, select ***Text***
3. Click **OK**
4. Type the desired numbers and/or alphanumeric text that should be in the cell
5. To force text to wrap at a specific point in a cell, press [**Alt**] + [**Enter**]
6. To accept the information, press [**Enter**] or an [**Arrow**] key

Entering a Date or Time Manually

1. Select the cell where you want to enter the date or time
2. To enter a date, type the date in one of the following formats: 8/21/2008, 8-21-2008, or August 21, 2008

   NOTE: To indicate AM or PM, leave a space and press [**Shift**] + [**A**] or [**P**], respectively.
3. To accept the information, press [**Enter**] or [**return**]

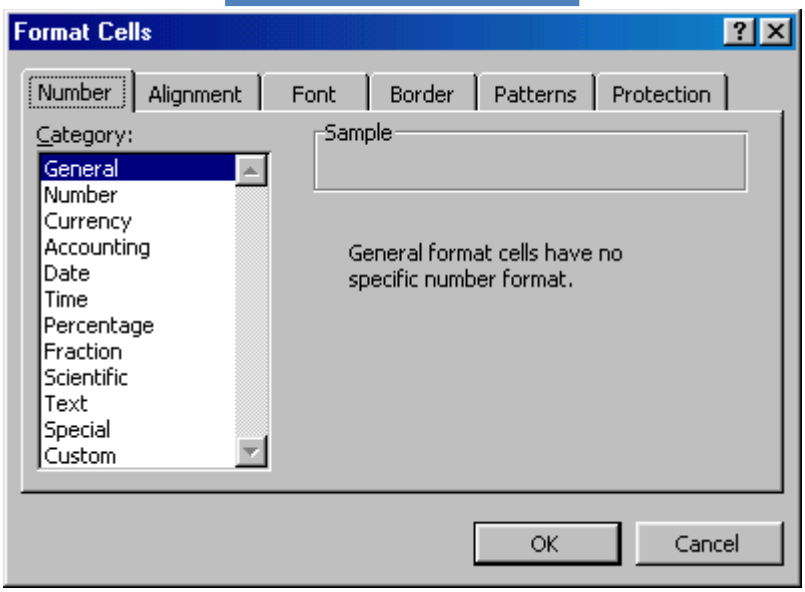
Entering the Current Date or Time Automatically

1. To enter today's date, press [**Ctrl**] + [**;**]
   To enter the current time, press [**Ctrl**] + [**Shift**] + [**;**]
2. To accept the information, press [**Enter**]

Format Cells (1 of 2)

Two options for formatting fonts in Excel are the ***Formatting*** toolbar option and the ***Format*** menu option. The *Format Cells* dialog box contains many other style choices not available on the *Formatting* toolbar.

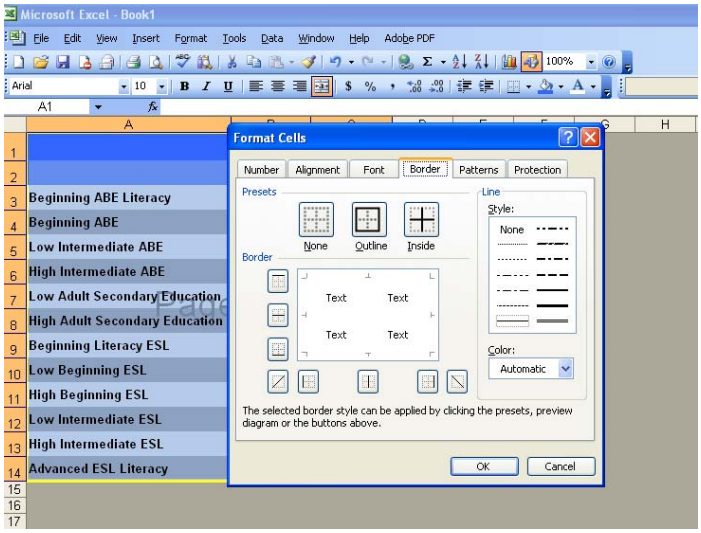
Format Cells Dialog Box



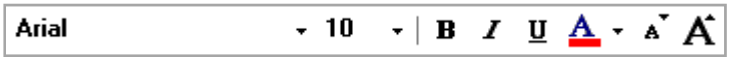
- **Number tab** - The data type can be selected from the options on this tab. Select General if the cell contains text and number, or another numerical category if the cell is a number that will be included in functions or formulas.
- **Alignment tab** - These options allow you to change the position and alignment of the data with the cell.
- **Font tab** - All of the font attributes are displayed in this tab including font face, size, style, and effects.
- **Border and Pattern tabs** - This tab allows you to add borders.
- **Border and Pattern tabs** – This tab allows you to add shading and background colors to a cell.
- **Protection tab -** Locks, protects and hides formulas in the cell.

Formatting Fonts: Menu Option

1. Right-click on the highlighted cells and choose **Format Cells** from the shortcut menu
2. Or **select Format » Cells** from the menu bar
3. Make the desired changes
4. Click **OK**

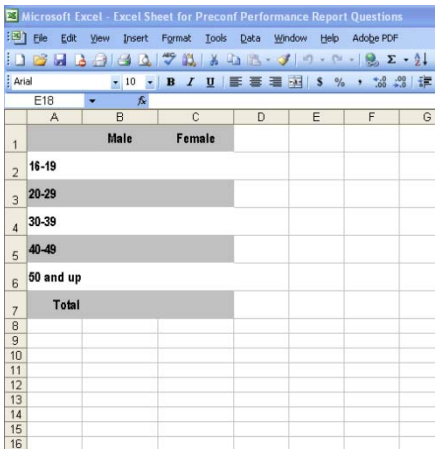


Formatting Fonts: Formatting Toolbar



1. Select the cell(s) to be formatted
2. On the *Formatting* toolbar, click the desired formatting option

   NOTES: Holding the pointer over a toolbar button for a short period displays a description of that option.



Formatting Numbers

Formatting cells for numbers can be very helpful and time-saving. You can format cells to display time, currency, numbers, etc. in the desired style.

Formatting Numbers: Toolbar Option

1. Select the cell(s) to be formatted
2. On the *Formatting* toolbar, click the desired formatting option

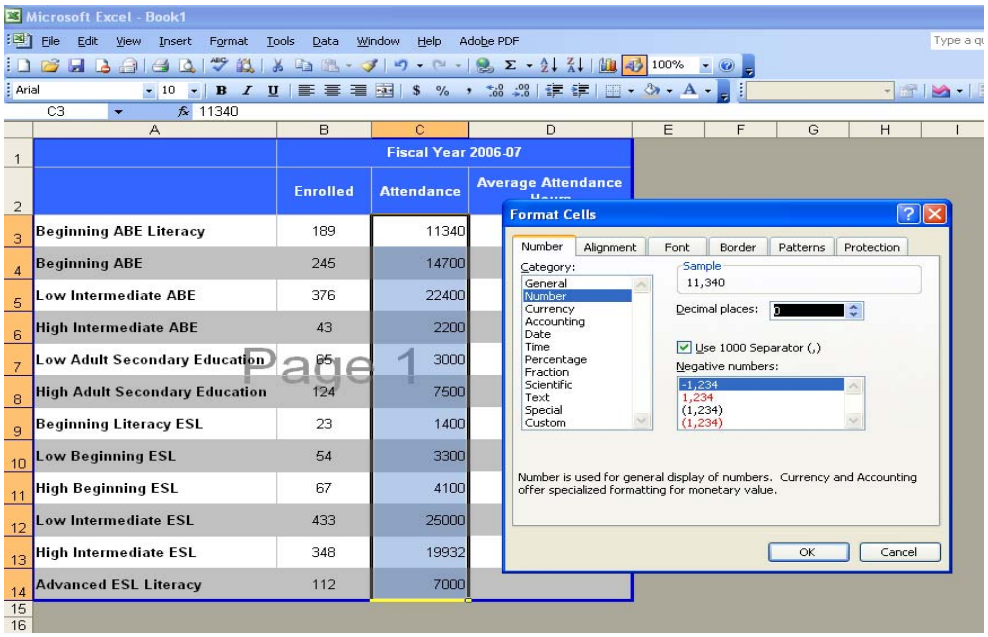
   NOTE:
   Holding the pointer over a toolbar button for a short period displays a description.

Formatting Numbers: Menu Option

1. Select the cell(s) to be formatted
2. From the *Format* menu, select ***Cells…***

   The *Format Cells* dialog box appears.
3. Select the ***Number*** tab

   NOTE: Under *Category*, you will see some common choices for formatting numbers.
4. From the *Category* scroll box, select the appropriate number category based on your selection, additional options appear.
5. Make the appropriate choices
6. Click **OK**



Format Painter

A handy feature on the standard toolbar for formatting text is the Format Painter. If you have formatted a cell with a certain font style, date format, border, and other formatting options, and you want to format another cell or group of cells the same way, place the cursor within the cell containing the formatting you want to copy.

1. Click the **Format Painter** button in the standard toolbar (notice that your pointer now has a paintbrush beside it).

2. Highlight the cells you want to add the same formatting to.

   To copy the formatting to many groups of cells, double-click the **Format Painter** button.

3. The format painter remains active until you press the **ESC** key to turn it off.

Adjusting Row Height and Column Width (1 of 3)

When you start working on a worksheet, all columns are eight characters wide and row heights are set to fit the content of the cell with a maximum of 12 points. Depending on what you are doing, this may be perfect, too big, or too small. In addition, Excel may widen the column or increase the row height to fit the cell content.

Adjusting Row Height: Menu Option

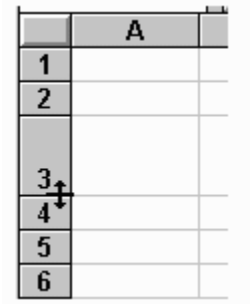
1. To adjust a single row, select any cell from the row to be adjusted
   To adjust multiple non-contiguous rows, press [**Ctrl**] + select cells from each row to be adjusted
2. From the *Format* menu, select ***Row » Height...***
   The *Row Height* dialog box appears.
3. In the *Row height* text box, type the desired height
4. Click **OK**

Adjusting Row Height: Mouse Option

Using this option, you can only adjust the height of one row at a time.

1. Along the row ID (1, 2, 3, ...), point to the border below the row to be adjusted
2. When the pointer turns into a double-arrow, click and drag

   HINT: For a shorter row, drag up; for a taller row, drag down.
   A box appears next to the pointer, indicating the current row height as you drag it.



3. When the row reaches the desired height, release the mouse button

Adjusting Row Height and Column Width (2 of 3)

Adjusting Column Width: Menu Option

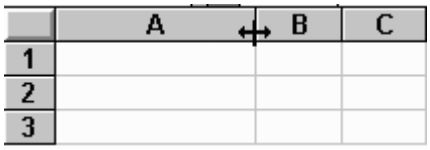
1. To adjust a single column, select any cell from the column to be adjusted
   To adjust multiple non-contiguous columns, press [**Ctrl**] + select cells from each column to be adjusted
2. From the *Format* menu, select ***Column » Width...***
   The *Column Width* dialog box appears.
3. In the *Column width* text box, type the desired width
4. Click **OK**

Adjusting Column Width: Mouse Option

Using this option, you can only adjust the width of one column at a time.

1. Along the column ID (A, B, C, ...), point to the border right of the column to be adjusted
2. When the pointer turns into a double-arrow, click and drag

   HINT: For a narrower column, drag left; for a wider column, drag right.
   A box appears next to the pointer, indicating the current column width as you drag it.



3. When the column reaches the desired width, release the mouse button

Using AutoFit to Adjust Rows and Columns (3 of 3)

To adjust the column width or the row height, Excel can determine the best "fit" based on the information in the column or row.

Using AutoFit to Adjust Row Height: Mouse Option

1. Along the row ID (1, 2, 3, ...), point to the border below the row to be adjusted
2. When the pointer turns into a double-arrow, double click the row height adjusts so the largest (tallest) item is displayed in full.

Using AutoFit to Adjust Row Height: Menu Option

1. To select a row to be adjusted, click the **ROW ID** (1, 2, 3, ...) the entire row is selected.
2. From the *Format* menu, select ***Row » AutoFit***
   The row height adjusts so the largest (tallest) item is displayed in full.

Using AutoFit to Adjust Column Width: Mouse Option

1. Along the column ID (A, B, C, ...), point to the border right of the column to be adjusted
2. When the pointer turns into to a double-arrow, double click the column width adjusts so the largest (widest) item is displayed in full.

Using AutoFit to Adjust Column Width: Menu Option

1. To select a column to be adjusted, click the **COLUMN ID** (A, B, C, ...) the entire column is selected.
2. From the *Format* menu, select ***Column » AutoFit Selection***
   The column width adjusts so the largest (widest) item is displayed in full.

Moving Information (1 of 2)

Often, your first approach at organization will not be the same as your final ideas. For this reason, you may want to reorganize information. Also, you may have the need for a similar formula in a second location. The Drag and Drop, Cut and Paste, and Copy and Paste options will help you do this without having to recreate the entire worksheet.

Drag and Drop vs. Cut and Paste

Drag and Drop allows you to move the information from a single cell or a range of cells. *Drag and Drop* is great for moving short distances but challenging for moving to cells not displayed on the current screen. The Excel default settings will warn you if you try to drop on cells already containing information. *Cut and Paste* is the better method when moving information over long distances.

Moving Information: Drag and Drop

In Word, it makes little difference if you *Drag and Drop* text rather than *Cut and Paste* it; however, the difference is significant when formulas are involved. When using the *Drag and Drop* method, cell references are updated.

1. Select the cell(s) to be moved

2. Point to and click the heavy border surrounding the cell(s)

   The mouse pointer changes to a four-headed arrow

3. Holding the mouse button, drag the highlighted border of the selected cell to the destination cell with the mouse

   NOTE: An outline of the cell(s) you are moving will appear over the new location. As you move the cell(s), a box appears next to the pointer indicating the cell location.

4. When you reach the desired location, to drop the cell(s), release the mouse button

   WARNING: If information already exists at the new location, a dialog box will appear asking if you want to replace the information.

To undo Drag and Drop:

1. From the *Edit* menu, select ***Undo Drag and Drop***
   OR
   On the *Standard* toolbar, click **UNDO**

Moving Information (2 of 2)

Moving Information: Cut and Paste

When using *Cut and Paste*, double check formulas to ensure that cell references are properly updated.

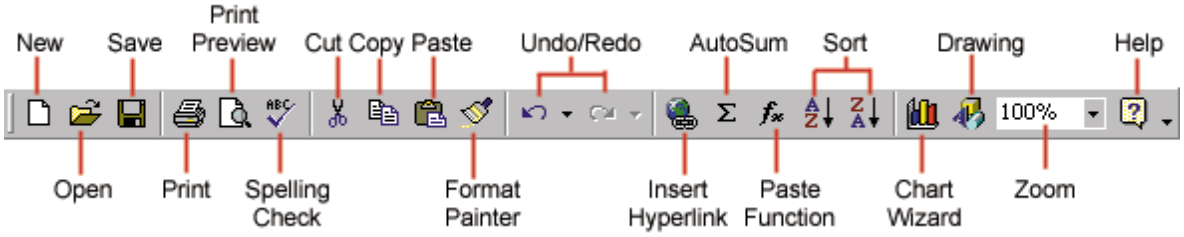
1. Select the cell(s) to be moved
   HINTS:
   To select an individual cell, click that cell.
   To select multiple contiguous cells, click and drag across the desired cells.

2. From the *Edit* menu, select ***Cut***
   OR
   On the *Standard* toolbar, click **CUT**
   A moving border appears around your selection.

