

Excel Refresher

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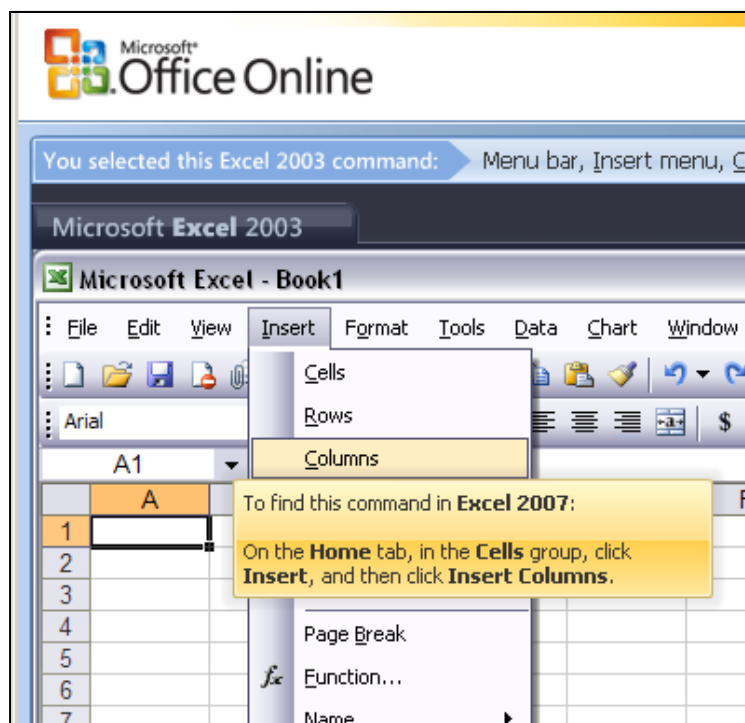
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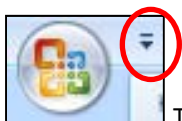
Hors d'oeuvres

How to Find Help

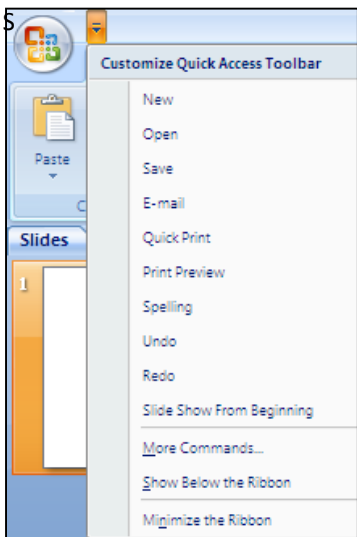
-  will launch Help
- F1 key will launch Help
- Google your topic/question
- Interactive Tools – Office 2003 vs. 2007
 - Enough positive cannot be said about these tools. Basically you open the application you are working with, say Excel. When it opens it will look like 2003. Navigate your mouse how you would do it in 2003. A pop up will appear indicating where the option is in 2007.
 - Several tools are available for MS applications; however, we have downloaded Excel, Word, Outlook, & PowerPoint. If you need additional they are available on the web
 - They are located in two places for your convenience:
 - File 0\ScoeShare\Office 03 vs. 07: The tools have been downloaded and can be launched.
 - [www.shastacoe.org\departments\technology services\support services\training docs & cool tools](http://www.shastacoe.org/departments/technology%20services/support%20services/training%20docs%20&%20cool%20tools): The links to MS web pages so that you may download the tool yourself.
 - For example, you are working in 2007 and want to insert a column except you cannot find the secret spot. Opening the tool, you navigate your mouse to Insert\columns as you would in 2003, a pop up appears indicating that is on the home tab, cells group, insert, and insert columns.



Adding Icons to the Quick Access Bar

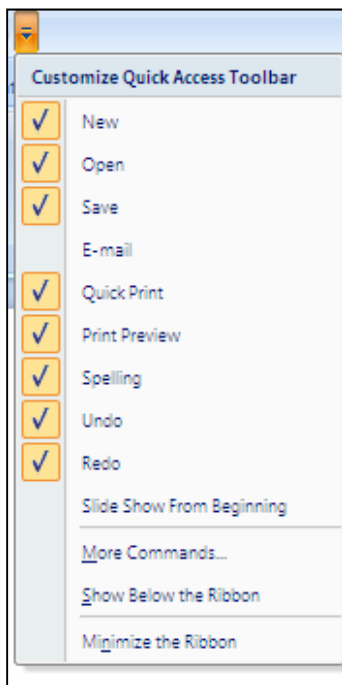


The Office button is located in the top left corner of all Microsoft Applications. If the quick access bar is empty, a single line with a chevron below it will be just to the right of the office button.



Select the chevron and the Customize Quick Access Toolbar will appear.

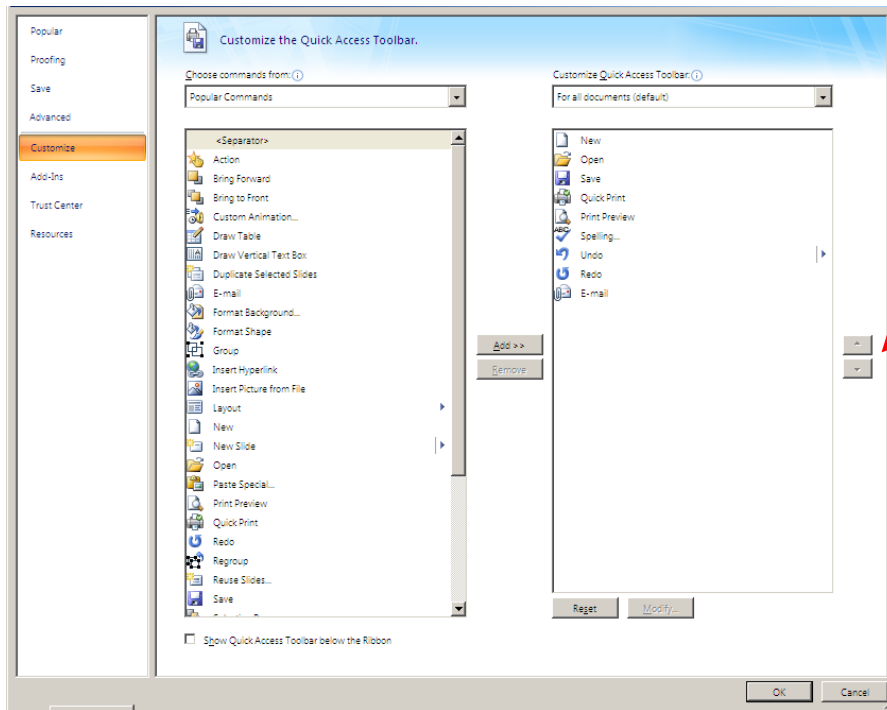
After the drop down menu appears, select the icons you would like to add or select *more commands* to receive the entire list. Once you select an icon the drop down will disappear. Continue the selection process until you have all you would like.



The bar will continue to grow as you add more icons.



When selecting the *more commands* option, you have the options to add or remove icons to the list and to rearrange them on the toolbar.




Use these arrows to move the icons within the list.

Icons can be added on the fly as well. When using an icon on the ribbon that you would like to add to the ribbon:

- Hover over the icon until it is highlighted
- Right click your mouse
- When the popup menu appears, select *Add to Quick Access Toolbar*

Top Twenty Quick Access Toolbar Icons

																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	Create a new document										11	Quickprint								
2	Open a spreadsheet										12	Insert Column								
3	Save a spreadsheet										13	Insert Row								
4	Copy										14	Delete Column								
5	Paste special (When selected the option box will appear giving multiple pasta options; i.e. values, subtract, transpose.)										15	Delete Row								
6	Undo (How could we live without it!)										16	Sum								
7	Redo										17	Borders								
8	Set print area										18	Shapes								
9	Print titles (When selected the page setup dialog box will appear where you can manipulate page, margins, header/footer & sheet setups)										19	Pivot Table and Pivot Chart Wizard								
10	Print preview										20	Spelling								