3. Select the cell where you want the cell(s) to be pasted

4. From the *Edit* menu, select ***Paste***
   OR
   On the *Standard* toolbar, click **PASTE**

Moving Information



Moving Cells

To cut cell **contents that will be moved** to another cell

1. Select **Edit,** select **Cut** from the menu bar
2. Or click the **Cut** button on the standard toolbar.

Copying Cells

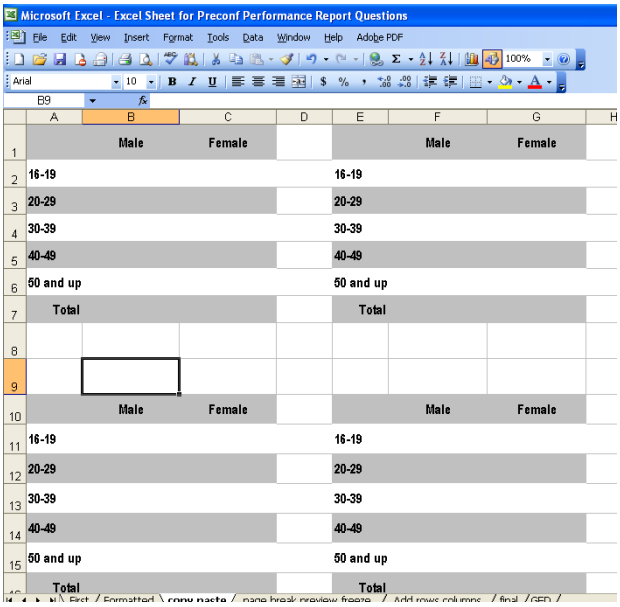
To copy the cell contents,

1. Select **Edit » Copy** from the menu bar
2. Or click the **Copy** button on the standard toolbar

Pasting Cut and Copied Cells

Highlight the cell you want to paste the cut or copied content into,

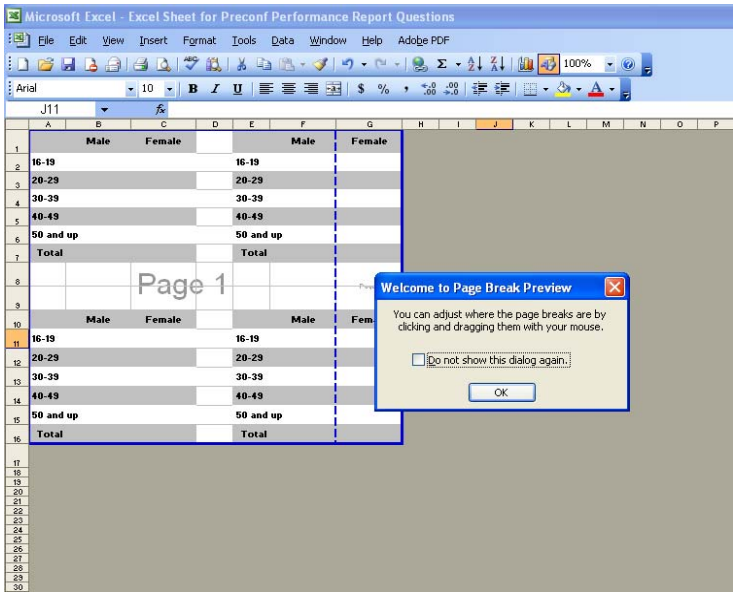
1. Select **Edit » Paste** from the menu bar
2. Or click the **Paste** button on the standard toolbar



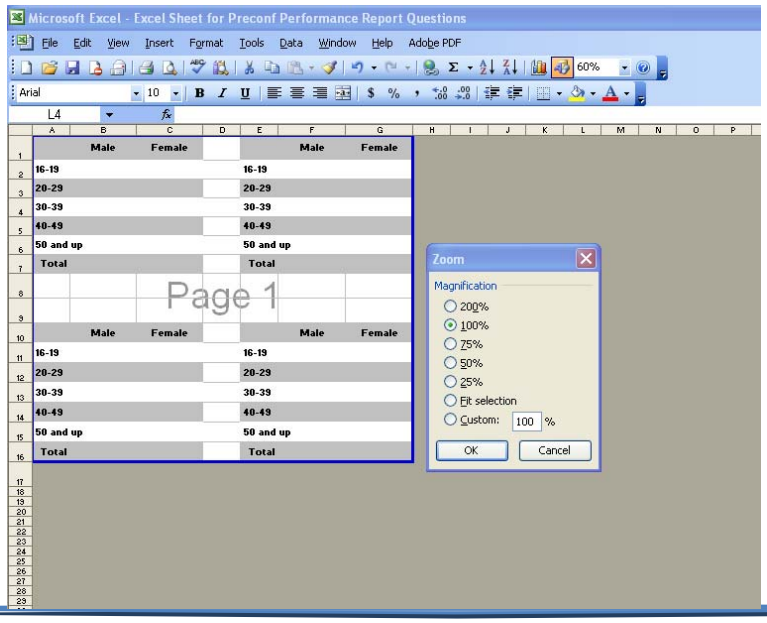
Page Break Preview

When using *Cut and Paste*, double check formulas to ensure that cell references are properly updated.

1. From the standard toolbar select **View >> Page Break Preview**
2. Click OK on the **Welcome to Page Break Preview** popup window
3. Click and drag mouse to remove dotted line



4. From the standard toolbar select **View >> Zoom**
5. Click 100% on the **Zoom** popup window
6. Click OK



Saving Your Work

Saving for the First Time

The following steps should be used when you are saving a worksheet for the first time, when you want to save it to a new location (perhaps a backup), or when you want to save a copy with a different name.

1. From the *File* menu, select ***Save As...***
   The *Save As* dialog box appears.
2. From the *Save in* pull-down list, select the desired save location
3. In the *File name* text box, type a ***filename***
   NOTE: You do not need to type the file extension ".xls." The file extension will be automatically added to the filename.
4. Click **SAVE**

Saving Subsequent Times

1. From the *File* menu, select ***Save***

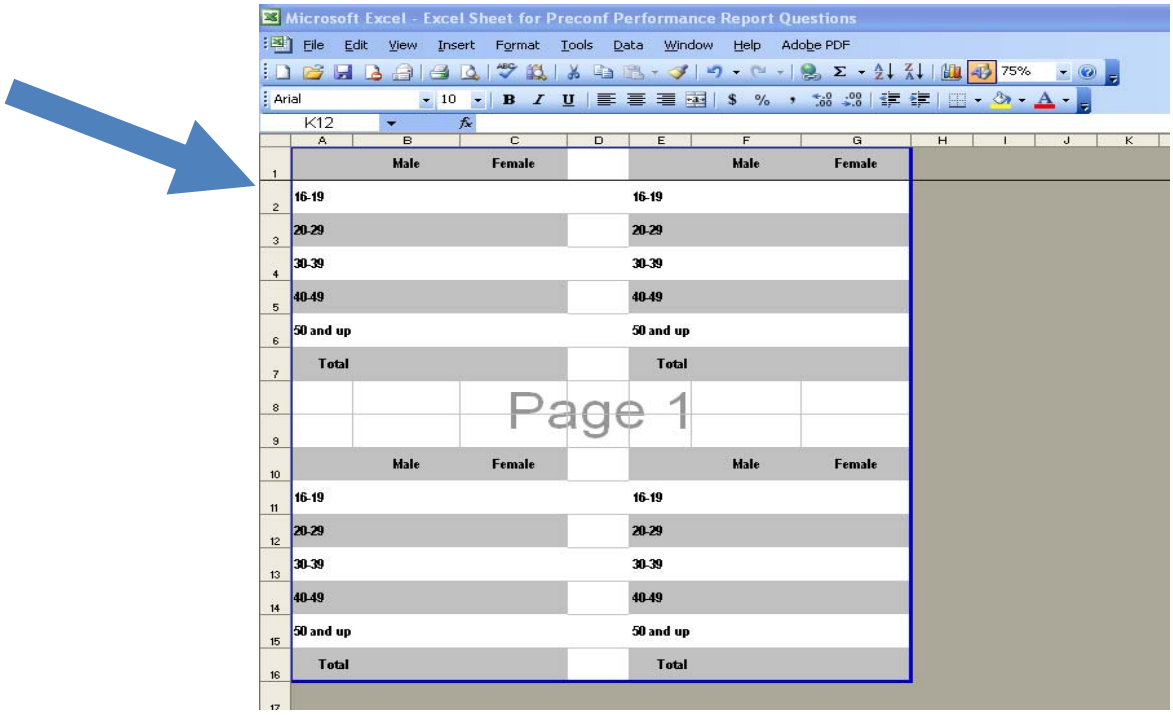
   OR

2. On the *Standard* toolbar, click **SAVE** or

Freeze Panes

If you have a large worksheet with column and row headings, those headings will disappear as the worksheet is scrolled. By using the Freeze Panes feature, the headings can be visible at all times.

1. Click the label of the row below the row that should remain frozen at the top of the worksheet.
2. **Select Window » Freeze Panes** from the menu bar.
3. To remove the frozen panes, **select Window » Unfreeze Panes**.



Adding and Removing Rows and Columns

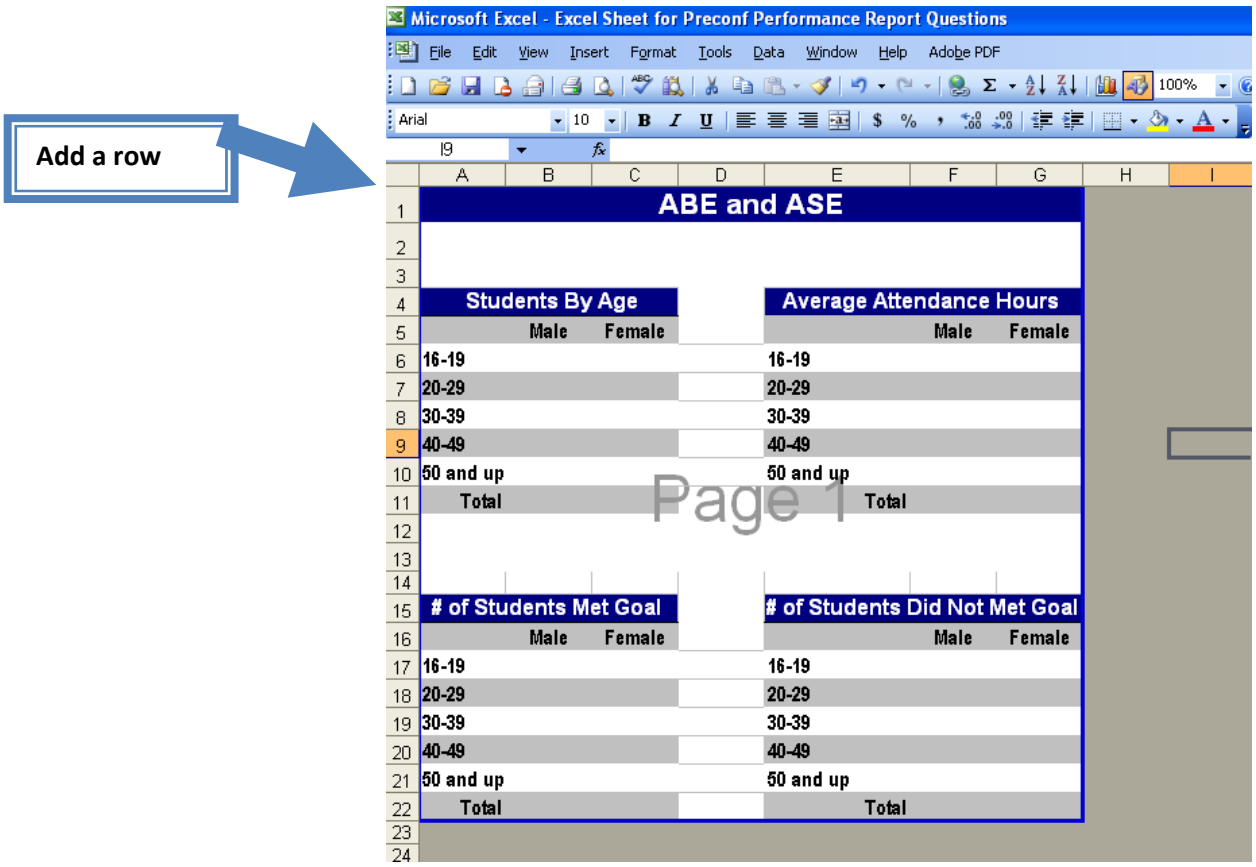
When working with worksheets, you will often need to make changes to the original worksheets. You will often need to delete old information or add new information. To make this task easier, you can add new rows and columns or delete existing rows and columns. The process is similar for both rows and columns.

Adding Rows

1. Select a cell below where you want to add a new row
2. From the menu bar select ***Insert***, select ***Rows.***
3. Or highlight the row by clicking on the row label, right-click with the mouse, and choose ***Insert***.

Adding Columns

1. Select a cell to the right of where you want to add a new column
2. From the menu bar select ***Insert***, select ***Columns.***
3. Or highlight the column by clicking on the column label, right-click with the mouse, and choose ***Insert***.



Adding and Removing Rows and Columns

Deleting Rows

WARNING: When you delete a row, everything in the row is deleted. If you do not want to delete the whole row, delete information from specific cells instead.

1. To delete a single row, select any cell from the row to be deleted
   To delete multiple non-contiguous rows, press and hold [***Ctrl***] + select a cell from each row to be deleted
2. Right-click with the mouse, and choose ***Delete***.

1. From the *Edit* menu, select ***Delete...***
   The *Delete* dialog box appears.
2. Select ***Entire row***
3. Click **OK**

Deleting Columns

WARNING: When you delete a column, everything in the column is deleted. If you do not want to delete the whole column, delete information from specific cells instead.

1. To delete a single column, select any cell from the column to be deleted
   To delete multiple non-contiguous columns, press and hold [***Ctrl***] + select cells from each column to be deleted
2. From the *Edit* menu, select ***Delete...***
   The *Delete* dialog box appears.
3. Select ***Entire column***
4. Click **OK**

Merging and Centering Text (1 of 2)

Merging and centering text in your Excel document can add a professional appearance. Merging and centering is useful for titles and headings so they are not broken up into different cells or displayed with inappropriate alignment.

Merging and Centering Text: Toolbar Option

1. Type the desired text in the first cell of the group to be merged

2. Select the text and a cell from each column you want merged
   EXAMPLE: To center across columns A through D in row 2 of the worksheet, select cells A2, B2, C2, and D2

3. On the *Formatting* toolbar, click **MERGE AND CENTER**

Merging and Centering Text: Menu Option

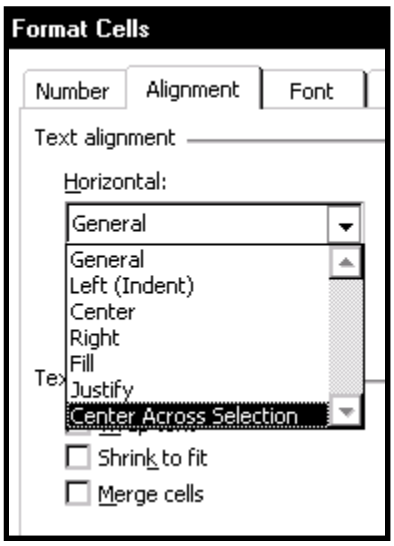
1. Type the desired text in the first cell of the group to be merged

2. Select the text and a cell from each column you want merged
   EXAMPLE: To center across columns A through D in row 2 of the worksheet, select cells A2, B2, C2, and D2

3. From the *Format* menu, select ***Cells...*** the *Format Cells* dialog box appears.

4. Select the ***Alignment*** tab

5. From the *Horizontal* pull-down list, select ***Center Across Selection***



6. Under *Text control*, select ***Merge cells***

7. Click **OK**

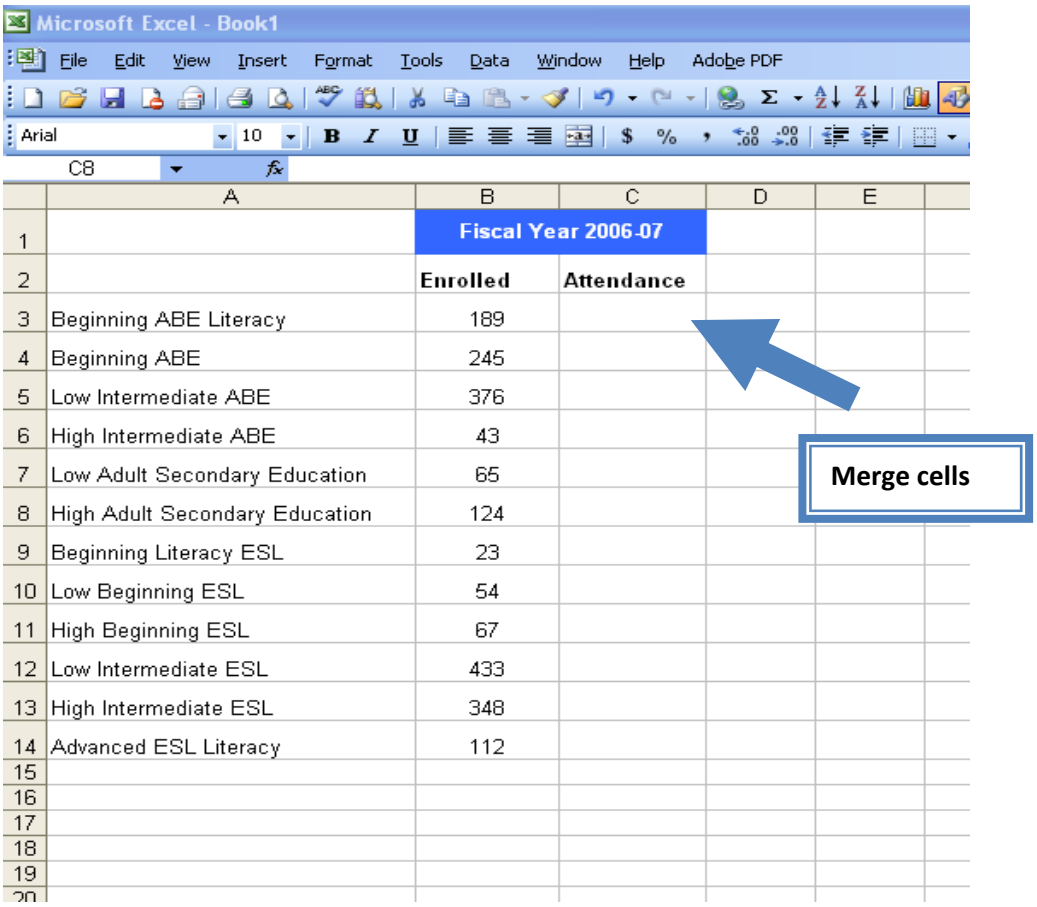
Merging and Centering Text (2 of 2)

Unmerging Text: Toolbar Option

1. Select the merged cell
2. On the *Formatting* toolbar, click **MERGE AND CENTER**

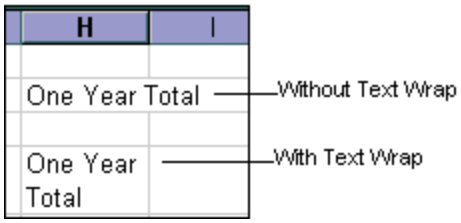
Unmerging Text: Menu Option

1. Select the merged cell
2. From the *Format* menu, select ***Cells...*** the *Format Cells* dialog box appears.
3. Select the ***Alignment*** tab
4. From the *Horizontal* pull-down list, select ***General***
5. Under *Text control*, deselect ***Merge cells***
6. Click **OK**



Wrapping Text

If you have text that appears in a single cell and you want to increase the height of that cell to accommodate all of the words, you can use the *Wrap text* option.



Wrapping Text: Menu Option

1. Select the cells to which *Wrap text* will be applied
2. From the *Format* menu, select ***Cells...*** the *Format Cells* dialog box appears.
3. Select the ***Alignment*** tab
4. Under *Text control*, select ***Wrap text***
5. Click **OK**

   NOTE: To display all of the text, it may be necessary to adjust row height.

Wrapping Text: Keyboard Option

1. Select the cells
2. In the *Formula Bar* text box, place the insertion point where *Wrap text* will be applied
3. Press [**Alt**] + [**Enter**]

Un-wrapping text*:*

1. Select the cell containing wrapped text
2. From the *Format* menu, select ***Cells...*** the *Format Cells* dialog box appears.
3. Under *Text control*, deselect ***Wrap text***
4. Click **OK**

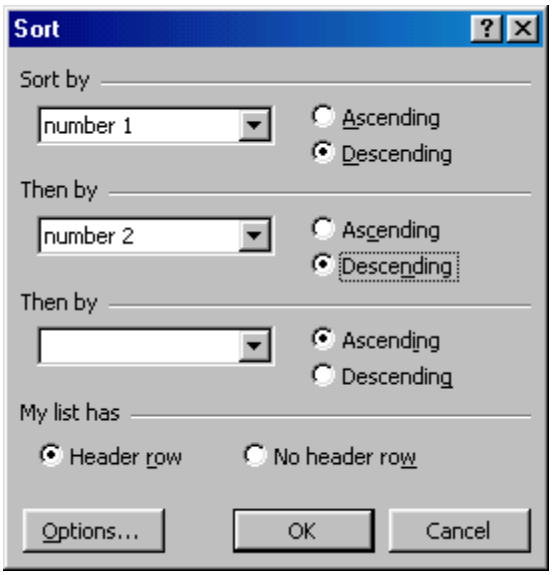
Basic Sorts

To execute a basic descending or ascending sort based on one column, highlight the cells that will be sorted and click the **Sort Ascending** (A-Z) button or **Sort Descending** (Z-A) button on the standard toolbar.

Complex Sorts

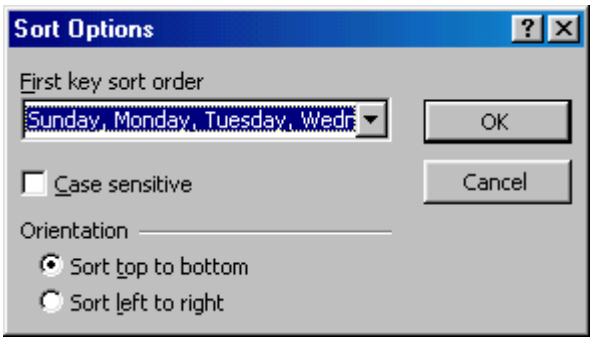
To sort by multiple columns, follow these steps:

1. Highlight the cells, rows, or columns that will be sorted.
2. **Select Data» Sort** from the menu bar.
3. From the **Sort** dialog box, select the first column for sorting from the **Sort By** drop-down menu and choose either ascending or descending.
4. Select the second column and, if necessary, the third sort column from the **Then By** drop-down menus.



5. If the cells you highlighted included the text headings in the first row, mark **My list has**...**Header row** and the first row will remain at the top of the worksheet.

6. Click the **Options** button for special non-alphabetic or numeric sorts such as months of the year and days of the week.



7. Click **OK** to execute the sort.

Autofill

The Autofill feature allows you to quickly fill cells with repetitive or sequential data such as chronological dates or numbers, and repeated text.

1. Type the beginning number or date of an incrementing series or the text that will be repeated into a cell.

2. Select the handle at the bottom, right corner of the cell with the left mouse button and drag it down as many cells as you want to fill.

3. Release the mouse button.

Autofill a column

1. If you want to autofill a **column** with cells displaying the same number or date you must enter identical data to two adjacent cells in a column.

2. Highlight the *two* cells and drag the handle of the selection with the mouse.

Alternating Text and Numbers with Autofill

The Autofill feature can also be used for alternating text or numbers. For example, to make a repeating list of the days of the week, type the seven days into seven adjacent cells in a column. Highlight the seven cells and drag down with the mouse.

Autofilling Functions

Autofill can also be used to copy functions. In the example below, column A and column B each contain lists of numbers and column C contains the sums of columns A and B for each row.

The function in cell C2 would be "=SUM(A2:B2)".

This function can then be copied to the remaining cells of column C by activating cell C2 and dragging the handle down to fill in the remaining cells.

The autofill feature will automatically update the row numbers as shown below if the cells are reference relatively.

C2 = =SUM(A2:B2)

	A	B	C	D
1	**number 1**	**number 2**	**sum**	
2	87	49	136	
3	54	30		
4	34	10		
5	43	8		
6	24	23		
7	93	97		
8	40	32		
9	59	30		
10	82	87		
11	39	57		

C11 = =SUM(A11:B11)

	A	B	C	D
1	**number 1**	**number 2**	**sum**	
2	87	49	136	
3	54	30	84	
4	34	10	44	
5	43	8	51	
6	24	23	47	
7	93	97	190	
8	40	32	72	
9	59	30	89	
10	82	87	169	
11	39	57	96	

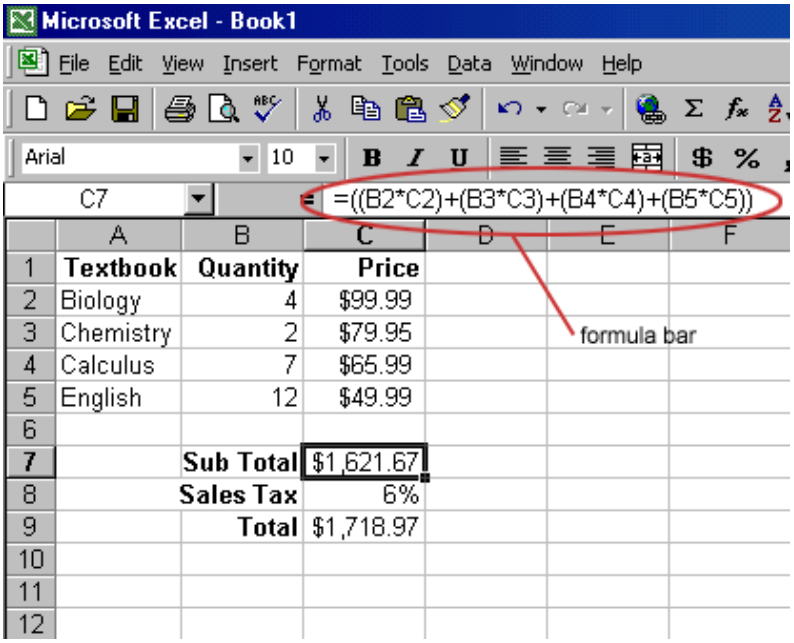
FORMULAS & FUNCTIONS

Formulas and Functions

The distinguishing feature of a spreadsheet program such as Excel is that it allows you to create mathematical formulas and execute functions. Otherwise, it is not much more than a large table for displaying text. This page will show you how to create these calculations.

Formulas

Formulas are entered in the worksheet cell and must begin with an equal sign "=". The formula then includes the addresses of the cells whose values will be manipulated with appropriate operands placed in between. After the formula is typed into the cell, the calculation executes immediately and the formula itself is visible in the formula bar. See the example below to view the formula for calculating the sub total for a number of textbooks. The formula multiplies the quantity and price of each textbook and adds the subtotal for each book.



Writing Formulas & Functions with the Point Method

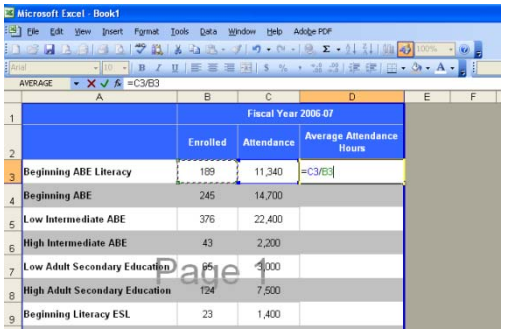
Formulas based on cell references can be "written" by pointing to the cells rather than typing the cell entries. This "point" method can help reduce the chance of error in the formulas and sometimes may make more sense. The point method may not work as well when the cells in question are located in different areas of the worksheet, but the method can be used then as well. **Note**: Function is a prewritten formula.

The key to the point method is to point to click the cells to be included and to type the operators where appropriate.

The following examples provide step-by-step instructions for a simple addition of two cells and for adding a range of cells.

Adding Cells Together

1. Place the insertion point in the cell where the results should be displayed
2. To start the function, press [**=**]
3. Point and click the first cell to be added
4. Press [**/**]
5. Point and click the next cell to be added
6. Repeat steps 4-5 as necessary
7. Press [**Enter**] or [**return**]



Adding a Range of Cells with the SUM Function: Option 1

1. Place the insertion point in the cell where the results should be displayed
2. To start the function, press [**=**]
3. Type **SUM(**
4. Point and click the first cell in the range to be added
5. Press [**:**]
6. Point and click the last cell to be added
7. Type **)**
8. Press [**Enter**] or [**return**]

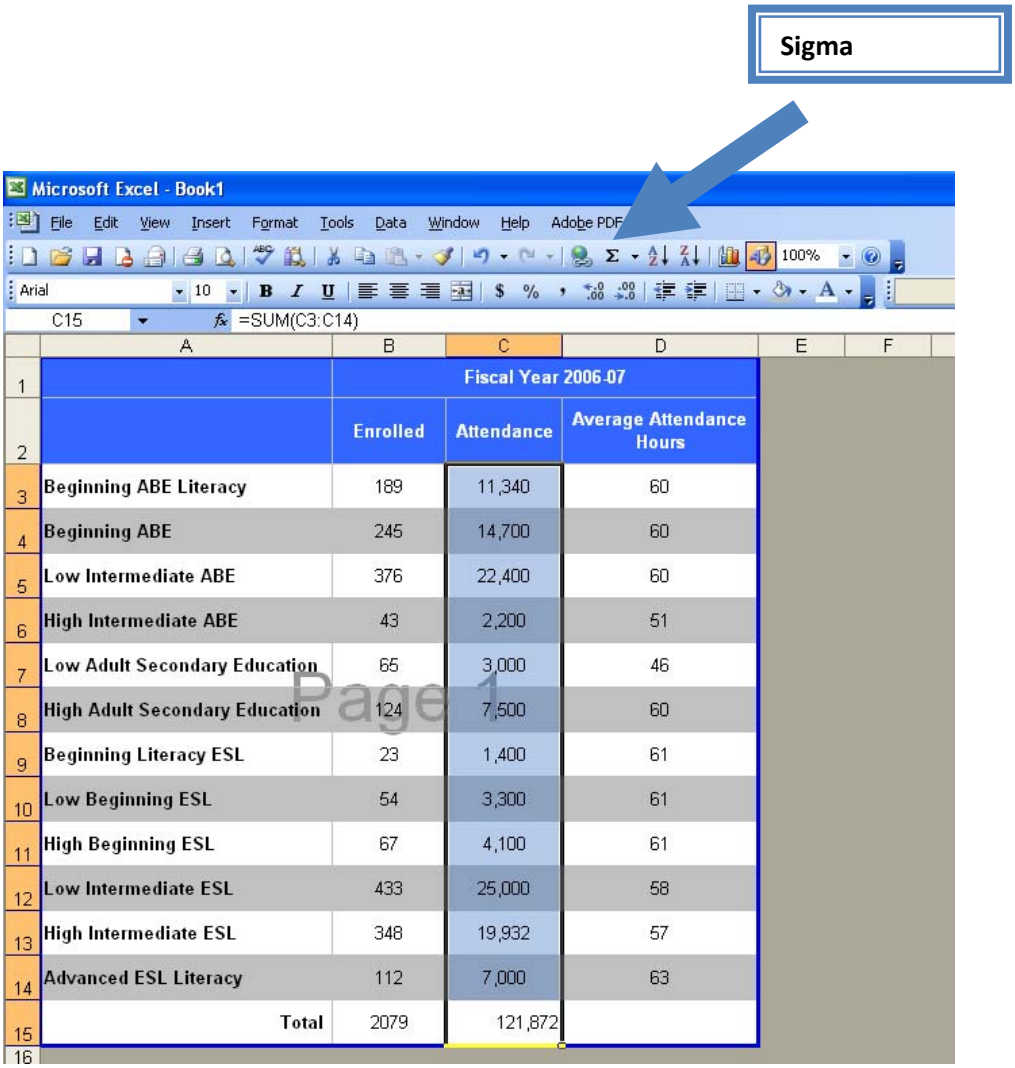
Adding a Range of Cells with the SUM Function: Option 2

1. Place the cell pointer in the cell where the results should be displayed
2. To start the function, press [**=**]
3. Type **SUM(**
4. Click and drag the mouse to select the range of cells to be added
5. Type **)**
6. Press [**Enter**] or [**return**]

Autosum Σ

Use the Autosum function to add the contents of a cluster of adjacent cells.

1. Select the cell that the sum will appear in that is outside the cluster of cells whose values will be added. Cell C2 was used in this example.
2. Click the **Autosum** button (Greek letter sigma) on the standard toolbar.
3. Highlight the group of cells that will be summed (cells A2 through B2 in this example).
4. Press the **ENTER** key on the keyboard or click the green check mark button on the formula bar ✓.



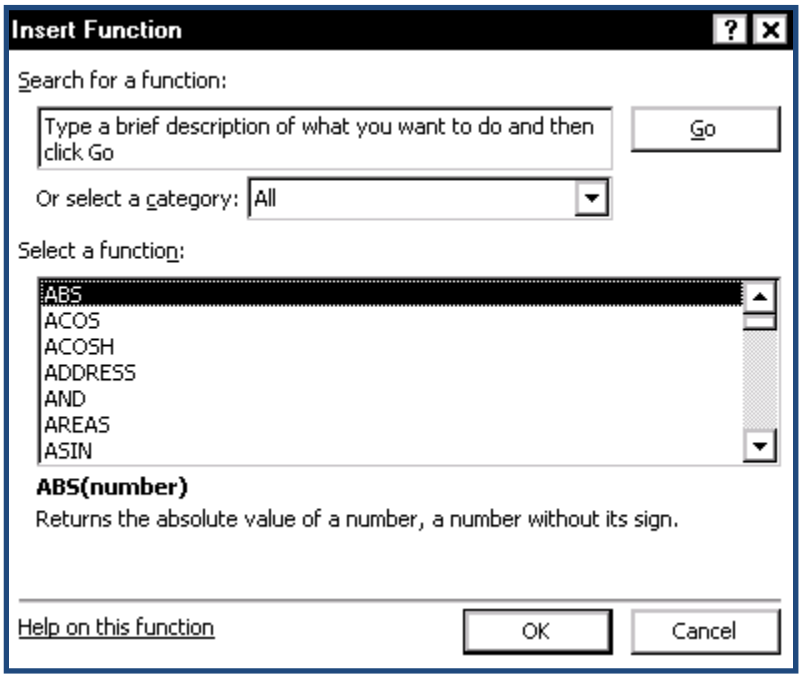
Calculating with Functions (1 of 2)

There are multiple ways you can create a function. You can insert functions manually (by typing them), or you can use the *Insert Function* dialog box. The *Insert Function* dialog box eliminates the possibility of a typing error, so it is the recommended method. For more information on formulas, refer to Performing Calculations in Your Workbook.