Status Bar

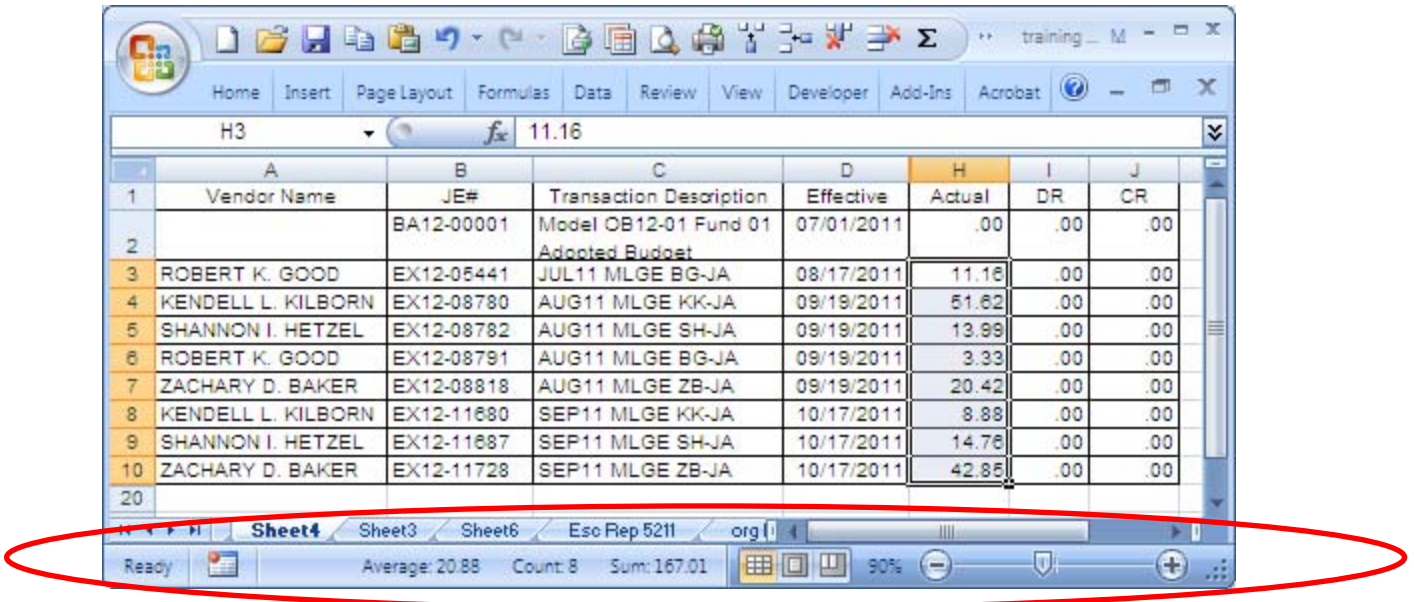


Figure 1: View of Worksheet Highlighting Status Bar

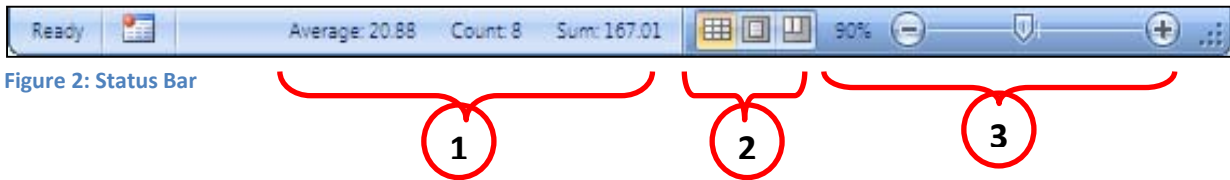


Figure 2: Status Bar

Status Bar	
1	<p><i>Auto Calculate Indicator:</i> displays the average and sum of all the numerical entries in the current selection along with the count of every cell in the selection.</p> <ul style="list-style-type: none"> NOTE: These defaults can be changed by launching the Customize Status Bar
2	<p><i>Layout Selector:</i> enables you to select between three layouts for the worksheet area.</p> <ul style="list-style-type: none"> Normal: Default view that shows the worksheet cells with column and row headings Page Layout: View displaying rulers, page margins, headers & footers, and page breaks. Page Break Preview: Enables you to adjust the paging of the report
3	<p><i>Zoom Slider:</i> enables you to zoom in and out on the cells in the worksheet area by dragging the slider to the right or left, respectively.</p>



The status bar may be customized to your liking. Right-click the status bar and select an option to enable the feature. Options that appear with a check mark are already active.

Common Short Cut Keys and Functions

Quick Key	Description
F1	Help Key
F2	Edit Key
F4	Repeat Key
Ctrl F	Find
Ctrl C	Copy
Ctrl X	Cut
Ctrl V	Paste
Shift + left mouse click	Will select consecutive items, i.e. cells, rows, columns, files
Ctrl + left mouse click	Will select nonconsecutive items, i.e. cells, rows, columns, files
Ctrl + select worksheets	Grouping several worksheets. Any changes made to one will affect all.

Ribbon Tour

The premise of the ribbon tour is not to review every icon, there are just too many to do so effectively. We will review the more commonly used. Feel free to peruse them on your own. When you hover over an icon a quick tip will open describing its function.

One challenge of the ribbons is that all of the icons do not appear all of the time. For instance, the picture tools appear in a shadow tab once you have a picture in your document. A general rule of thumb to use when you are trying to locate an icon and it is nowhere to be found, is look on the home tab.

Home Tab Ribbon

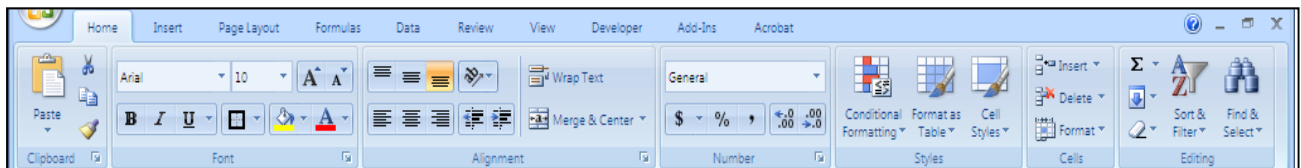


Figure 3: Home Tab Ribbon

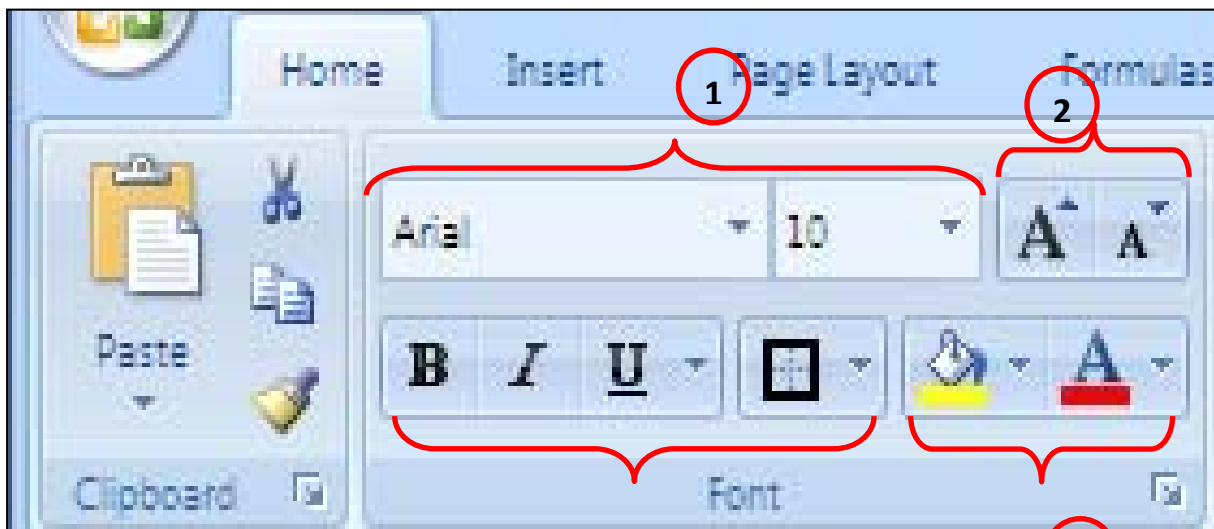


Figure 4: Font group located on the Home Tab

Font Group	
1	Choose font & font size for this spreadsheet. You will need to select the text that you want to change. If you like to use a particular font and font size, consider changing the default.
2	These will increase or decrease the font size on the selected text by a single font size.
3	Reading from left to right: Bold, Italics, underline, and borders. <ul style="list-style-type: none"> NOTE the chevrons to the right of both the underline and borders. By selecting additional options will appear that you may choose from.
4	The first icon will color the cell contents, the second the font color

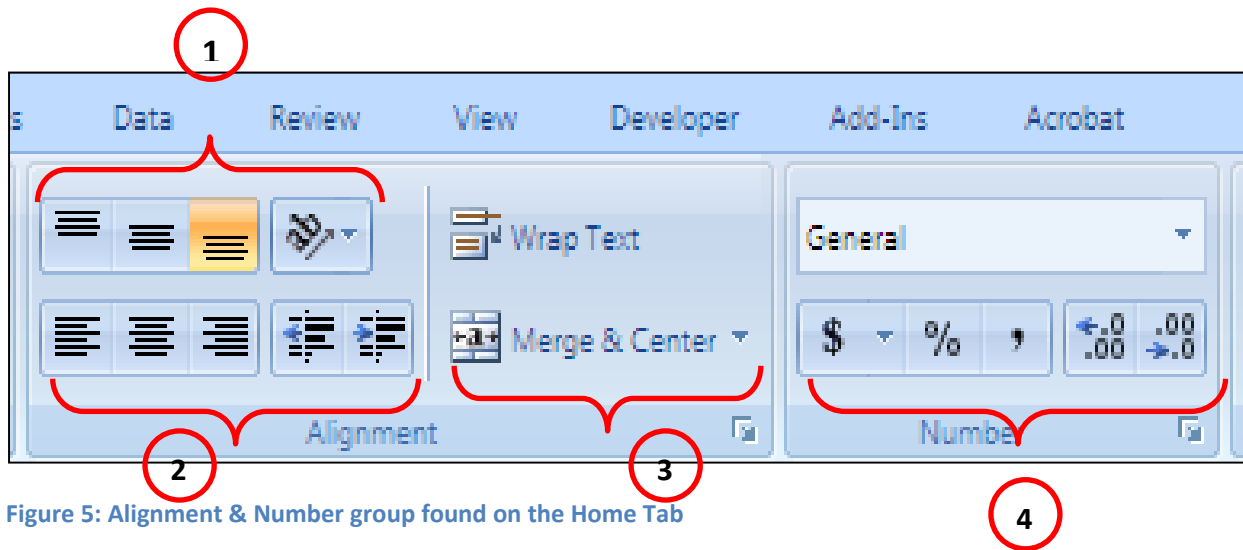


Figure 5: Alignment & Number group found on the Home Tab

Alignment & Number Group	
1	<ul style="list-style-type: none"> • Top, Middle, & Bottom Align: Aligns text within the cell horizontally. Common use is column headers. • Orientation: Allows the text to be rotated to a diagonal or vertical orientation. Often used with narrow columns.
2	<ul style="list-style-type: none"> • Left, Center, & Right Align: Aligns text within the cell vertically. Used typically for the body of the spreadsheet. Numbers are typically right justified. • Decrease & Increase Indent: Changes the margin between the border and text of the cell. <ul style="list-style-type: none"> ○ NOTE: Rather than tapping the space bar five times to indent text, use the increase icon for a consistent indent.
3	<ul style="list-style-type: none"> • Wrap Text: Use when your data/text is longer/wider than your cell. The data wraps to fit the column width. When you change the column width, data wrapping adjusts automatically. <ul style="list-style-type: none"> ○ NOTE: If all wrapped text is not visible, it may be because the row is set to a specific height. • Merge & Center: Joins the selected cells into one larger cell and centers the contents in the new cell. Often used to create labels that span multiple columns. <ul style="list-style-type: none"> ○ NOTE: The chevron to the right allows for additional options: Merge across (does not center the text, merge cells, & unmerge cells)
4	<ul style="list-style-type: none"> • The top row, currently displaying General, allows for a quick dropdown of number formats. • The bottom row, reading left to right are: Accounting number format, percent, comma style, increase decimal, and decrease decimal. • NOTE: These options are also available when you right click in a cell and select format cells from the dialog box. • NOTE: Custom options are useful when you want to keep a visual format and still keep the value a number, i.e. social security numbers, phone numbers, alias's, account codes. <ul style="list-style-type: none"> ○ Zero's – Enables leading zeros to appear in worksheet. ○ ##- Number Sign forces formatting: SSN would be formatted as ###-##-####. 5555555555 would be displayed as 555-55-5555