Writing Functions with the Insert Function Dialog Box

Determining what functions are available, what function you should be using, and what you need to include in the function is easier with the *Insert Function* dialog box. The *Insert Function* dialog box will display a listing of all functions or categories of functions available with Excel. As you select a function (as in the following graphic), a sample of the function appears at the bottom of the dialog box. As you make your selection, the *Insert Function* dialog box will request certain types of information. You simply select the cells where that information is located.

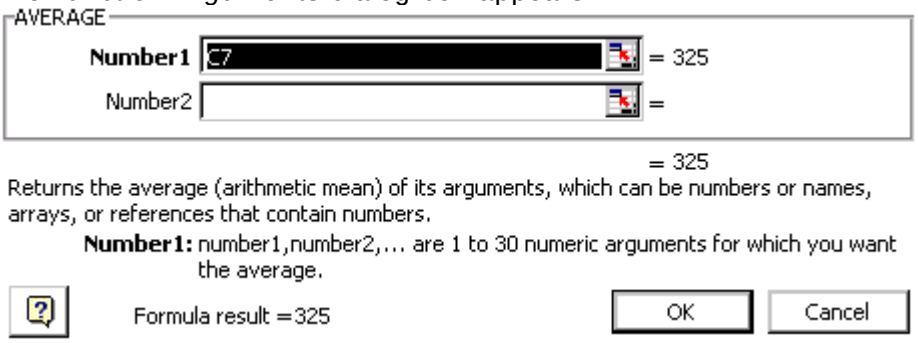
1. Place the cell pointer on the cell where the formula should be added
2. From the *Insert* menu, select ***Function…***
   The *Insert Function* dialog box appears.



3. From the *Or select a category* pull-down list, select the appropriate function category or ***All***
4. From the *Select a function* scroll box, select the desired function
   HINT: A description of the selected function appears beneath the *Select a function* scroll box.

Calculating with Functions (2 of 2)

5. Click **OK**
   The *Function Arguments* dialog box appears.

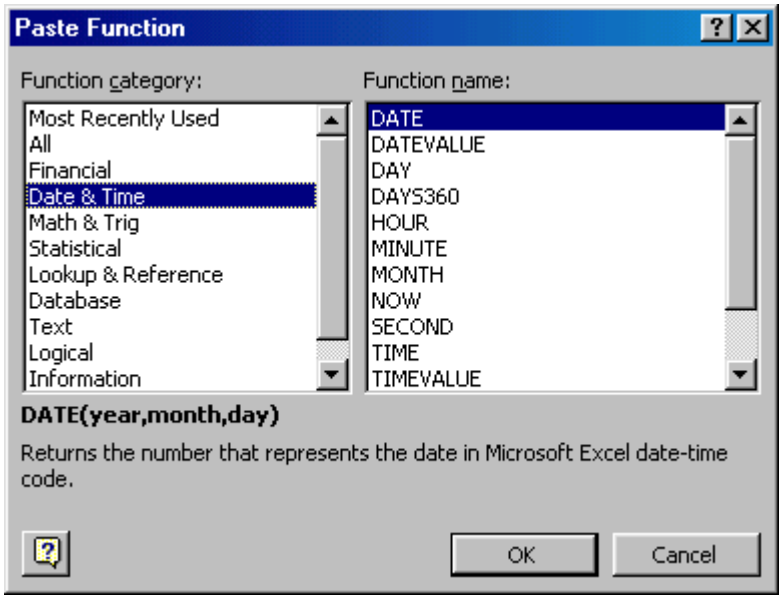


6. In the text boxes, type the data to be in the function
   HINTS:
   To hide the dialog box so you can select cell ranges with the mouse rather than type them, click **COLLAPSE DIALOG**.
   To restore the dialog box, click **RESTORE DIALOG**.
7. Click **OK**

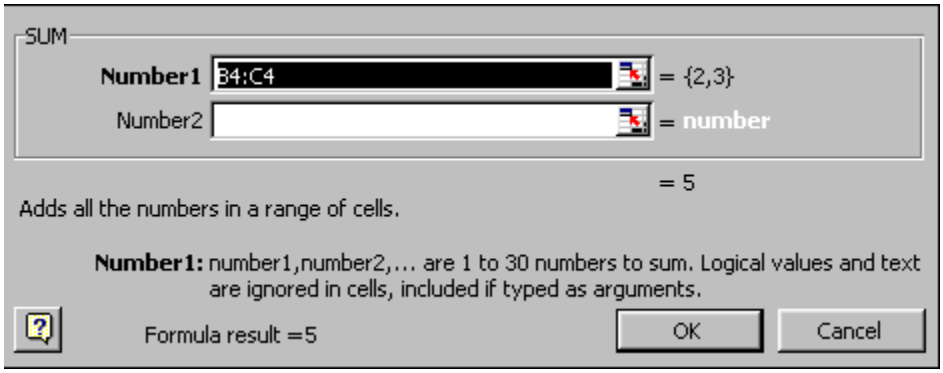
Function Wizard

View all functions available in Excel by using the Function Wizard.

1. Activate the cell where the function will be placed and click the **Function Wizard** button on the standard toolbar.
2. From the **Paste Function** dialog box, browse through the functions by clicking in the **Function category** menu on the left and select the function from the **Function name** choices on the right. As each function name is highlighted a description and example of use is provided below the two boxes.



3. Click **OK** to select a function.
4. The next window allows you to choose the cells that will be included in the function. In the example below, cells B4 and C4 were automatically selected for the sum function by Excel. The cell values {2, 3} are located to the right of the **Number 1** field where the cell addresses are listed. If another set of cells, such as B5 and C5, needed to be added to the function, those cells would be added in the format "B5:C5" to the **Number 2** field.



5. Click **OK** when all the cells for the function have been selected.

Relative, Absolute, and Mixed Referencing

Calling cells by just their column and row labels (such as "A1") is called **relative referencing**. When a formula contains relative referencing and it is copied from one cell to another, Excel does not create an exact copy of the formula. It will change cell addresses relative to the row and column they are moved to.

- For example, if a simple addition formula in cell C1 "=(A1+B1)" is copied to cell C2, the formula would change to "=(A2+B2)" to reflect the new row.

To prevent this change, cells must be called by **absolute referencing** and this is accomplished by placing dollar signs "$" within the cell addresses in the formula.

Continuing the previous example, the formula in cell C1 would read "=($A$1+$B$1)" if the value of cell C2 should be the sum of cells A1 and B1.

Both the column and row of both cells are absolute and will not change when copied.

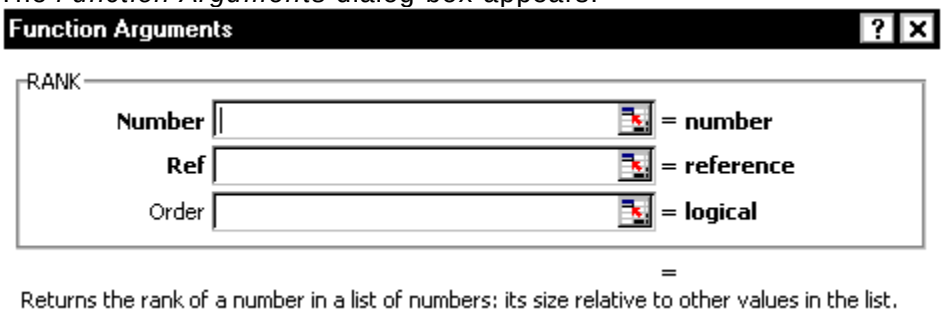
Mixed referencing can also be used where only the row OR column fixed.

- For example, in the formula "=(A$1+$B2)", the row of cell A1 is fixed and the column of cell B2 is fixed.

Functions: Rank

The *Rank* function returns the rank of a value within a list. This function is useful when you need to maintain a sort based on another column and/or when you want to determine the rank of items in more than one column.

1. Open the desired worksheet
2. Select the cell where you would like the result of the function to appear
3. From the *Insert* menu, select ***Function...***
   OR
   On the *Formula Bar*, click **INSERT FUNCTION** f_x
   The *Insert Function* dialog box appears.
4. From the *Or select a category* pull-down list, select ***All*** or ***Statistical***
5. From the *Select a function* scroll box, select ***RANK***
6. Click **OK**
   The *Function Arguments* dialog box appears.



7. In the *Number* text box, type the value of which you want to know the rank
   EXAMPLE: Type **47**
8. In the *Ref* text box, type the cell range to be included
   EXAMPLE: Type **C2:C6**
   OR
   1. Click **COLLAPSE DIALOG** or
   2. Select the cells to be included
   3. Click **RESTORE DIALOG** or
9. To obtain the rank of a value where the list of values is sorted in descending order, in the *Order* text box, type **0** or leave the text box blank
   To obtain the rank of a value where the list of values is sorted in ascending order, in the *Order* text box, type any nonzero value
   NOTE: This action does not sort the information in your worksheet; it is used only as a reference from which to perform the ranking.
   EXAMPLE: To find the rank of 47 when the Quiz 1 scores are sorted from high to low, type **0**
10. Click **OK**
    The rank appears in the selected cell and the formula appears in the *Formula Bar*.

Functions: Countif and Sumif (1 of 2)

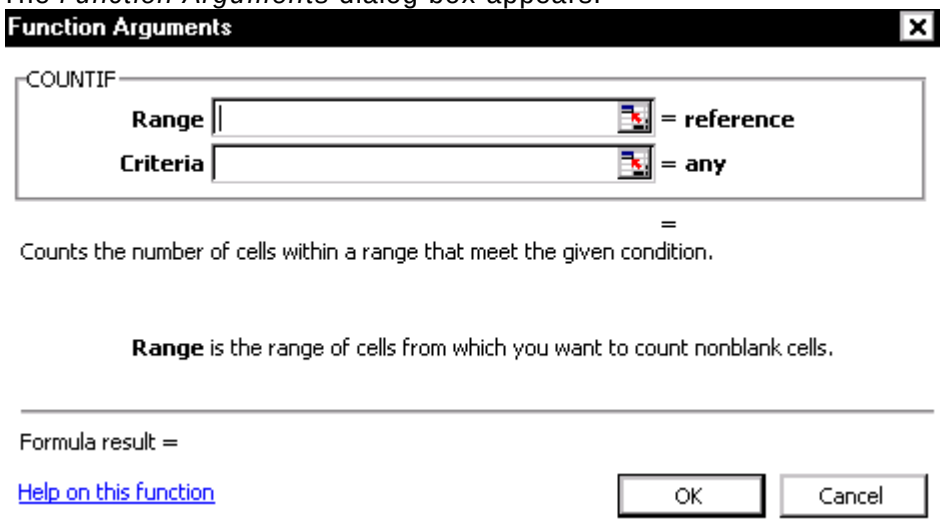
Countif and *Sumif* are two functions which are helpful and very easy to use. *Countif* counts the number of items that meet a certain criteria. *Sumif* adds all items that meet a certain criteria.

Countif

The *Countif* function counts the number of items that meet a certain criteria. These criteria can be a number range or a word. This is useful when determining the number of entries within a certain range, such as test scores or the number of entries that equal a certain value, like the class rank of "junior" or "senior."

1. Open the desired worksheet
2. Select the cell where you want the result of the function to appear
3. From the *Insert* menu, select ***Function...***
   OR

   On the *Formula Bar*, click **INSERT FUNCTION** f_x
   The *Insert Function* dialog box appears.
4. From the *Or select a category* pull-down list, select ***All*** or ***Statistical***
5. From the *Select a function* scroll box, select ***COUNTIF***
6. Click **OK**
   The *Function Arguments* dialog box appears.



7. In the *Range* text box, type the range of cells
   OR

   1. Click **COLLAPSE DIALOG** or
   2. Within your worksheet, select the range of cells to analyze
      NOTE: These are the cells which will be analyzed to see if they meet the criteria you select.
   3. Click **RESTORE DI**
   4. **ALOG** or

Functions: Countif and Sumif (2 of 2)

8. In the *Criteria* text box, type the appropriate criteria, such as the numerical range, text value, or expression (e.g., >2)
   EXAMPLE: To count the number of students with a class rank of "senior," type **senior”**

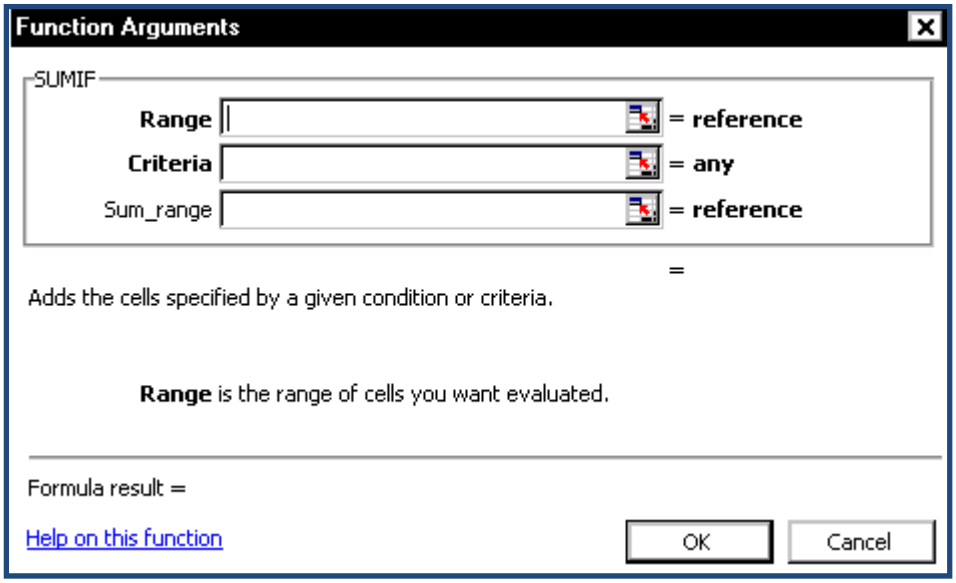
9. Click **OK**
   The appropriate number appears in the cell you selected and the formula appears in the *Formula Bar*.
   EXAMPLE: The formula should look something like =COUNTIF(C2:C11,"senior") with

10. C2:C11 being the range, and "senior" the criteria.

Sumif (1 of 2)

The *Sumif* function adds all items that meet a certain criteria. For example, you could add all the scores of students with a class rank of "senior."

1. Open the desired worksheet
2. Select the cell where you want the result of the function to appear
3. From the *Insert* menu, select ***Function...***
   OR
4. From the *Or select a category* pull-down list, select ***All*** or ***Math & Trig***
5. From the *Select a function* scroll box, select ***SUMIF***
6. Click **OK**
   The *Function Arguments* dialog box appears.



1. In the *Range* text box, type the range of cells
   OR
   a. Click **COLLAPSE DIALOG** or
   b. Within your worksheet, select the range of cells to analyze
      NOTE: These are the cells which will be analyzed to see if they meet the criteria you select.
   c. Click **RESTORE DIALOG** or

2. In the *Criteria* text box, type the appropriate criteria (such as the numerical range or text value)
   OR
   a. Click **COLLAPSE DIALOG** or
   b. Within your worksheet, select the appropriate criteria
   c. Click **RESTORE DIALOG** or

Sumif (2 of 2)

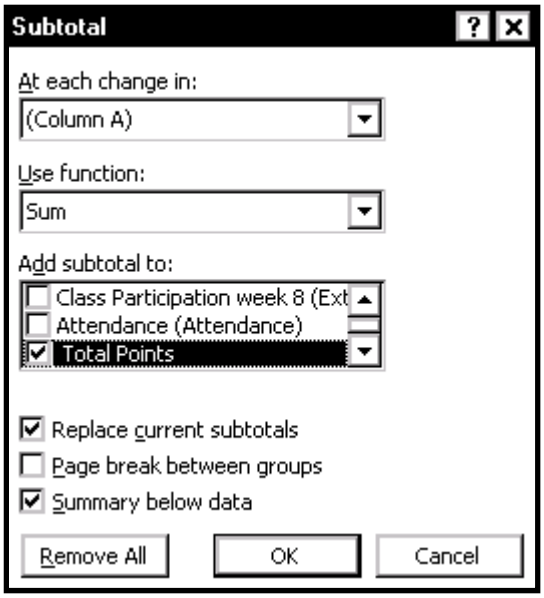
3. In the *Sum_range* text box, type the range of cells
   OR
   a. Click **COLLAPSE DIALOG** or
   b. Within your worksheet, select the range of cells to analyze
      NOTE: These are the cells which will be summed of the criteria has been met.
   c. Click **RESTORE DIALOG** or
4. Click **OK**
   The sum appears in the selected cell and the formula appears in the *Formula Bar*.
   EXAMPLE: The formula should look something like =SUMIF(C2:C11,"senior") with C2:C11 being the range and "senior" being the criteria.