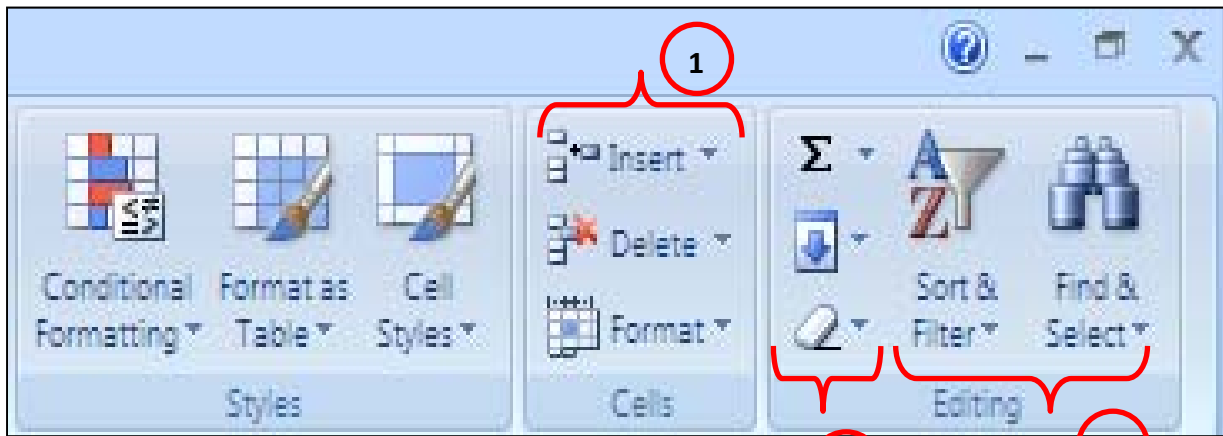


Figure 6: Styles, Cells, & Editing group Located on Home Tab

Styles, Cells, & Editing Group	
1	<ul style="list-style-type: none"> • Insert: Rows, columns, sheets, and cells <ul style="list-style-type: none"> ○ NOTE: Suggest you place the insert row & column icons on your quick access bar; yes you will use them that much. • Delete: Rows, columns, sheets, and cells <ul style="list-style-type: none"> ○ NOTE: Suggest you place the delete row & column icons on your quick access bar. • Format: Cell Size, height & width; hide & unhide columns, rows, and sheets; Organize sheets by renaming, moving, copying, or coloring the tabs; Protecting sheets & cells <ul style="list-style-type: none"> ○ NOTE: Another quick way to access these items is to select one or several rows/columns by selecting the row/column headings and right click your mouse. By doing so, a dialog box appears with numerous options. These dialog boxes are smart. If you have selected rows, the row related items appear; select columns and the column related items appear.
2	<ul style="list-style-type: none"> • Starting from the top: AutoSum, fill, and clear <ul style="list-style-type: none"> ○ AutoSum: Although the sum icon appears, selecting the icon gives quick access to average, count numbers, maximum, minimum, as well as other formulas. <ul style="list-style-type: none"> ▪ NOTE: Suggest you place at least the sum icon on your quick access bar. ○ Fill: Continues a pattern into one or more adjacent cells. ○ Clear: Clears formats, contents, comments or everything. <ul style="list-style-type: none"> ▪ NOTE: Best to use the clear option to erase cell contents. Formulas are often compromised because someone used the space bar to clear the contents. Although you do not see anything in the cell, the computer does. A #VALUE in a cell is what occurs when this has transpired.
3	<ul style="list-style-type: none"> • Sort & Filter <ul style="list-style-type: none"> ○ Sort options are: A to Z, Z to A, Custom Sort <ul style="list-style-type: none"> ▪ The A to Z and Z to A sorts used the left most column to sort from, either ascending or descending, depending on the option chosen. ▪ Custom Sort is when you get to define the column(s) and the sort order. ○ Filter options are: Filter, Clear, & Reapply • Find & Select <ul style="list-style-type: none"> ○ There are a variety of commands under this option, the two most commonly used are Find and Replace

Insert Tab Ribbon

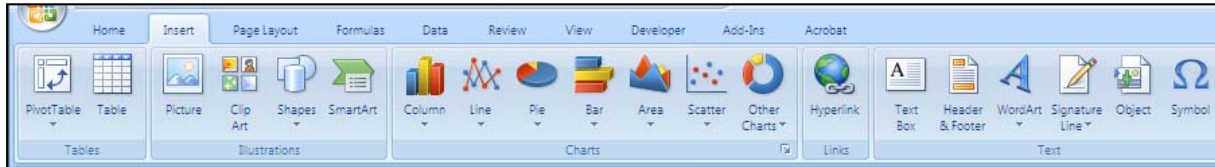


Figure 7: Insert Ribbon

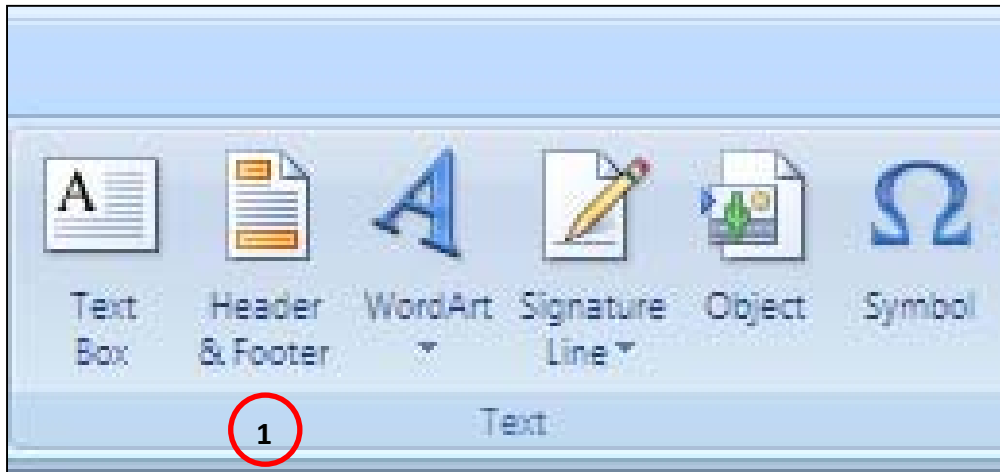


Figure 8: Text Group within Insert Ribbon

Text Group	
1	<p>Insert Header & Footer into your worksheet.</p> <ul style="list-style-type: none"> • Automatically changes to page layout view • Will only add the header and/or footer to this worksheet. • To add the header and/or footer to all worksheets in this workbook, use the header/footer option within: <ul style="list-style-type: none"> ○ Page Setup group located on the Page Layout Tab ○ Print Titles icon which can be added to the Quick Access Tool Bar

Page Layout Ribbon

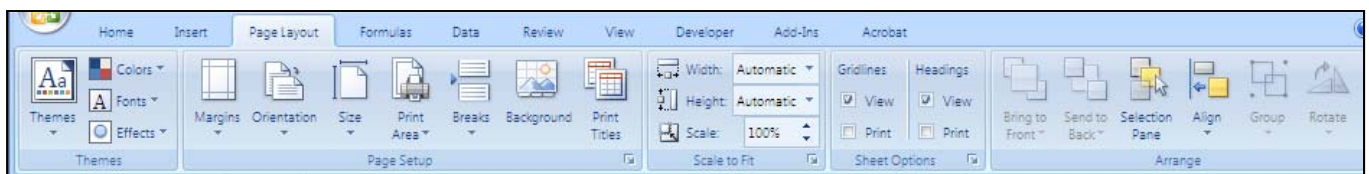


Figure 9: Page Layout Ribbon

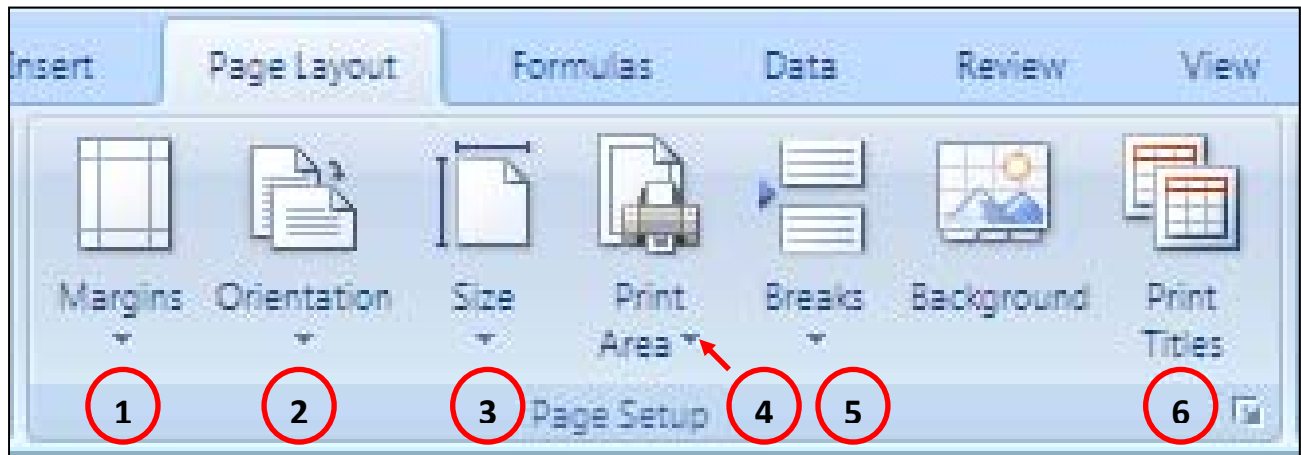


Figure 10: Page Setup Group within Page Layout Ribbon

Page Setup Group	
1	Margins- following quick margins will appear <ul style="list-style-type: none"> • Last custom setting- last setting used by the user • Normal • Wide • Narrow • Custom Margins
2	Orientation <ul style="list-style-type: none"> • Portrait • Landscape
3	Size: variety of different standard page settings appear
4	Print Area <ul style="list-style-type: none"> • Set Print Area • Clear Print Area
5	Page Breaks <ul style="list-style-type: none"> • Insert Page Break • Remove Page Break • Reset All Page Breaks
6	Print Titles: By selecting this icon the Page Setup Dialog Box Appears with the following tabs: <ul style="list-style-type: none"> • Page • Margins • Header/Footer • Sheet

Data Tab

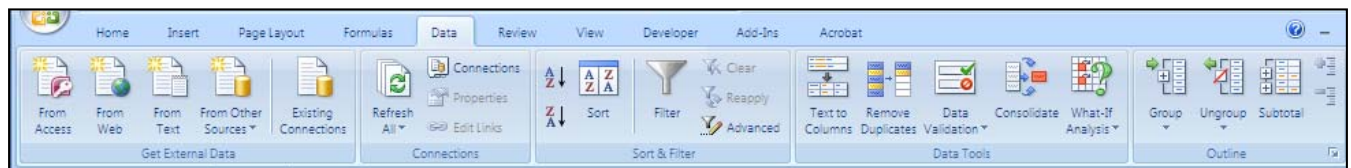


Figure 11: Data Tab Ribbon

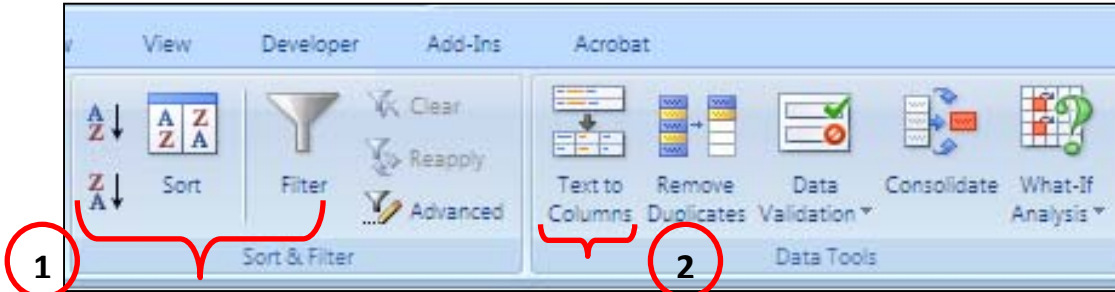





Figure 12: Sort & Filter and Data Tools Groups on Data Tab Ribbon

Sort & Filter and Data Tools Groups	
1	<p>Sort:</p> <ul style="list-style-type: none"> The Quick sorts,  &  , utilize the far left column to sort the data range from. The custom sort,  , allows you to choose the column(s) to sort by and define by column ascending or descending order
2	<p>Text to Columns</p> <ul style="list-style-type: none"> Will convert numbers that Excel recognizes as text back to being recognized as numbers Handy when exports from Escape upload into Excel as text when in fact they are numbers. NOTE: Previously known as data parsing

View Tab Ribbon



Figure 13: View Tab Ribbon

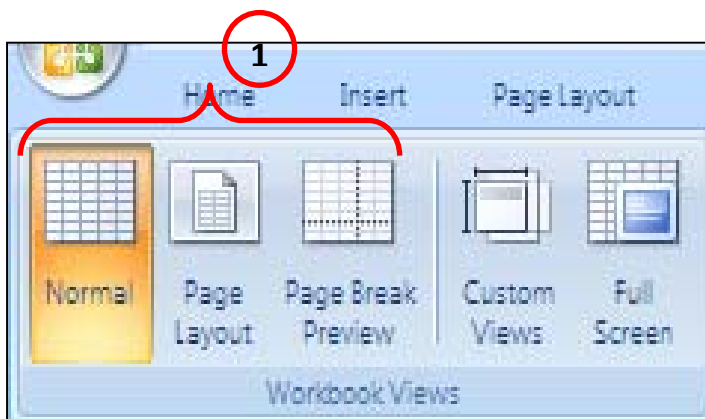



Figure 14: Workbook Views Group on View Tab Ribbon

Workbook Views Groups	
1	<ul style="list-style-type: none"> • Normal – View the worksheet in normal view, easiest to read • Page Layout – View the document as it will appear on the printed page. You will see where pages begin & end and see any headers or footers. • Page Break Preview – View where pages will break when this document is printed • NOTE: These views may also be chosen by selecting the icons at the bottom right corner of the worksheet on the status bar. Left to right is normal, page layout, & page break preview. 

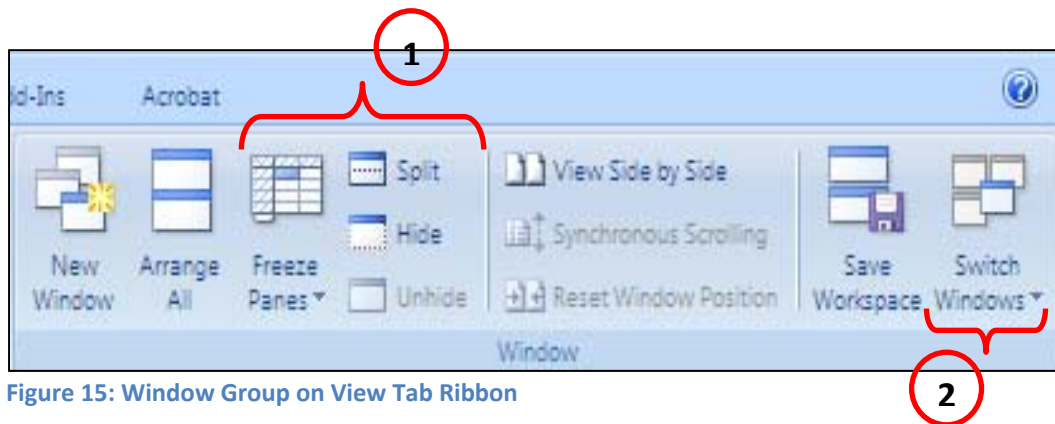



Figure 15: Window Group on View Tab Ribbon

Window Groups	
1	<ul style="list-style-type: none"> • Freeze Panes: Keep a portion of the sheet visible while the rest of the sheet scrolls. <ul style="list-style-type: none"> ○ NOTE: Numerous options are available with <i>freeze panes</i> which freeze rows & columns while the rest of the worksheet scrolls. • Split: Split the Window into multiple resizable panes containing views of your worksheet. <ul style="list-style-type: none"> ○ NOTE: This is particularly useful when you need to view multiple distant parts of your worksheet. ○ NOTE: Can also accomplish by dragging using the icon at the extremes of the Vertical and horizontal scroll bars.  • Hide: This controls the current workbook, not the rows or columns, which is used more. • Unhide: This controls the current workbook, not the rows or columns, which is used more. • NOTE: To hide/unhide rows and columns select those to be hidden/unhide and right click on your mouse, select hide or unhide as appropriate.
2	<ul style="list-style-type: none"> • Switch Windows: Used when multiple windows are open. • NOTE: Windows can also be toggled between by selecting them using the Office status bar; or opening multiple copies of Excel to have multiple worksheets appearing at once.

Common Functionality

Data Sorts

Prior to sorting it is good practice to save your worksheet. Your data can quickly go haywire if not all rows and columns are selected to sort. Good rule of thumb is to select the rows by the numbered column so that all rows and columns are selected.

Using the Sort dialog box allows you to sort on multiple columns at one time. Although the most common sort is by rows, top to bottom, you can also sort by columns, left to right. To sort by columns open the Sort Dialog Box, click the *Options* button, choose *Sort left to right*, and click *OK*.



Return to the data tab to locate the sort options.