Calculating Subtotals

Calculating subtotals based on subgroups of information is made easier with the *Data Subtotal* command. Once the data is sorted, Excel can add subtotals based on data within the database, automatically inserting a new row and adding an appropriate total heading for each line.

Adding Subtotals

1. Sort the data
   NOTES:
   For more information, refer to Using the Sort Command.
   Sorting the database is important for grouping the information you want subtotaled.
   If you do not have column labels on what you are subtotaling, Excel will prompt you to enter column labels or to choose the top row as your column labels. Be aware that if you choose the first row as your column labels, that data will not be included in the subtotals.
2. Select a cell within the database
3. From the *Data* menu, select ***Subtotals...***
   The *Subtotal* dialog box appears.



4. From the *At each change in* pull-down list, select the desired option
5. From the *Use function* pull-down list, select the desired function
6. From the *Add subtotal to* scroll box, select the desired column label
7. OPTIONAL: At the bottom of the dialog box, select/deselect the appropriate options

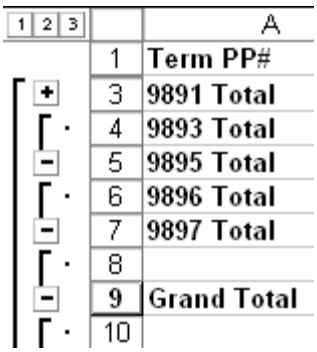
   Click **OK**
   Subtotal lines are added to the database along with outlines for adjusting the view of the data.

Calculating Subtotals

Adjusting Views with Subtotals

When you have applied subtotals to your database, an outline-type bar appears to the left of the row IDs.

The 1 2 3 represents the levels of the view.



Level 1: grand total

Level 2: subtotals and grand total

Level 3: all data in the database

To expand the view one level:

1. Click the plus sign +

To collapse the view one level:

1. Click the minus sign –

Removing Subtotals

If you no longer need the subtotals, you can easily remove them with a command rather than deleting each row. To remove the subtotals, use the following instructions:

1. Select a cell within the database
2. From the *Data* menu, select ***Subtotals...***
   The *Subtotal* dialog box appears.
3. Click **REMOVE ALL**
   The subtotals are removed.

Re-sorting the Data

If you re-sort the database, Excel will warn you that it will remove the subtotals and re-sort. After the database has been sorted, you can add subtotals again.

Modifying the Subtotal Function

Once you perform one of the *Subtotal* calculations on your data, you can change the calculation at any time by modifying the existing function. This allows you to perform additional calculations on the same data.

1. Select the cell where the *Subtotal* function is being performed
   The function appears in the *Formula Bar*.

2. On the *Formula Bar*, change the *Function_num*

3. Press [**Enter**] or [**return**]

Using the Subtotal Function (1 of 2)

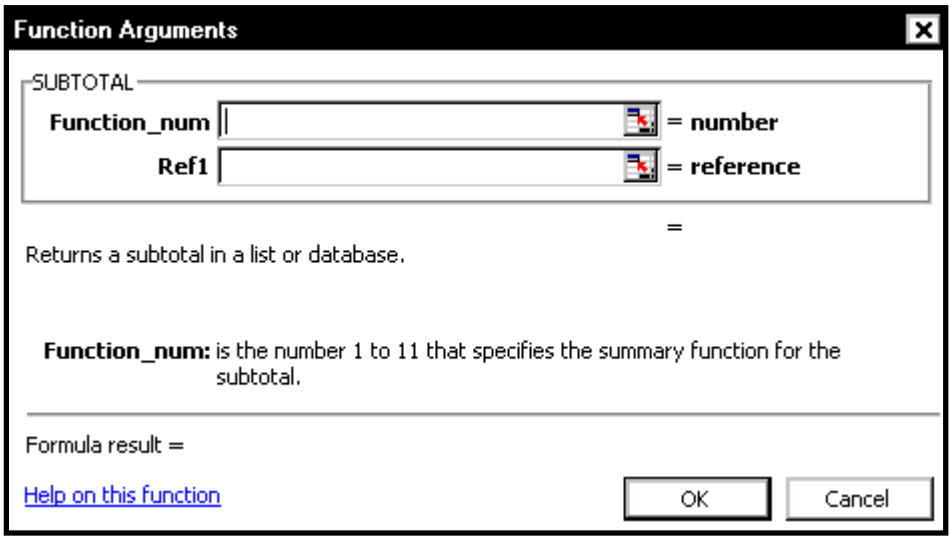
The *Subtotal* function will ignore any hidden rows within your worksheet. This becomes a factor if you filter your worksheet. Filtering your worksheet after performing the *Subtotal* function will provide you with subtotals on only the visible filtered rows. This is a handy way to obtain subtotal calculations of subsets within your data.

1. Open the desired worksheet
2. Select the cell where you want the result of the function to appear
   NOTE: If filtering your worksheet, make sure that the selected field is below your data, allowing you to see the results.
3. From the *Insert* menu, select ***Function...***

   OR

   On the *Formula Bar*, click **INSERT FUNCTION** f_x
   The *Insert Function* dialog box appears.

4. From the *Or select a category* pull-down list, select ***All*** or ***Math & Trig***
5. From the *Select a function* scroll box, select ***SUBTOTAL***
6. Click **OK**
   The *Function Arguments* dialog box appears.



7. In the *Function_num* text box, type the number of the function you would like to perform
   NOTE: For more information, refer to Function Numbers.
8. In the *Ref1* text box, type the range of cells
   OR
   1. Click **COLLAPSE DIALOG** or
   2. Select the range of cells to include
   3. Click **RESTORE DIALOG** or

Using the Subtotal Function (1 of 2)

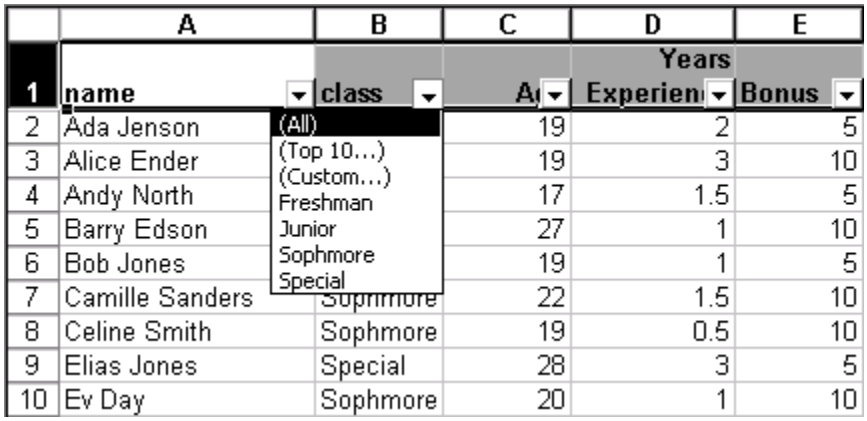
9. Repeat step 8 for as many of the *Ref* text boxes as necessary
   NOTE: You may select up to 29 different fields to include in the subtotal.
10. Click **OK**
    The subtotal appears in the selected cell and the formula appears in the *Formula Bar*.
    HINT: The formula should look similar to =SUBTOTAL(1,D2:D11) with 1 (average) being the *Function_num*, and D2:D11 being *Ref1.*

Filtering

After you have your subtotal on a field in your worksheet, you can easily get the same information on subsets of that same field. You can do this by filtering the field. For more information on filtering, refer to Filtering Your Database.

1. Select the row of column headings, such as name, class, or age

2. From the *Data* menu, select ***Filter » AutoFilter***
   Pull-down lists appear in each of the selected cells.



	A	B	C	D	E
1	name	class	Ag	Years Experien	Bonus
2	Ada Jenson		19	2	5
3	Alice Ender		19	3	10
4	Andy North		17	1.5	5
5	Barry Edson		27	1	10
6	Bob Jones		19	1	5
7	Camille Sanders	Sophmore	22	1.5	10
8	Celine Smith	Sophmore	19	0.5	10
9	Elias Jones	Special	28	3	5
10	Ev Day	Sophmore	20	1	10

3. From the desired pull-down list, select the desired option

   EXAMPLE: If you wanted to find the average age of "Sophomores," from the class cell pull-down list, select ***Sophomore***
   The worksheet hides all other cells except those meeting the selected *AutoFilter* criteria. The new average is shown in the same cell where the first subtotal appeared.

4. To return to the unfiltered view, from the *Data* menu, select ***Filter » AutoFilter***

Chart Wizard

Charts allow you to present data entered into the worksheet in a visual format using a variety of graph types. Before you can make a chart you must first enter data into a worksheet. This page explains how you can create simple charts from the data.

The Chart Wizard brings you through the process of creating a chart by displaying a series of dialog boxes.

1. Enter the data into the worksheet and highlight all the cells that will be included in the chart including headers.

	A	B	C
1		Students	
2	English	34	
3	Biology	32	
4	Calculus	26	
5	Physics	28	
6	History	39	

2. Click the Chart Wizard button on the standard toolbar to view the first **Chart Wizard** dialog box.
3. **Chart Type** - Choose the **Chart type** and the **Chart subtype** if necessary. Click **Next**.

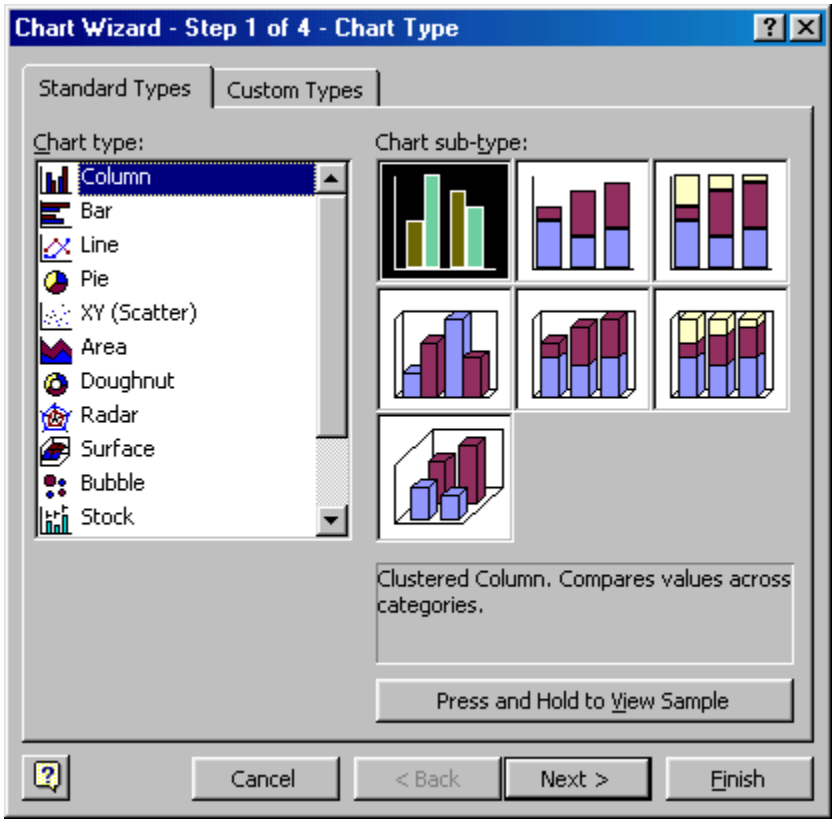
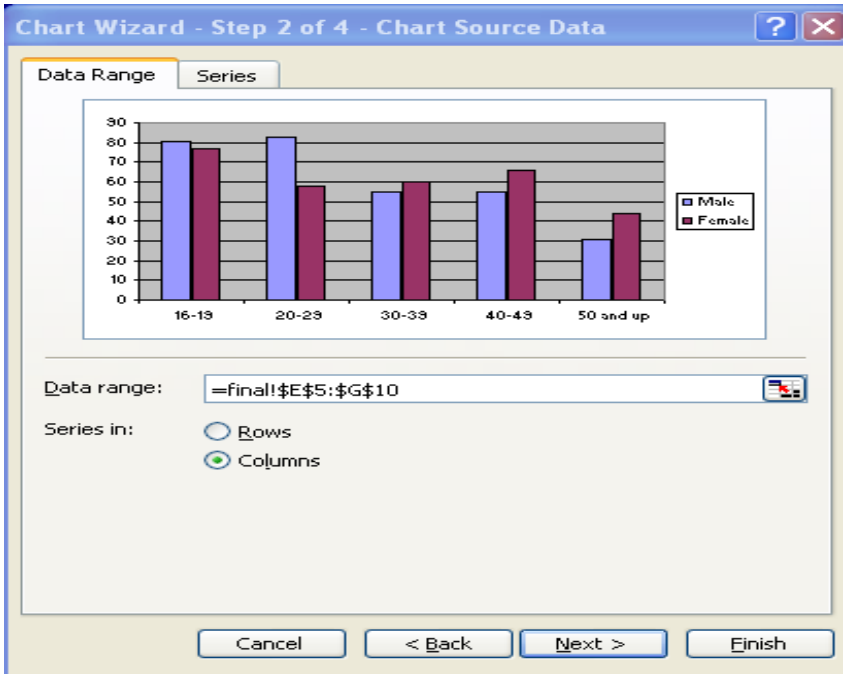


Chart Wizard

4. **Chart Source Data** - Select the data range (if different from the area highlighted in step 1) and click **Next**.



5. **Chart Options** - Enter the name of the chart and titles for the X- and Y-axes. Other options for the axes, grid lines, legend, data labels, and data table can be changed by clicking on the tabs. Press **Next** to move to the next set of options.

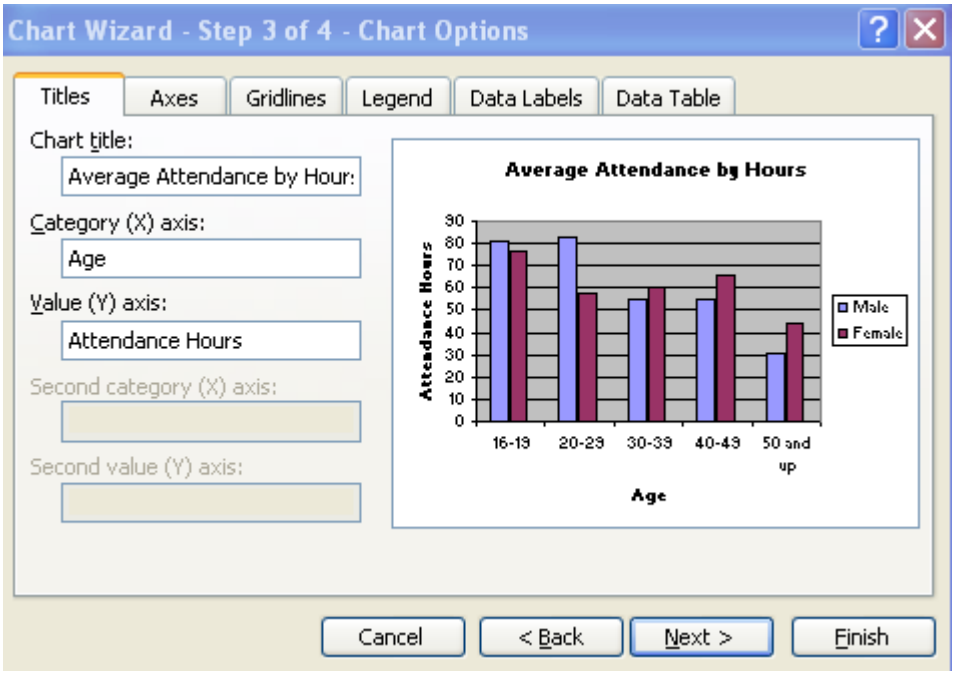
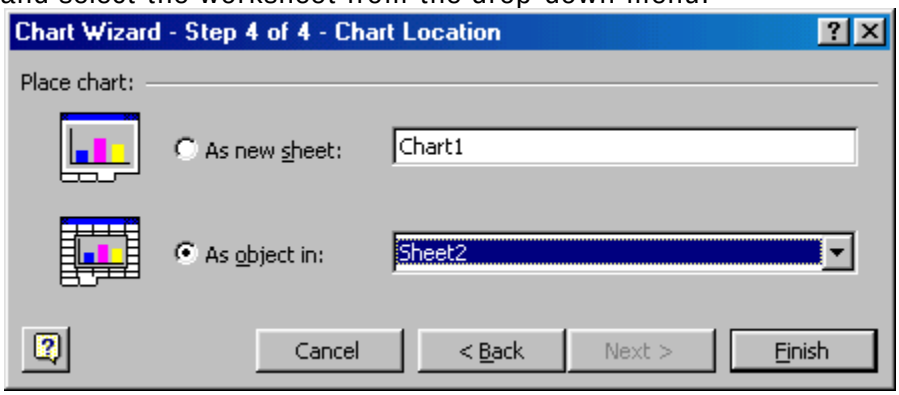
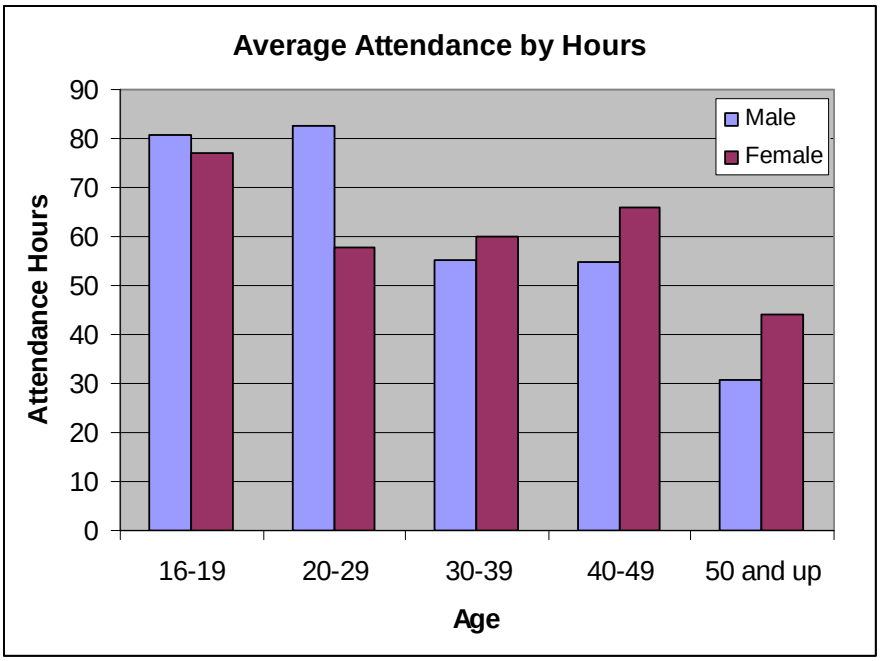