Figure 16: Sort & Filter Group on Data Tab

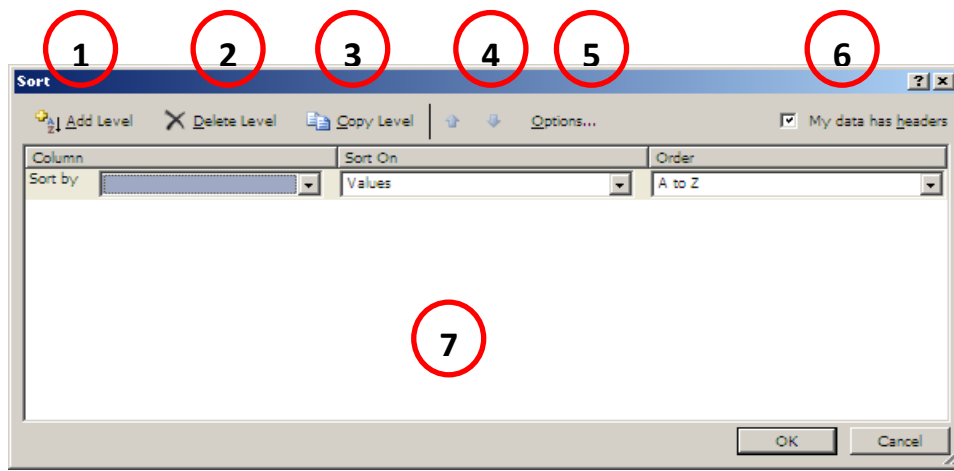

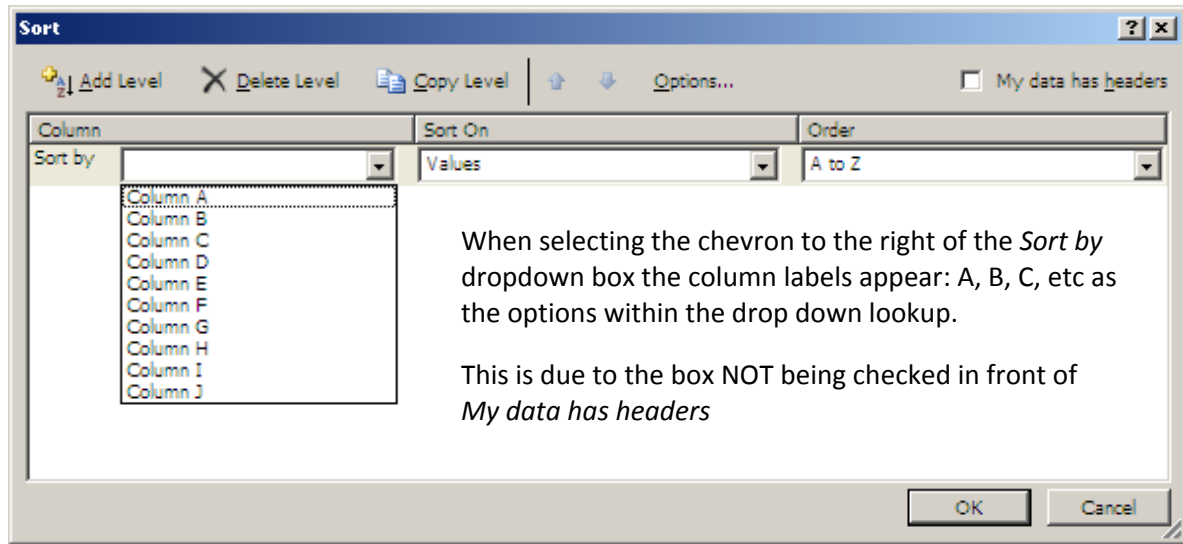
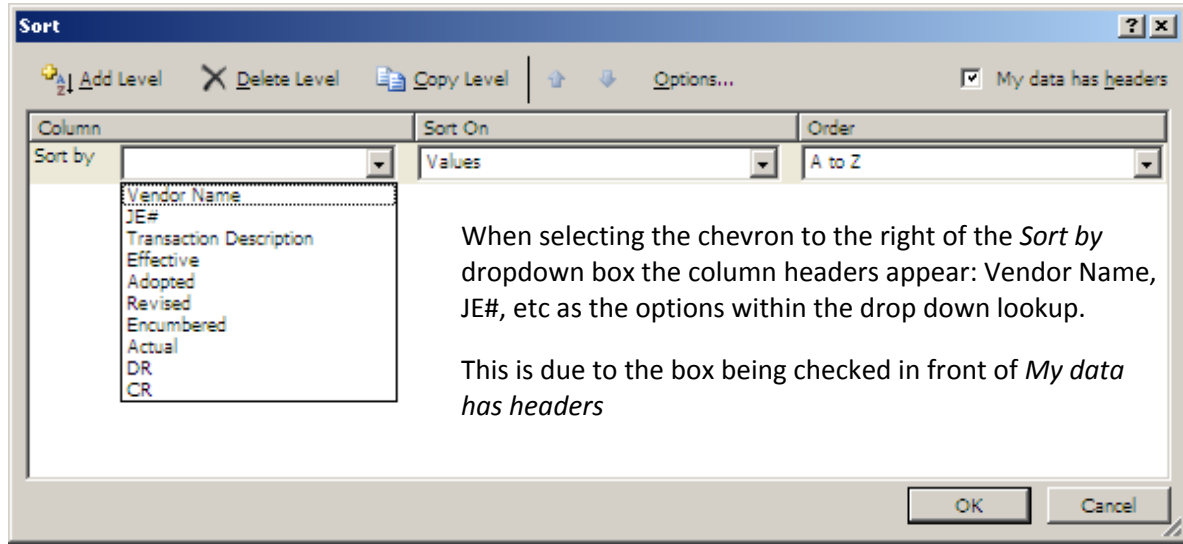
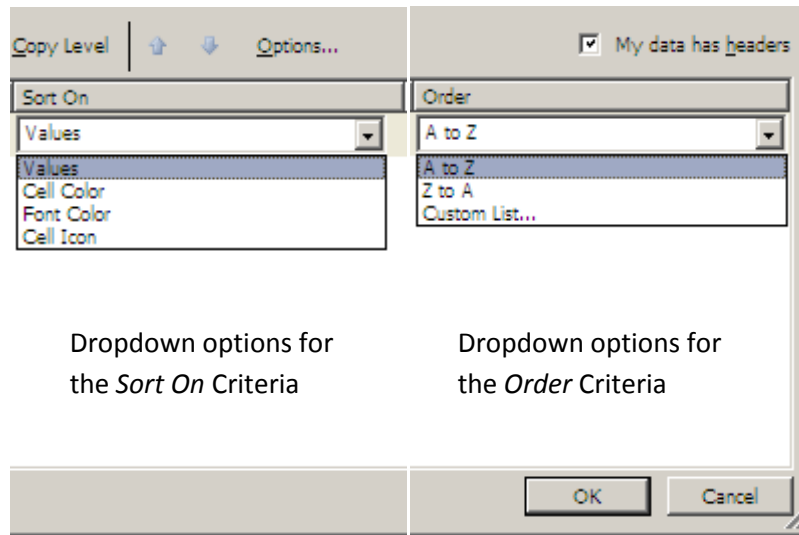


Figure 17: Sort Dialog Box

Sort Dialog Box	
1	Add Level: Can sort by multiple levels. Data is sorted by the order of the levels from top to bottom
2	Delete Level: Navigate to any level you no longer want to sort by and delete it
3	Copy Level: Copies blank levels
4	 Moves the selected level up or down within the different levels
5	Options..... <ul style="list-style-type: none"> • Can change between a top to bottom sort to a left to right; a row to column sort. • Can direct the sort to be case sensitive.

Sort Dialog Box	
6	<p>My data has headers:</p> <ul style="list-style-type: none"> The column drop down box is populated with either the column labels, A, B, C, etc or column headers, Name, Date, etc. NOTE: Common to uncheck the box to display the column labels
7	<p>Column, Sort On, & Order</p> <ul style="list-style-type: none"> Column





Find

The *Find* and *Find & Replace* are used to locate text or numbers within your worksheet; the find merely locates the item, the find and replace locates the item and replaces it with something else.

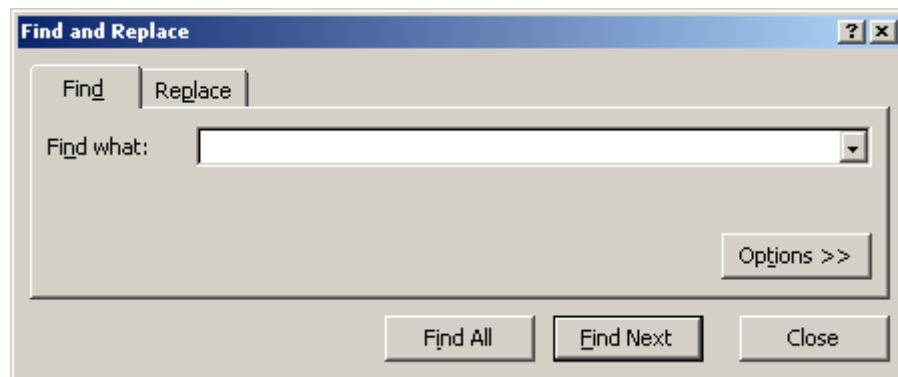


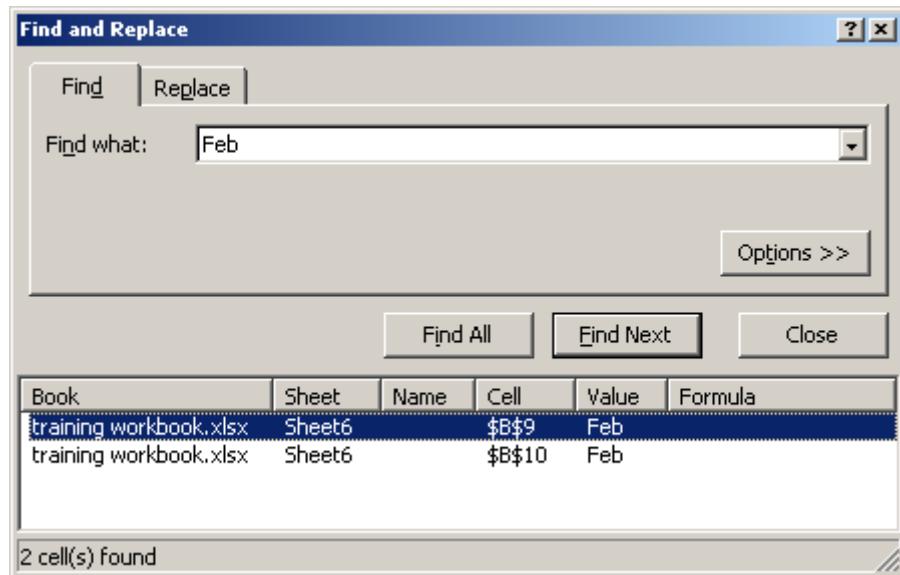
Figure 18: Find & Replace Dialog Box

The *Find* command can be augmented with a wildcard, either an asterisk (*) or a question mark (?).

- Use the asterisk to find any string of characters. For example, s*d finds “sad” and “started”.
- Use the question mark to find any single character. For example, s?t finds “sat” and “set”

To perform the find command:

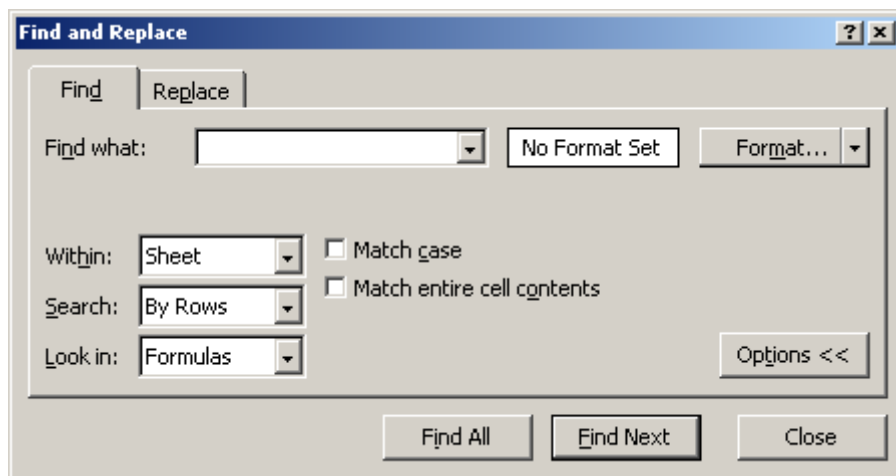
1. Type in the find what box the text you are searching for
2. Select either *find all* or *find next*
 - a. *Find all* will display a drop down itemizing the locations where the particular text was located.
 - b. You may select any cell reference indicated, and your cursor will go to that cell.