Chart Wizard

6. **Chart Location** - Click **As new sheet** if the chart should be placed on a new, blank worksheet or select **As object in** if the chart should be embedded in an existing sheet and select the worksheet from the drop-down menu.



7. Click **Finish** to create the chart.



Resizing the Chart

To resize the chart, click on its border and drag any of the nine black handles to change the size. Handles on the corners will resize the chart proportionally while handles along the lines will stretch the chart.

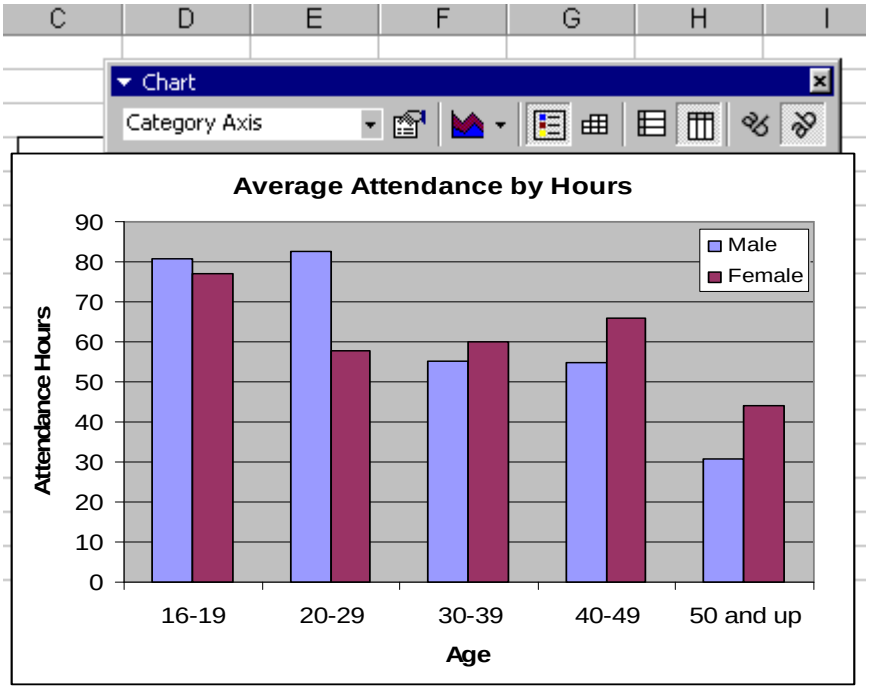
Chart Wizard

Moving the Chart

Select the border of the chart, hold down the left mouse button, and drag the chart to a new location. Elements within the chart such as the title and labels may also be moved within the chart. Click on the element to activate it, and use the mouse to drag the element to move it.

Copying the Chart to Microsoft Word

A finished chart can be copied into a Microsoft Word document. Select the chart and click **Copy**. Open the destination document in Word and click **Paste**.



Subtotal Functions

The *Subtotal* function sections off a part of the worksheet so that calculations can be performed upon it. There are 11 different calculations which you can have performed on the subset of the worksheet, as shown in the Function Numbers table. You must select one of these calculations to be initially performed on the subset. You may, however, change the selection at any time by modifying the existing function if you need to perform other calculations on the data.

Function Numbers

#	Calculation	Description
1	**AVERAGE**	adds all entries and then divides by the number of entries
2	**COUNT**	counts the number of entries containing numbers
3	**COUNTA**	counts the number of entries that are not blank (includes text entries)
4	**MAX**	reports the highest number of all the entries
5	**MIN**	reports the lowest number of all the entries
6	**PRODUCT**	multiplies all the entries together
7	**STDEV**	computes the standard deviation, assuming the selection is a sample of the entire population
8	**STDEVP**	computes the standard deviation, assuming the selection is the entire population
9	**SUM**	adds all entries together
10	**VAR**	computes the variance, assuming the selection is a sample of the entire population
11	**VARP**	computes the variance, assuming the selection is the entire population

Basic Functions

Functions can be a more efficient way of performing mathematical operations than formulas. For example, if you wanted to add the values of cells D1 through D10, you would type the formula "=D1+D2+D3+D4+D5+D6+D7+D8+D9+D10". A shorter way would be to use the SUM function and simply type "=SUM(D1:D10)". Several other functions and examples are given in the table below:

Function	Example	Description
SUM	=SUM(A1:100)	finds the sum of cells A1 through A100
AVERAGE	=AVERAGE(B1:B10)	finds the average of cells B1 through B10
MAX	=MAX(C1:C100)	returns the highest number from cells C1 through C100
MIN	=MIN(D1:D100)	returns the lowest number from cells D1 through D100
SQRT	=SQRT(D10)	finds the square root of the value in cell D10
TODAY	=TODAY()	returns the current date (leave the parentheses empty)

Copying Formulas

With a relative formula, the cell references change in relation to the new location of the cell. For example, if you copied the formula from column A to B and the formula used a value in cell A12, the formula would now be referring to cell B12. If you cut the formula, it would refer to the original cell, A12.

With an absolute formula, in the same example, the cell reference to A12 would remain constant.

A formula can have both relative and absolute components. When formulas are created, they are created as relative. By adding a dollar sign ($) before either the column or row location or both, that reference becomes absolute.

When copying formulas, cell references are important to the result of the formula. If you want to copy the formula and look at cells with similar information one column over, a relative formula is the best choice. However, if you want to copy the formula and refer to the same cell (perhaps the wage rate of a student employee), you should be working with an absolute formula, not a relative formula.

NOTE: Absolute references are automatically updated for column and row additions and deletions.

Example	Description
=A12+B12	Formula with relative references
=SUM(A12:A16)	Function with relative references
=$A$12+$B$12	Formula with absolute references
=SUM($A$12:$A$16)	Function with absolute references
=$A12+$B12	Formula with absolute column references but relative row references
=SUM(A$12:A$16)	Function with absolute row references but relative column references

Keyboard shortcuts can save time and the effort of switching from the keyboard to the mouse to execute simple commands. Print this list of Excel keyboard shortcuts and keep it by your computer for a quick reference.

Note: A plus sign indicates that the keys need to be pressed at the same time.

Action	Keystroke
Document actions	
Open a file	CTRL+O
New file	CTRL+N
Save As	F12
Save	CTRL+S
Print	CTRL+P
Find	CTRL+F
Replace	CTRL+H
Go to	F5
Cursor Movement	
One cell up	up arrow
One cell down	down arrow
One cell right	Tab
One cell left	SHIFT+Tab
Top of worksheet (cell A1)	CTRL+Home
End of worksheet (last cell with data)	CTRL+End
End of row	Home
End of column	CTRL+left arrow
Move to next worksheet	CTRL+PageDown
Formulas	
Apply AutoSum	ALT+=
Current date	CTRL+;
Current time	CTRL+:
Spelling	F7
Help	F1
Macros	ALT+F8

Action	Keystroke
Selecting Cells	
All cells left of current cell	SHIFT+left arrow
All cells right of current cell	SHIFT+right arrow
Entire column	CTRL+Spacebar
Entire row	SHIFT+Spacebar
Entire worksheet	CTRL+A
Text Style	
Bold	CTRL+B
Italics	CTRL+I
Underline	CTRL+U
Strikethrough	CTRL+5
Formatting	
Edit active cell	F2
Format as currency with 2 decimal places	SHIFT+CTRL+$
Format as percent with no decimal places	SHIFT+CTRL+%
Cut	CTRL+X
Copy	CTRL+C
Paste	CTRL+V
Undo	CTRL+Z
Redo	CTRL+Y
Format cells dialog box	CTRL+1

Pointer Shapes

As with other Microsoft programs, the shape of the pointer changes as you are working in Excel. Each pointer shape is communicating something about how Excel is working. The shape of the pointer when you click and drag a cell will greatly influence the results of the click and drag. The following document includes a table describing each of the pointer shapes you may encounter in Excel.

Shape	Implication	Action
	The default pointer shape.	Moves cell pointer or selects a range of cells
	Appears when the pointer is on a border (column, row, or window). When adjusting row height, the arrows point up and down. When adjusting column width, the arrows point right to left.	Adjusts the column width, row height, or window size
	Appears when you are editing the contents of a cell.	Moves the insertion point within the cell
Windows:	Appears when you have a graphic that may be moved.	Moves the selected graphic to the new location.
	Appears when you are pointing to the border of a cell.	Moves the selected cell to a new location
	Appears when you are at the "fill corner" of a cell or range of cells.	AutoFills other cells with similar information

Worksheet Terms

Like all other areas of computer technology, Microsoft Excel worksheets have their own "language." This list of common terms is provided to serve as a reference for you as you work in Excel.

Term	Definition
Cell	The intersection of a column and row. Information is stored in cells.
Cell Pointer	The cell pointer is similar to Word's insertion point. It selects or marks the current cell (where the next activity is going to take place). The Excel pointer changes shape depending on location and corresponding function. For more information, refer to Pointer Shapes.
Cell References	The address (consisting of the column and row IDs) of a specific cell. The current cell location is displayed in the upper left corner of the worksheet.
Column	A vertical group of cells within a worksheet.
Formula	A set of instructions which a calculation based on numbers entered in the cell or numbers entered in other cells (referred to by cell references). All formulas begin with the equal sign (**=**).
Function	A pre-programmed formula. The function performs the calculation based on the cells referenced in the function. All functions begin with the equal sign (**=**).
Range	A group of cells. Ranges are often referenced for formulas, printing, and designating information to be copied or cut. Ranges can be selected by dragging (also referred to as painting) over the cells.
Row	A horizontal group of cells within a worksheet.
Value	A number that can be used in an Excel calculation.
Workbook	A collection of worksheets contained within a single file.
Worksheet	A single layer or single sheet within the workbook. A worksheet can contain data, charts, or both. Instead of compiling all of your information into one worksheet, you can create several worksheets within the one workbook file. With this organization, similar information is grouped together to make it easier to locate and use. The worksheets for your workbook will vary based on its content and purpose. NOTE: The terms *worksheet* and *spreadsheet* are often used interchangeably.

FORMULAS

Example	Description
=A12+B12	Formula with relative references
=SUM(A12:A16)	Function with relative references
=$A$12+$B$12	Formula with absolute references
=SUM($A$12:$A$16)	Function with absolute references
=$A12+$B12	Formula with absolute column references but relative row references
=SUM(A$12:A$16)	Function with absolute row references but relative column references

Character	Use within Formula
!	Place between the worksheet name and cell reference
'	Place around the filename and sheet name or when a sheet name contains a space ('Budget 2001'!C4:C8)
[ ]	Place around a filename
:	Signifies a range (B3:C2 means B3 through C2)
+	Signifies a range (B3+C2 means B3 and C2)

Function Numbers

#	Calculation	Description
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3	**COUNTA**	counts the number of entries that are not blank (includes text entries)
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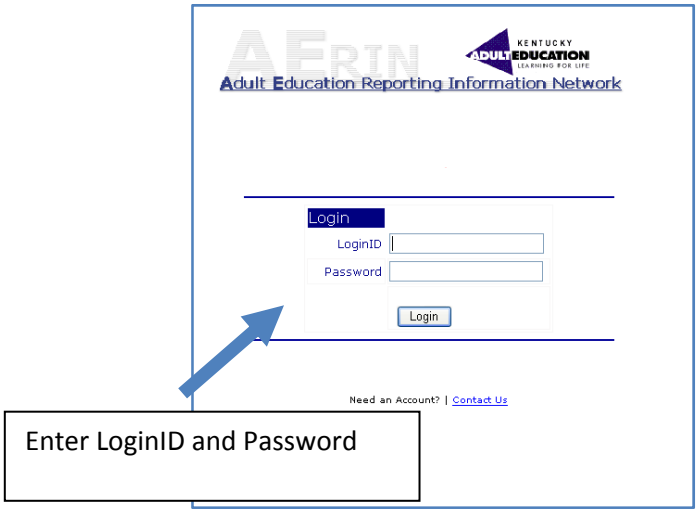
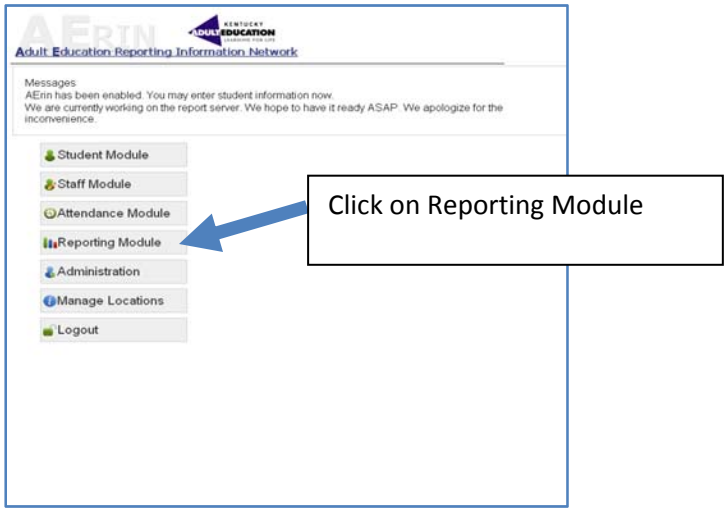
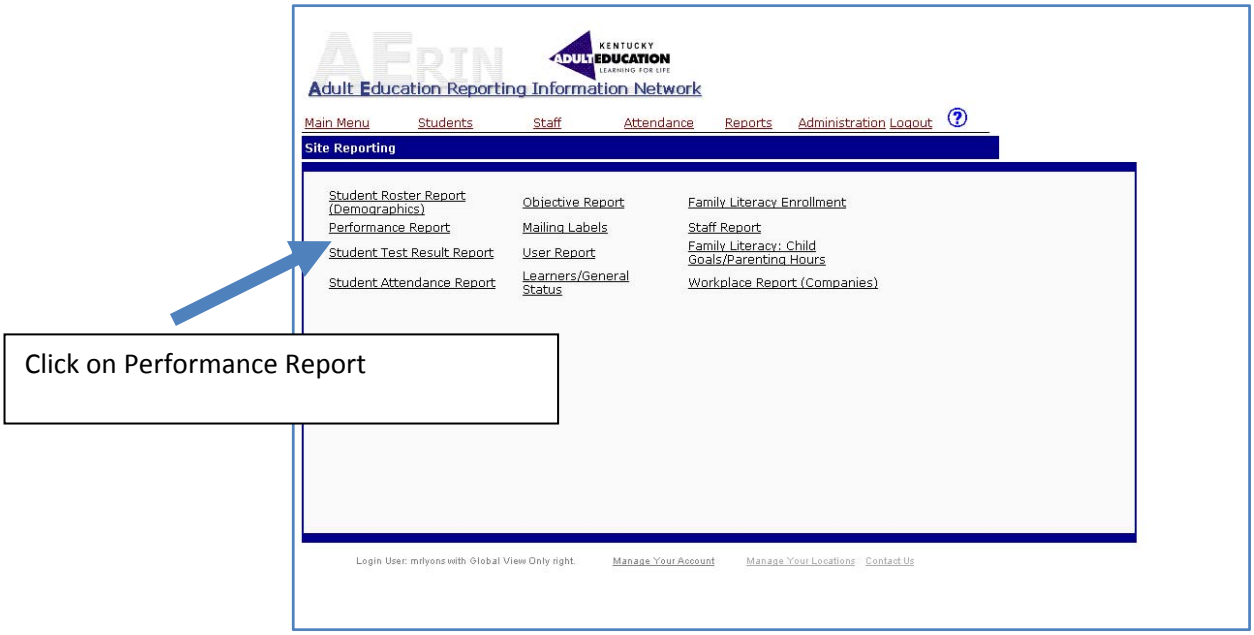
6	**PRODUCT**	multiplies all the entries together
7	**STDEV**	computes the standard deviation, assuming the selection is a sample of the entire population
8	**STDEVP**	computes the standard deviation, assuming the selection is the entire population
9	**SUM**	adds all entries together
10	**VAR**	computes the variance, assuming the selection is a sample of the entire population
11	**VARP**	computes the variance, assuming the selection is the entire population