- c. *Find Next* will result in the cursor moving to the next cell that contains the content. It will continue locating the next cell, including looping around and starting all over. Pay attention to the cell references so you can note when you have searched through the entire worksheet.
3. Once your search is complete, select *close*

Options are available to further define your search to search for data by:

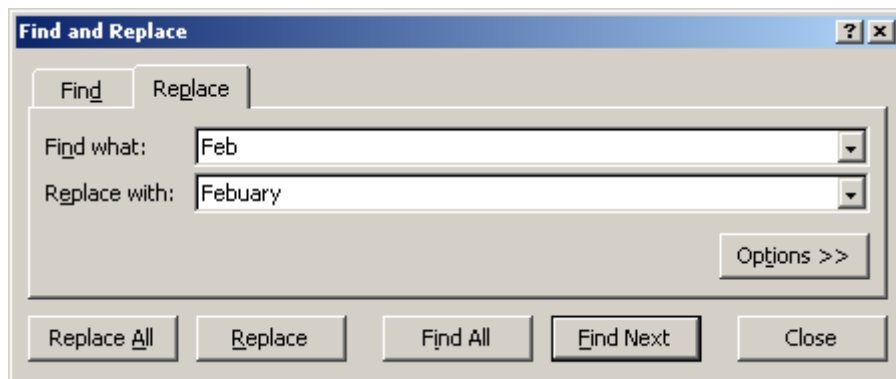
- a worksheet or entire workbook
- rows or columns
- to 'look' in the box and look at the formulas, values, or comments
- case-sensitive data
- exactly what you typed in the *find* box



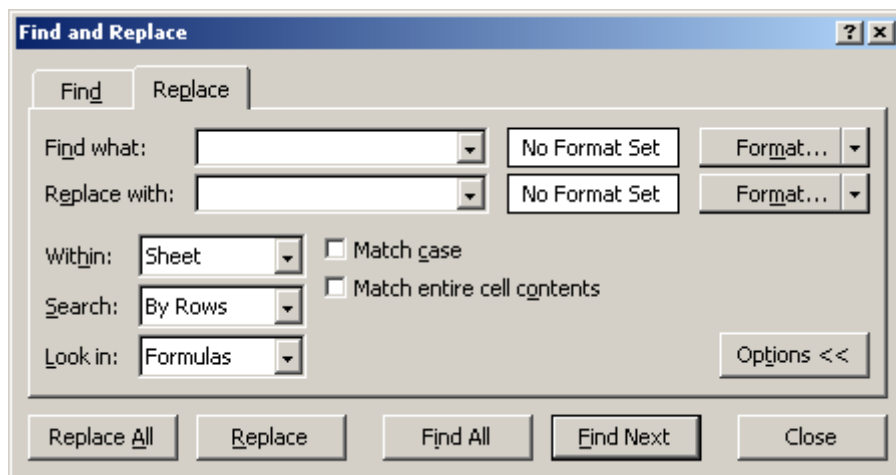
Find & Replace

The *Find & Replace* is an extension of the *find* command. Not only will you locate the item you are looking for, you can change it to whatever you would like. Text as well as formulas can be changed with the *replace* command.

For instance, within your spreadsheet you may have abbreviated February when you would like to have it spelled out in its entirety. You could use the *replace* command 'finding' Feb and 'replacing' it with February. You have control whether you want to replace one cell at a time or all at once.



By selecting Options the selection criteria may be refined. These are exactly the same options as are available with the typical *find* command.



If you would like to approve each cell to be replaced prior to replacement the most efficient method is to use the *find next* option and either replace it by selecting *replace* or *find next* until you locate a cell you want replaced.

To perform the *find & replace*

1. If you have a particular area you want to replace the text in you may select that area, otherwise it will search the worksheet.
2. Complete the *Find what* and *Replace with* boxes.
3. If you want control over what gets replaced:
 - a. Select the *find next* box
 - b. If that cell contents is to be replaced, select *replace* otherwise select *find next*
 - c. Repeat until done, then select *close*.
4. If you don't want control over what gets replaced, other than by selecting the area for the search:
 - a. Select *replace all*
 - b. A pop up appears indicating how many replacements were made

Page Setup Dialog Box

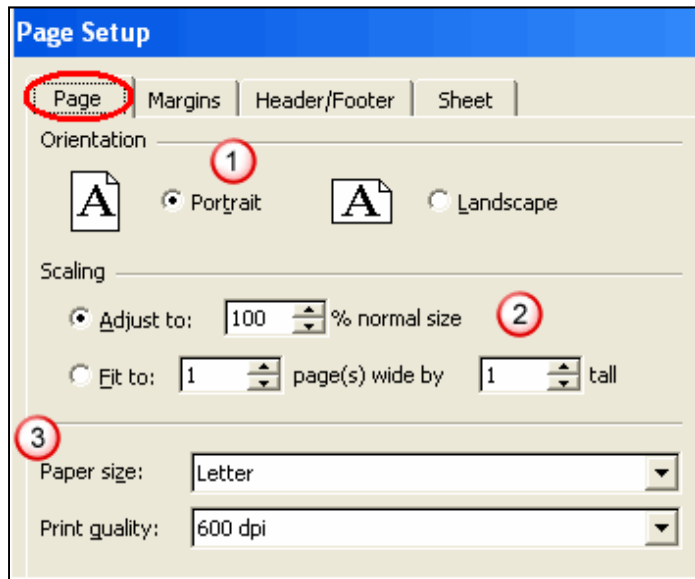


Figure 19: Page Tab on Page Setup Dialog Box

Page Tab on Page Setup Dialog Box	
1	Orientation: Allows you to print sheets sideways (Landscape view). Very useful for spreadsheets that are just a bit too wide to print using the default portrait view.
2	Scaling – Allows you to adjust the size of the worksheet you are printing. Most often used for shrinking an Excel worksheet to fit on fewer sheets or magnifying a small worksheet to make it easier to read.
3	<p>Paper Size- is adjusted most often to accommodate larger worksheets such as changing from the default letter size (8 ½ X 11 inches) to legal size (8 ½ X 14 inches).</p> <ul style="list-style-type: none"> • If you are unable to locate the page size you want it is most likely due to the fact that the printer you have selected does not support that page size. • Select the correct printer and then modify the page size