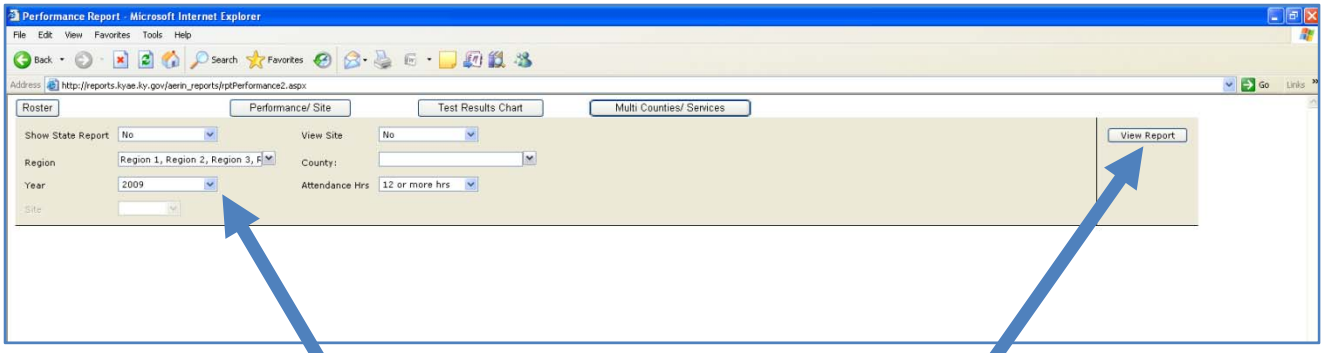
Exporting AERIN Data Using Excel

1. Open Internet Explorer
2. AERIN website https:// aerin.ky.gov/



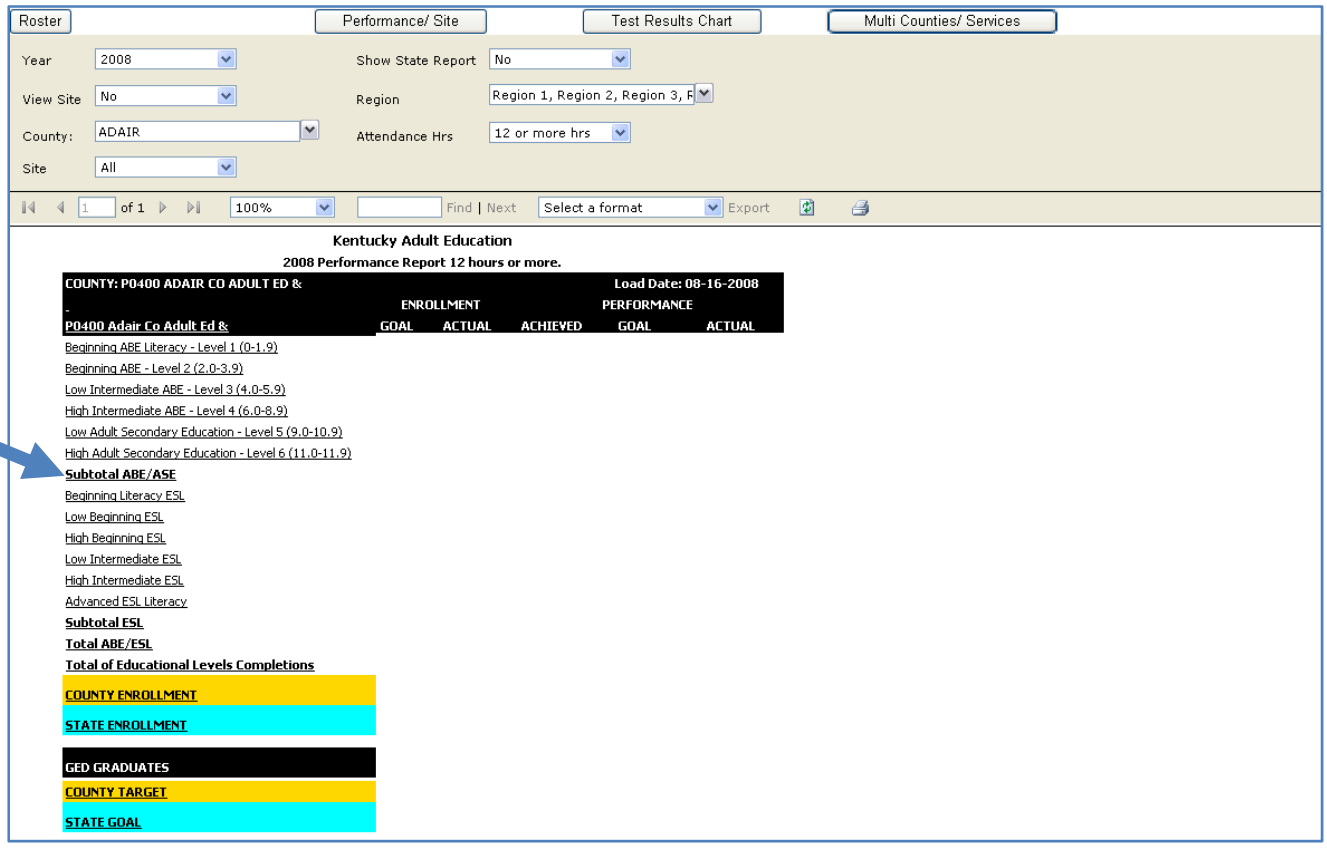






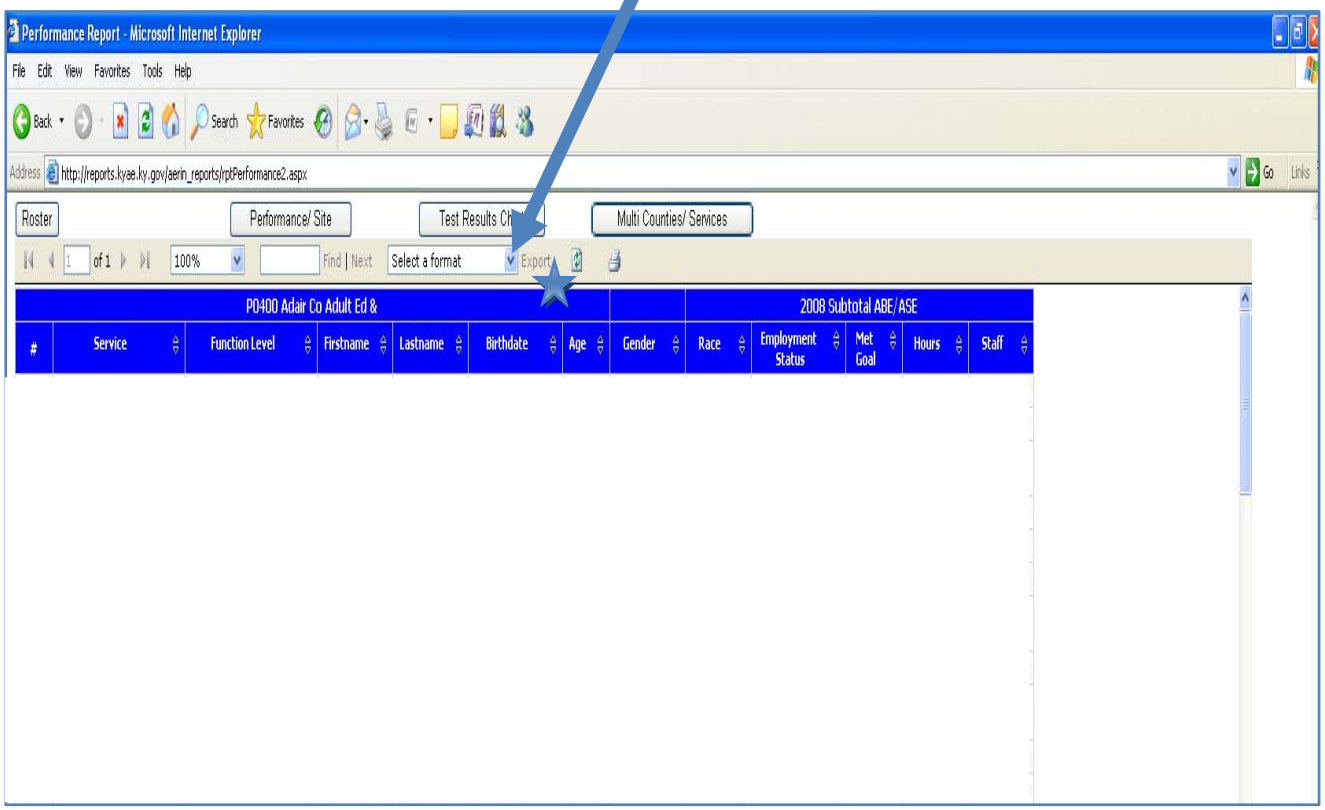
1. Click on down arrow and select 2008

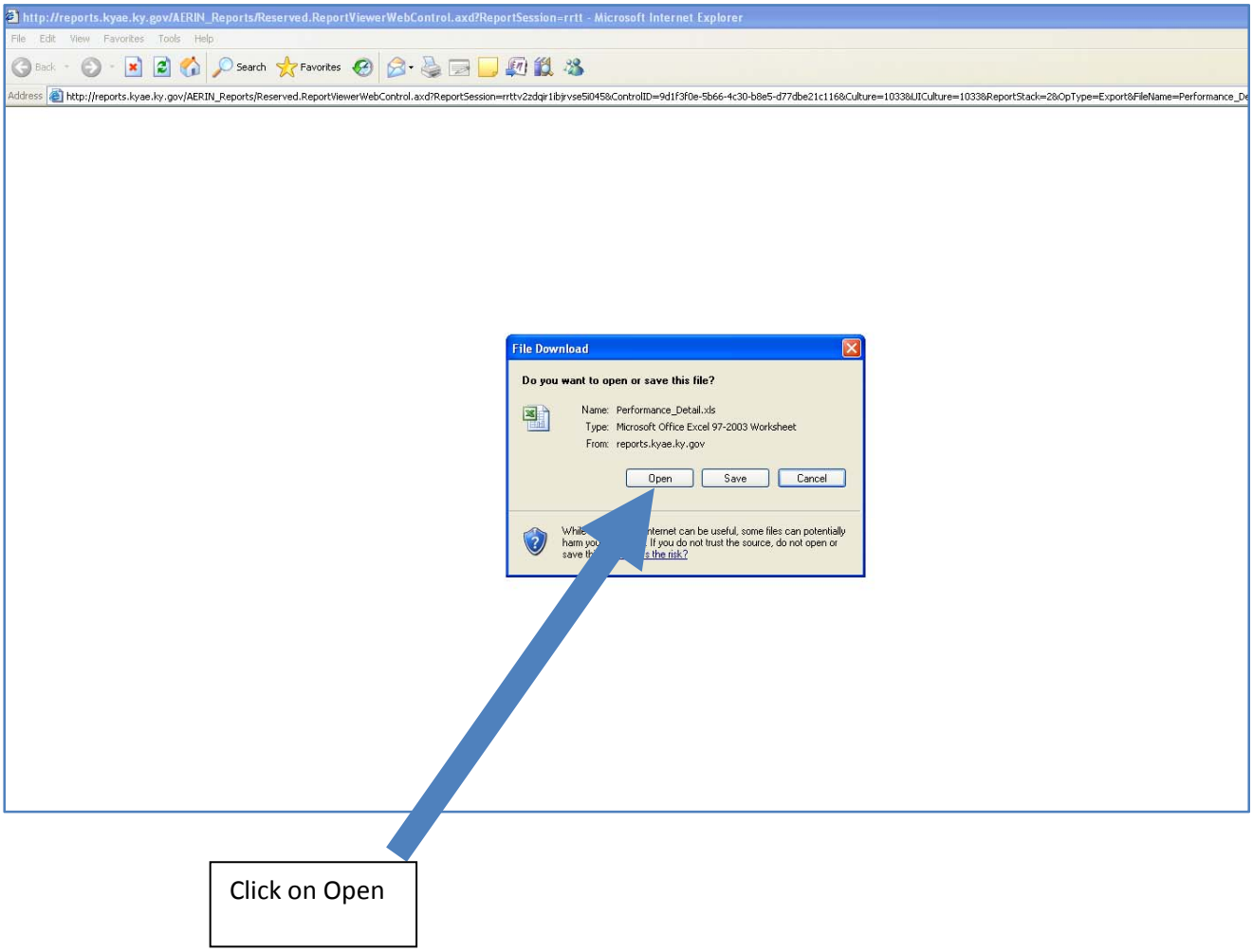
2. Click on View Report



Click on Subtotal ABE/ASE

1. Select a format for downloading by clicking on arrow
2. Select Excel
3. Click on Export





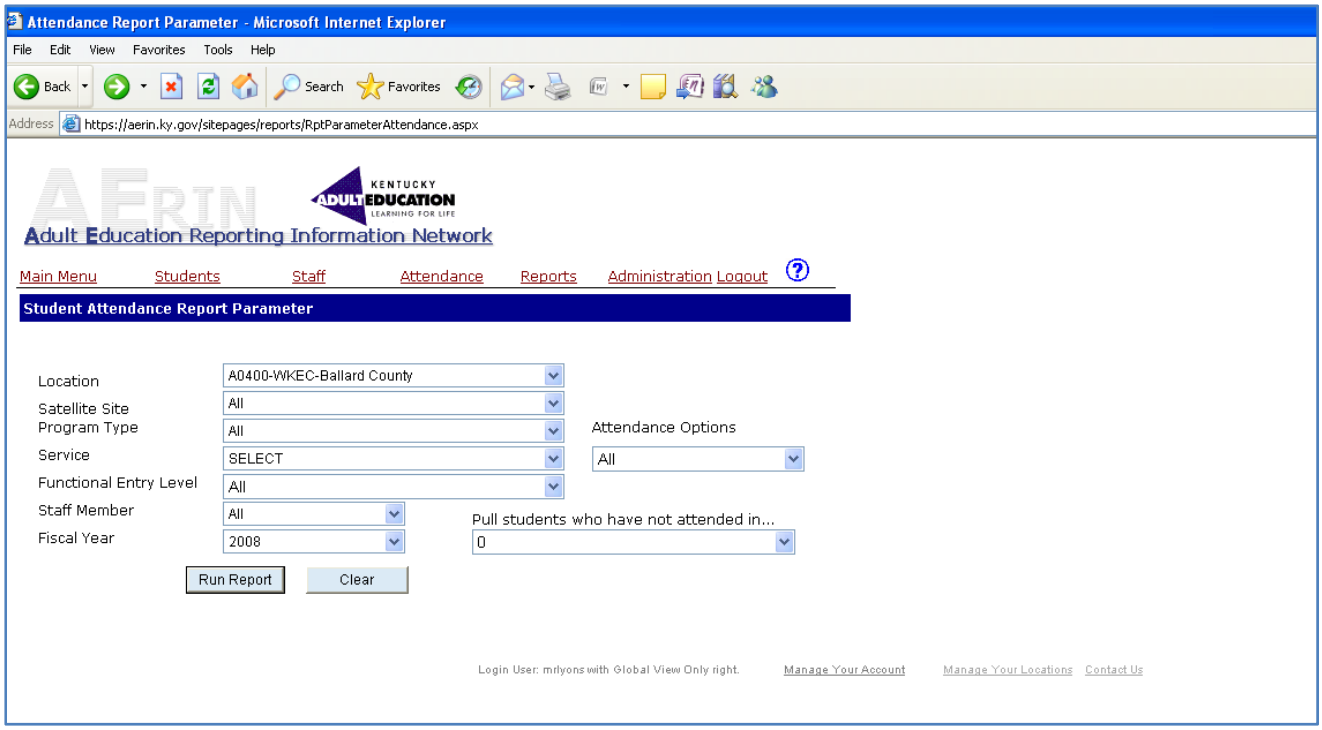
Click on Open

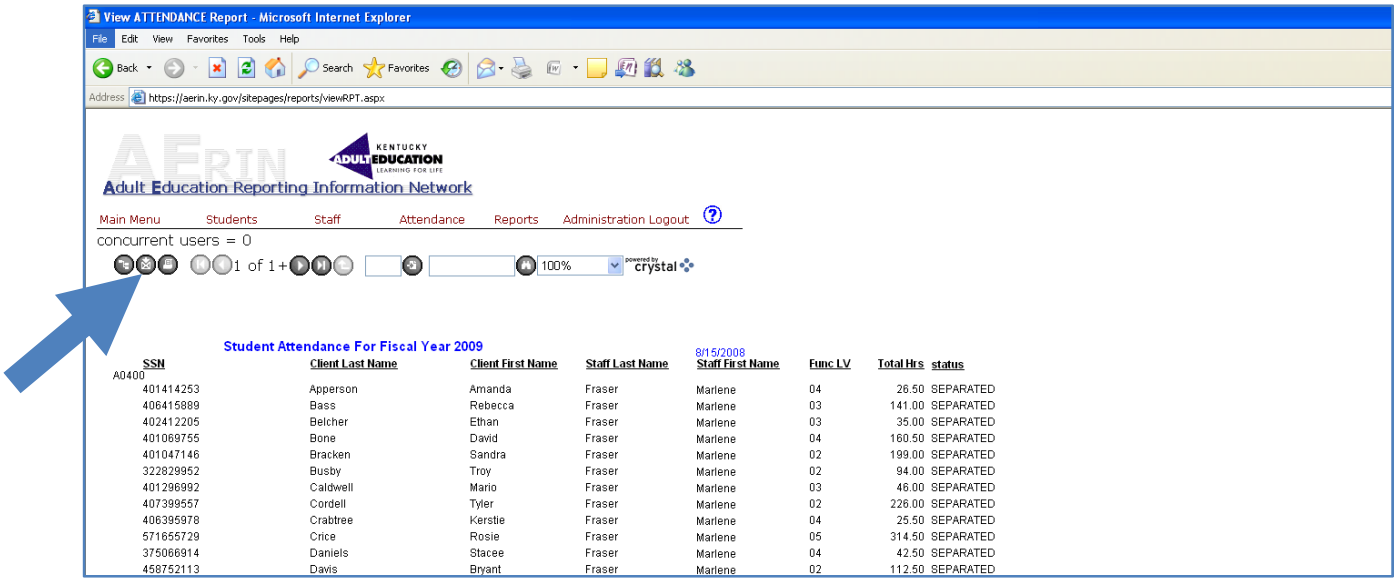
DOWNLOADED MICROSOFT EXCEL SPREADSHEET

Co Adult Ed &								2008 Subtotal ABE/ASE				
#	Service	Function Level	Firstname	Lastname	Birthdate	Age	Gender	Race	Employment Status	Met Goal	Hours	Staff

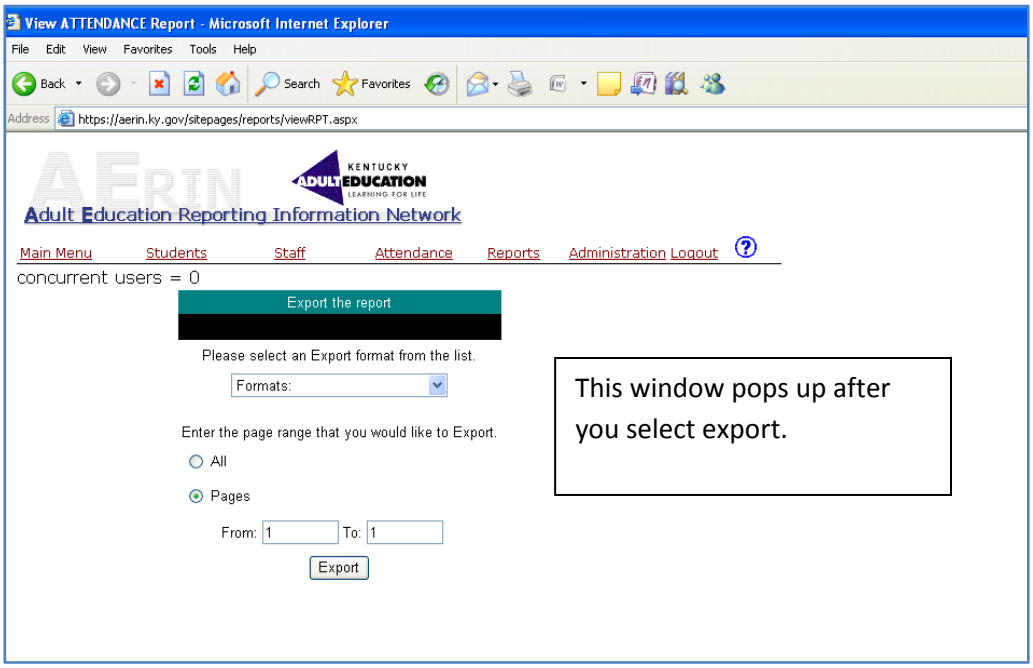
1. Final product to begin editing for analysis
2. Save to desktop, **SELECT >> FILE >> SAVE AS >>**
   a. Type name of file in the box **File Name**
   b. Make sure that Microsoft Office Excel Workbook is selected in the box**: Save as Type**

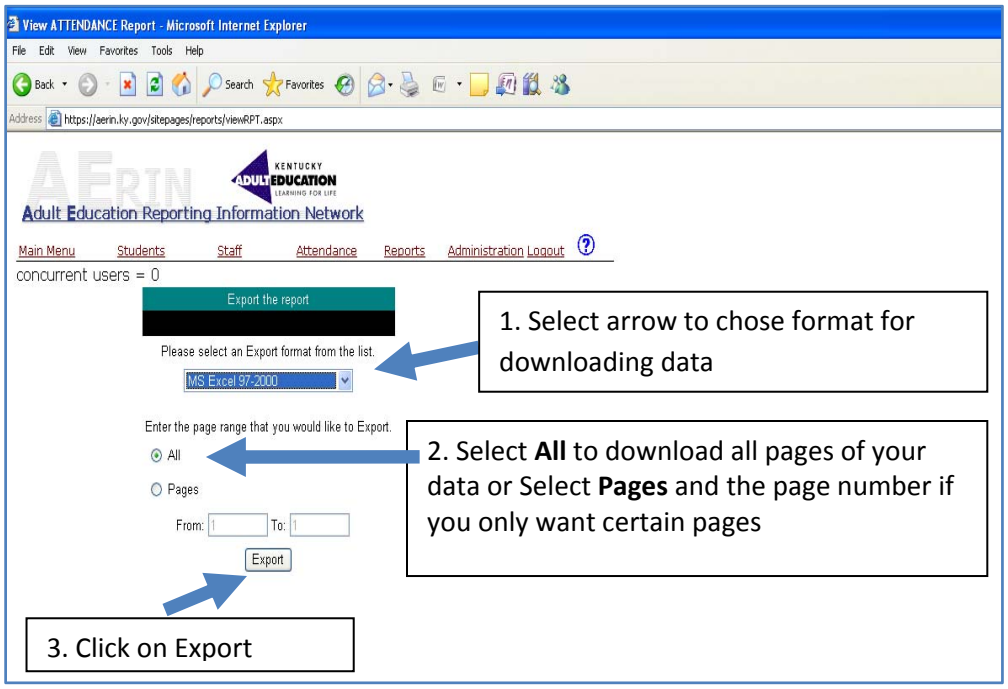
Attendance Report

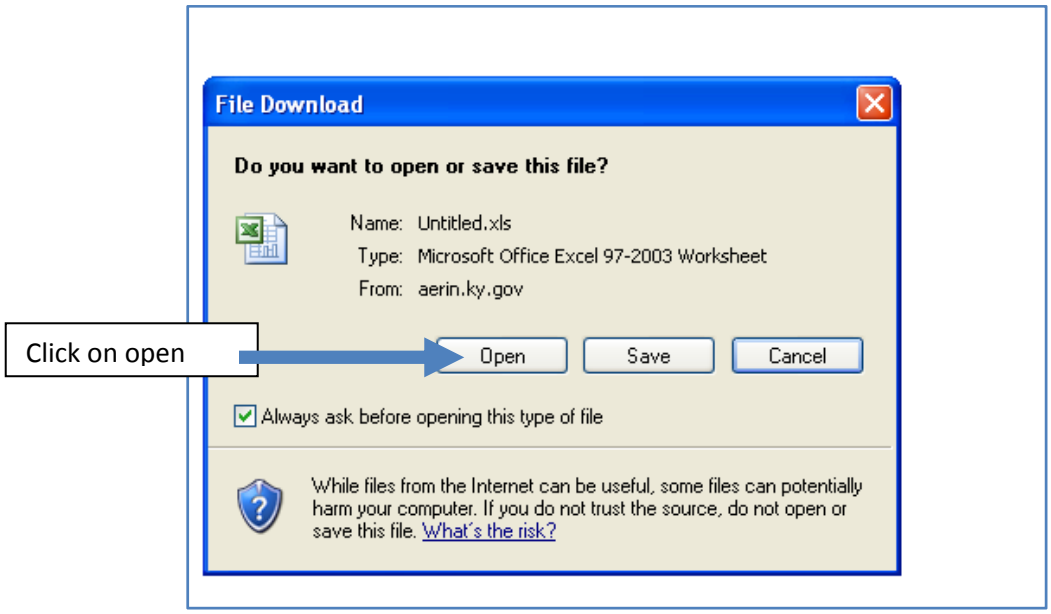


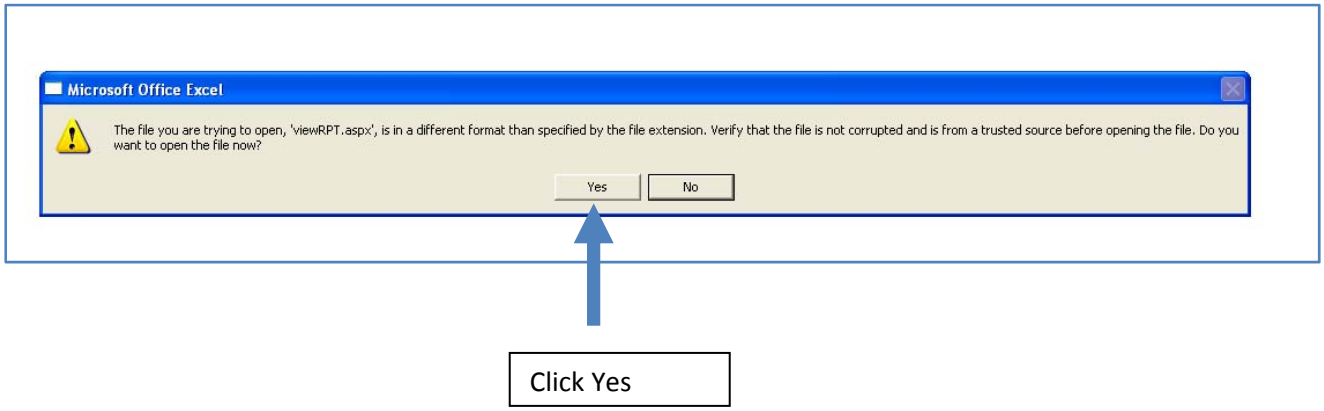


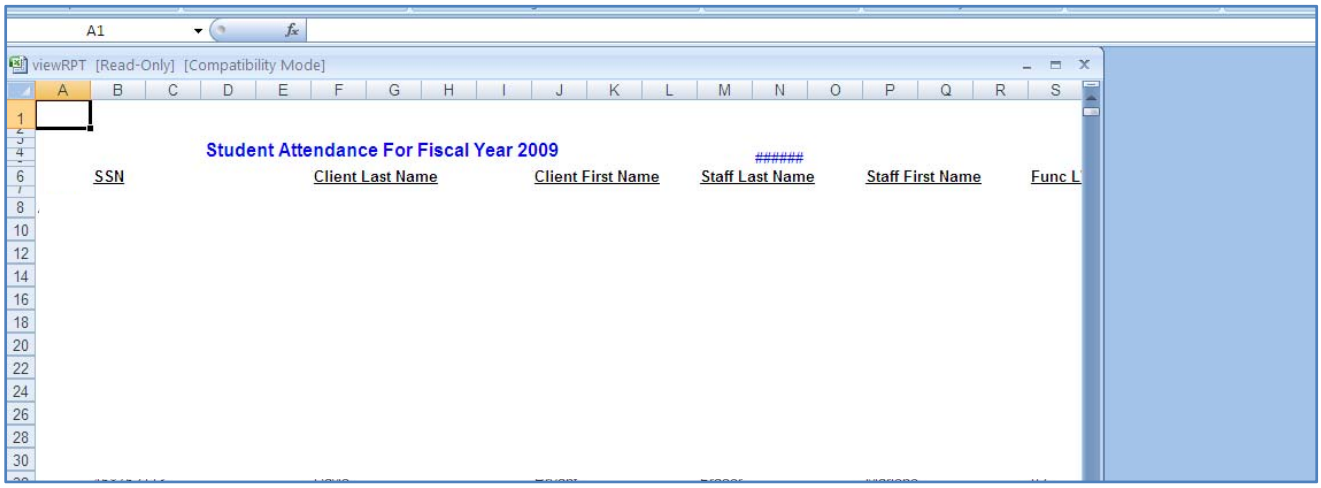
1. Click on envelope with arrow to export data to a different file format


View ATTENDANCE Report - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address https://aerin.ky.gov/sitepages/reports/viewRPT.aspx
KENTUCKY ADULT EDUCATION LEARNING FOR LIFE
Adult Education Reporting Information Network
Main Menu Students Staff Attendance Reports Administration Logout
concurrent users = 0
Export the report
Please select an Export format from the list.
Formats:
Enter the page range that you would like to Export.
All
Pages
From: 1 To: 1
Export
This window pops up after you select export.


View ATTENDANCE Report - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address https://aerin.ky.gov/sitepages/reports/viewRPT.aspx
KENTUCKY ADULT EDUCATION LEARNING FOR LIFE