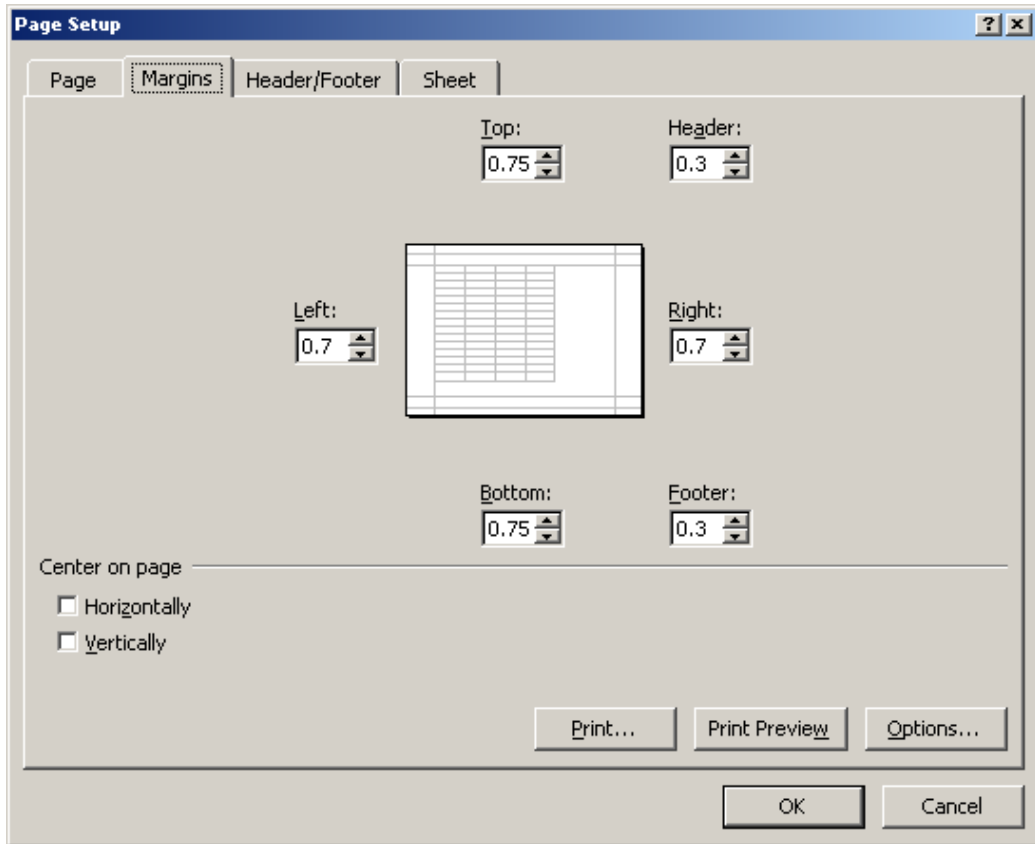


Figure 20: Margin Tab on Page Setup Dialog Box

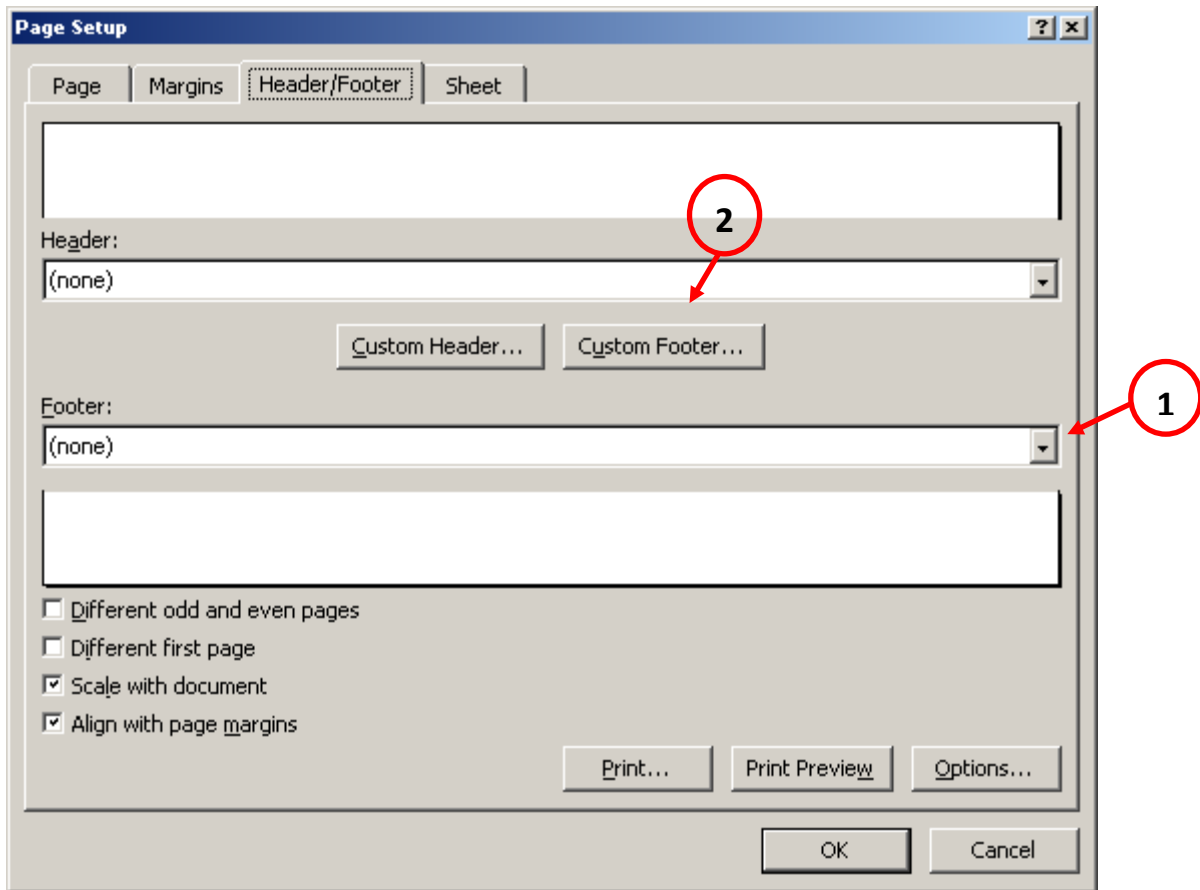


Figure 21: Header/Footer Tab on Page Setup Dialog Box

It is good practice to insert the file information on the footer of each worksheet so that in the future it is easy to find it. Good information to include is the path, file name, and tab name as well as the date and time. This can be accomplished in two ways:

1. Selecting the chevron to the right of the *Footer* option. Excel has several default footers you may choose from.
2. Select the *Custom Footer* to choose the items to be included as well as their placement.
 - a. Often inserting a '\ ' or a couple of spaces in between your fields will make reading it easier

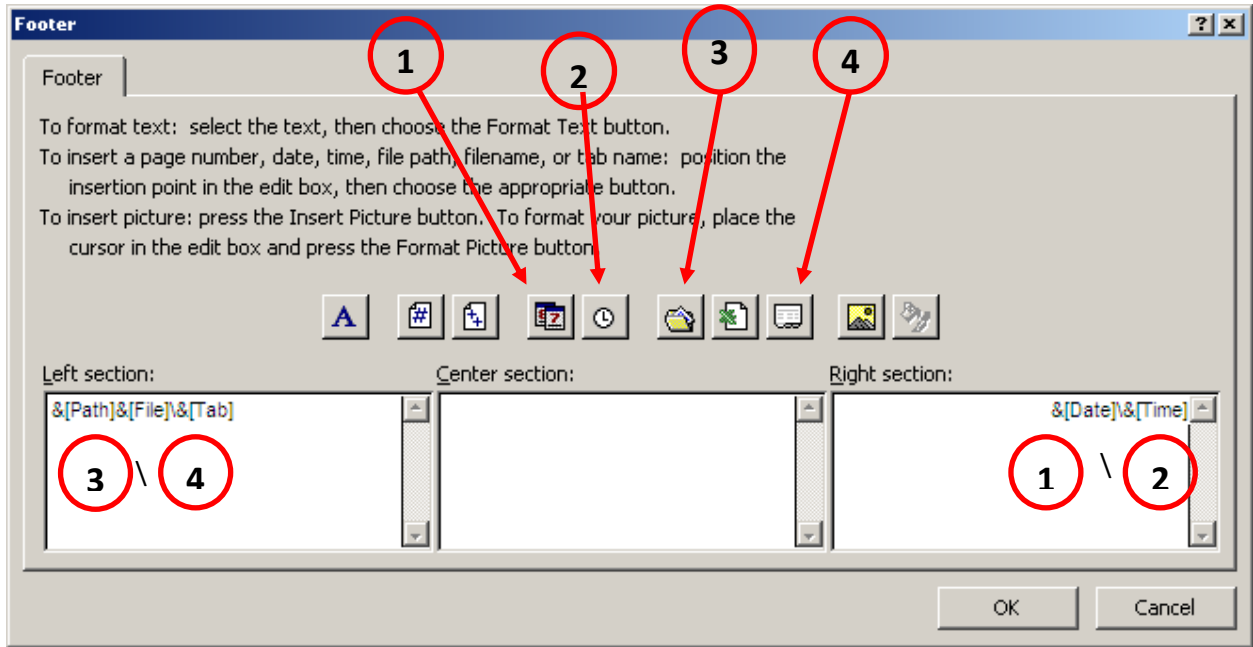


Figure 22: Custom Footer Dialog Box

Custom Footer Dialog Box	
1	Date
2	Time
3	File Directory Path & File Name
4	Worksheet Tab Name

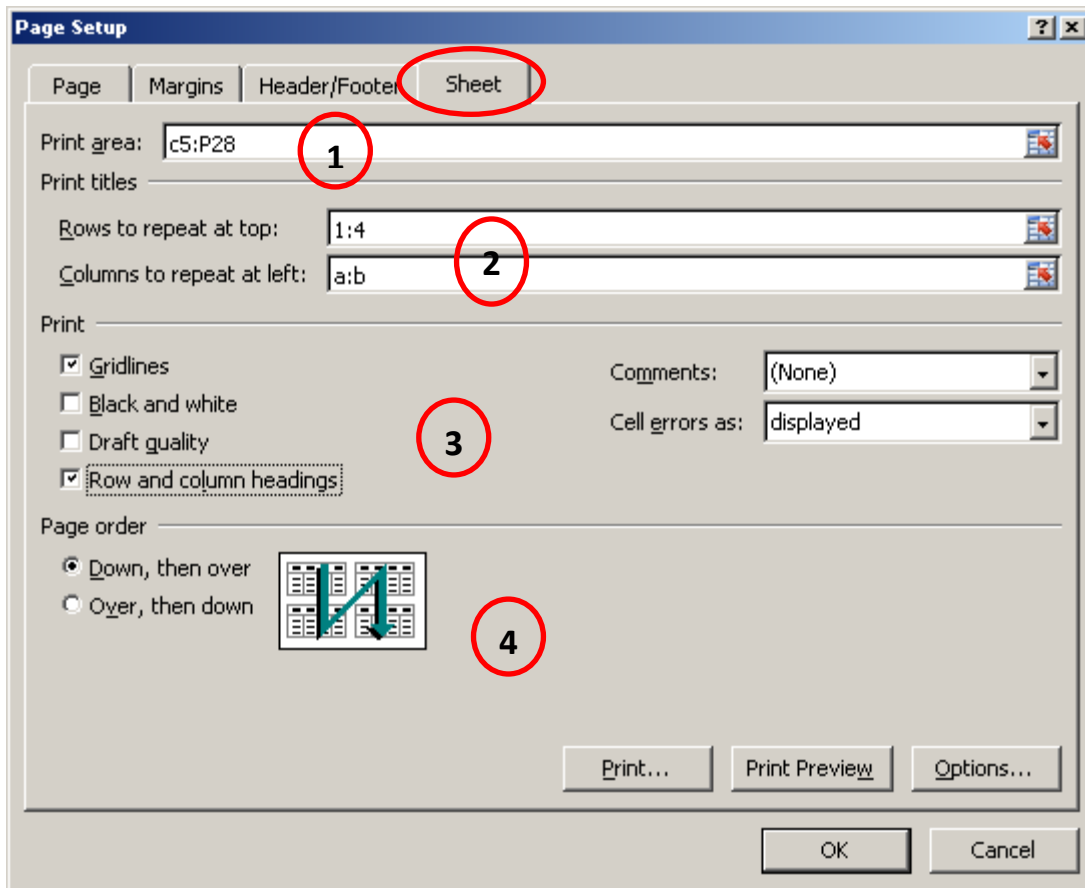
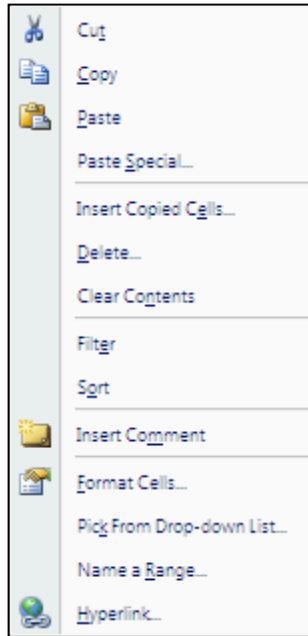