Adult Education Reporting Information Network
Main Menu Students Staff Attendance Reports Administration Logout
concurrent users = 0
Export the report
Please select an Export format from the list.
MS Excel 97-2000
Enter the page range that you would like to Export.
All
Pages
From: 1 To: 1
Export
1. Select arrow to chose format for downloading data
2. Select **All** to download all pages of your data or Select **Pages** and the page number if you only want certain pages
3. Click on Export


File Download
Do you want to open or save this file?
Name: Untitled.xls
Type: Microsoft Office Excel 97-2003 Worksheet
From: aerin.ky.gov
Click on open
Open
Save
Cancel
Always ask before opening this type of file
While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. What's the risk?


Microsoft Office Excel
The file you are trying to open, 'viewRPT.aspx', is in a different format than specified by the file extension. Verify that the file is not corrupted and is from a trusted source before opening the file. Do you want to open the file now?
Yes
No
Click Yes



1. Above is the downloaded Excel spreadsheet to begin editing for analysis
2. Save to desktop or hard drive, **SELECT >> FILE >> SAVE AS >>**
    - **a.** Type name of file in the box **File Name**
    - b. Make sure that Microsoft Office Excel Workbook is selected in the box**: Save as Type**

ATTENDANCE
&
EDUCATIONAL LEVEL COMPLETION QUESTIONS

Attendance and Educational Level Gains
Analyze the classes or enrollment type offered in your program by looking at student attendance patterns.
What are the demographics (gender and age) for students with strong attendance records? Are there any patterns?
What are the demographics for students making educational level completions? Are there any patterns?
How can you improve completion rates?
In which core measures is your county average performance more than 10 percentage points lower than the state average?
Does attendance have any relationship to completion?