Figure 23: Sheet Tab on Page Setup Dialog Box

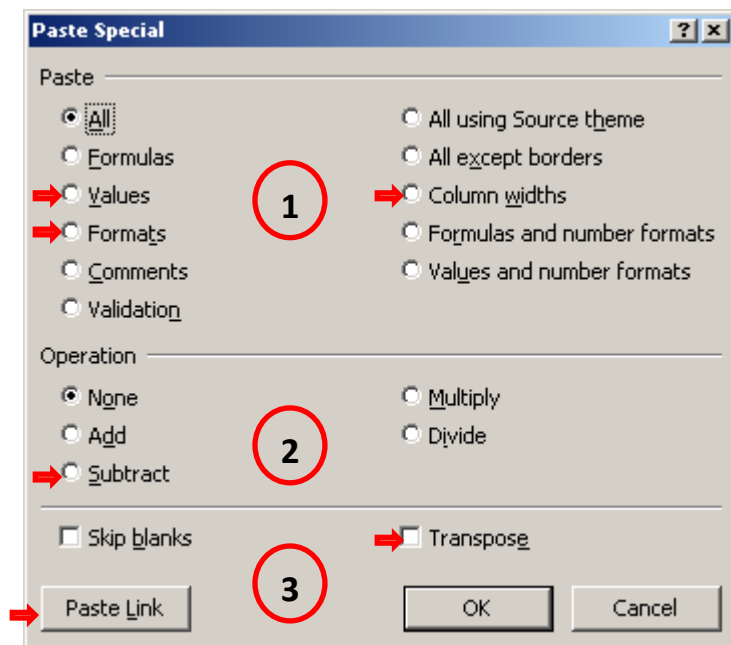
Page Setup Dialog Box	
1	<i>Print Area:</i> Select a range of cells on the spreadsheet to print. Very useful if you are interested only in printing a small section of the worksheet.
2	<i>Print Titles:</i> Used for printing certain rows and columns on every page - usually headings or titles.
3	<p><i>Print:</i> The most commonly used options are:</p> <ul style="list-style-type: none"> • <i>Gridline:</i> For printing the worksheet gridlines – making it easier to read data on larger worksheets • <i>Black and white:</i> Use when you have added color to your spreadsheet for final printing but do not want it during drafts • <i>Draft quality:</i> Prints a quick, low quality draft copy • <i>Row and column headings:</i> Prints the row numbers and the column letters down the side and across the top of each worksheet.
4	<i>Page order:</i> Changes the order for printing pages on a multiple page spreadsheet. Normally Excel prints down the worksheet. If you change the option, it will print across.

Paste Special

Excel normally copies all information in the range of cells you select when you paste the data. By using the paste special command, you can specify other options for the paste portion of the function.



The *paste special* command may be launched from a variety of locations. However the easiest way is after you have selected the items to be copied right click your mouse to launch the option box



Below are the descriptions for the more commonly used options.

The → to the left are in front of my favorites.

Figure 24: Paste Special Dialog Box

Paste Special Dialog Box	
1	<p>Paste options:</p> <ul style="list-style-type: none"> • <i>All</i>: to paste all the stuff in the cell selection (formulas, formatting, you name it). This is what happens when you paste normally. • <i>Formulas</i>: to paste all the text, numbers, and formulas in the current cell selection without their formatting. • <i>Values</i>: to convert formulas in the current cell selection to their calculated values. • <i>Formats</i> to paste only the formatting from the current cell selection, without the cell entries. • <i>Column Widths</i>: to apply the column widths of the cells copied to the Clipboard to the columns where the cells are pasted. • <i>Formulas and Number Formats</i>: to include the number formats assigned to the pasted values and formulas. • <i>Values and Number Formats</i>: to convert formulas to their calculated values and include the number formats you assigned to all the copied or cut values.
2	<p>Operation Option:</p> <ul style="list-style-type: none"> • <i>None</i>: Excel performs no operation between the data entries you cut or copy to the Clipboard and the data entries in the cell range where you paste. This is the default setting. • <i>Add</i>: Excel adds the values you cut or copy to the Clipboard to the values in the cell range where you paste. • <i>Subtract</i>: Excel subtracts the values you cut or copy to the Clipboard from the values in the cell range where you paste. • <i>Multiply</i>: Excel multiplies the data you cut or copy to the Clipboard by the data entries in the cell range where you paste. • <i>Divide</i>: Excel divides the data you cut or copy to the Clipboard by the data entries in the cell range where you paste.
3	<ul style="list-style-type: none"> • <i>Skip Blanks</i>: tells Excel only to paste from those cells that aren't empty. • <i>Transpose</i>: changes the orientation of the pasted entries. Flips data running down a column to running across a row and visa versa. • <i>Paste Link</i>: button establishes a link between the copies you're pasting and the original entries. That way, changes to the original cells automatically update in the pasted copies.

Formulas

Arithmetic & Comparison Operators

Arithmetic & Comparison Operators			
Operator	Meaning	Example	Result
+	Addition	A1+B1	Numeric Value
-	Subtraction or Negative	A1-B1	Numeric Value
*	Multiplication	A1*B1	Numeric Value
/	Division	A1/B1	Numeric Value
=	Equal to	A1=B1	Logical Value (TRUE or FALSE)
>	Greater than	A1>B1	Logical Value (TRUE or FALSE)
<	Less than	A1<B1	Logical Value (TRUE or FALSE)
>=	Greater than or equal to	A1>=B1	Logical Value (TRUE or FALSE)
<=	Less than or equal to	A1<=B1	Logical Value (TRUE or FALSE)
<>	Not equal to	A1<>B1	Logical Value (TRUE or FALSE)

Operator Precedence

If you combine several operators in a single formula, Excel performs the operations in a specific order, described below. If operators within the same formula share the same precedence Excel then defaults from left to right. The user may change the order by which calculations are performed by using parentheses.

The following is an example of why the precedence needs to be understood and why it is important:

Formula	Result	Calculation
=5+2*3	11	(2 times 3) plus 5
=(5+2)*3	21	(5 plus 2) times 3

Operator Precedence	
Operator	Meaning
* and /	Multiplication and Division
+ and -	Addition and Subtraction
&	Text Concatenation
=	Equal to
<>	Not equal to
<=	Less than or equal to
>=	Greater than or equal to

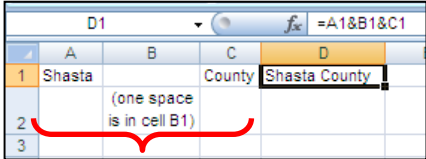
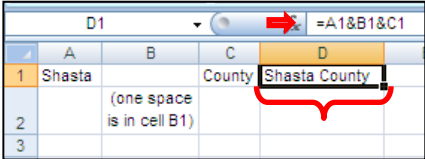
UPPER, LOWER, PROPER, and TRIM

These formulas all work with text. After using one of these functions it is good practice to *paste special\values* so that they will remain in their desired formatting.

	A	B	C
1	Shasta County	SHASTA COUNTY	=UPPER(A1)
2	Shasta County	shasta county	=LOWER(A1)
3	SHASTA COUNTY	Shasta County	=PROPER(A1)
4	Shasta County	Shasta County	=TRIM(A1)
5			

UPPER, LOWER, PROPER, and TRIM	
Formula	Description
=UPPER	Converts all text to upper case
=LOWER	Converts all text to lower case
=PROPER	Capitalizes the first letter in a text string and any other letters in text that follow any character other than a letter, i.e. a space. Converts all other letters to lowercase
=TRIM	Removes all blank, unnecessary spaces at the start and end of a string including extra spaces, tabs, and other characters that don't print.

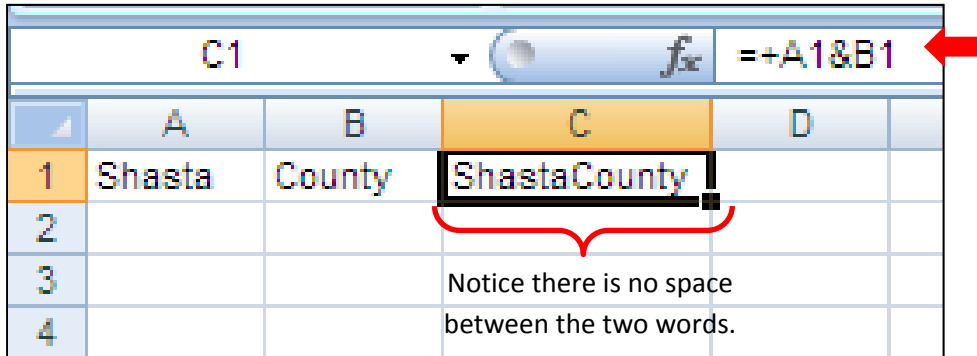
Text Concatenation Operators

Text Concatenation Operators			
Operator	Meaning	Example	Result
&	Connects, or concatenates, multiple values to produce one continuous text value	 <p>Want to combine the values in columns A-C. I added a space, via the space bar, so the words would have a space between them.</p>	 <p>The → shows what the formula in D1 looks like. You can see the value in D1 has the two words combined nicely.</p>

& (Ampersand)

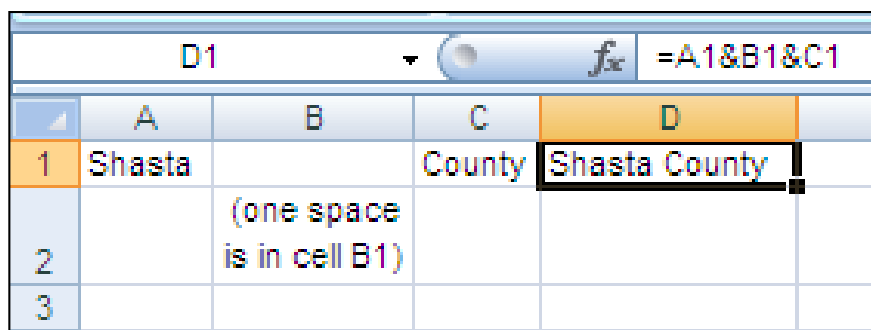
The & connects, or concatenates, multiple values to produce one continuous text value. After using this function it is good practice to *paste special\values* so that they will remain in their desired formatting.

The finished product I want is to have Shasta County in one cell which I can accomplish with the & function. By combining the values in columns A and B I have accomplished my desired task, but quite literally. Note there is no space between the two words in cell C1.



Notice there is no space between the two words.

By adding a column to the right of column A and pressing the space bar once, creating a single space ,



and modifying my formula to now include columns A – C, I now have a more readable result.

Note if your data consists of several rows you would need to copy the blank space in B1 all the way to the last row.