

Microsoft Excel 2008



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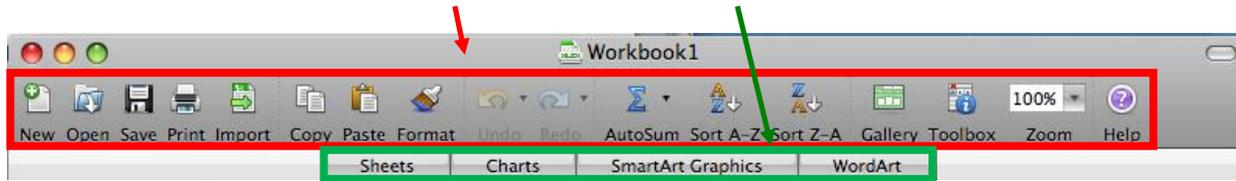
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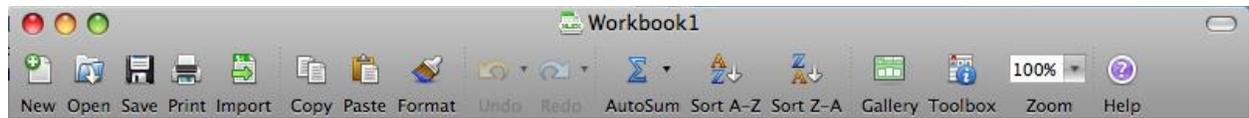
New Look in Microsoft Office 2008

Microsoft Office 2008 introduces a similar look and feel to Office 2004, with the exception of some changes and new features, including the **Standard Toolbar**, **Insert Ribbon**, and a new **Palette**.



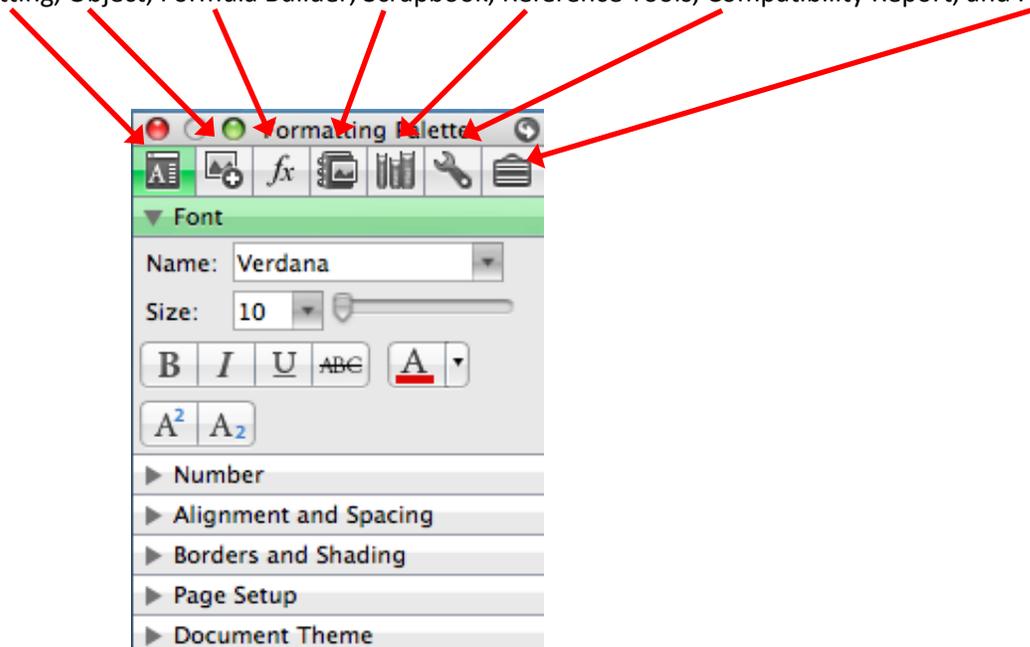
Standard Toolbar

The Standard Toolbar is now a part of the workbook when opening Excel. It may be turned on or off, but cannot be detached from the workbook. You can click **View** → **Toolbars** and check or uncheck Standard.



Palette

The Palette can be found to the right of your document. It is comprised of seven tabs: Formatting, Object, Formula Builder, Scrapbook, Reference Tools, Compatibility Report, and Project Palette.

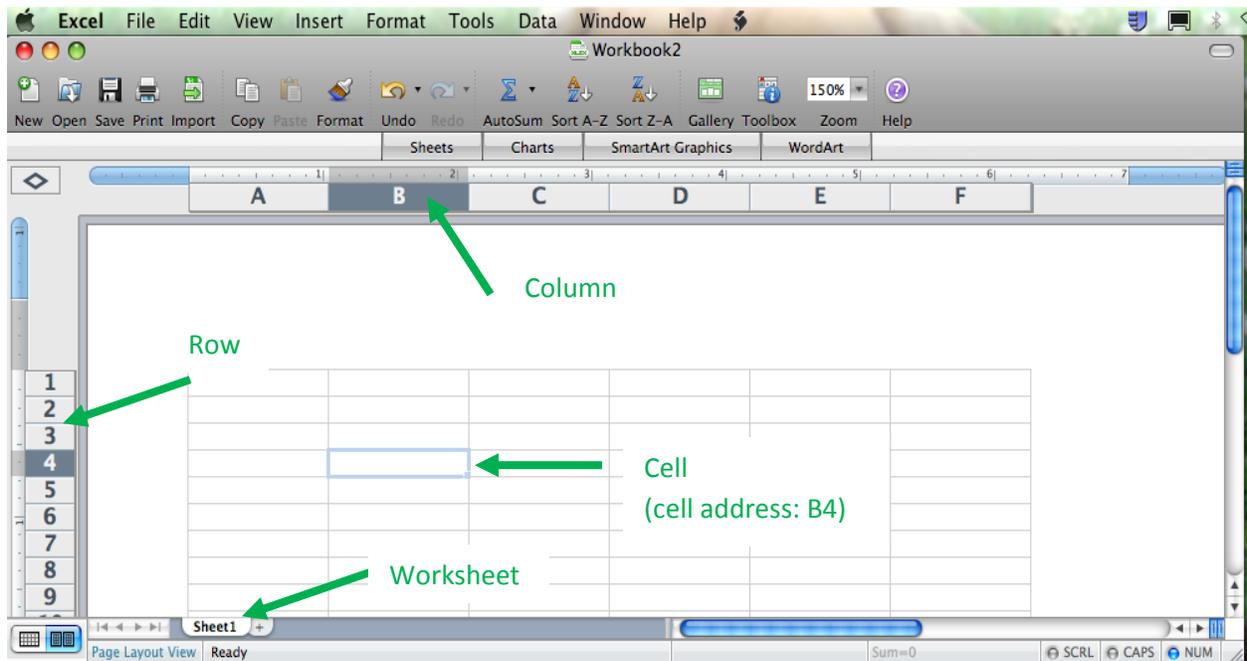


Clicking on a tab will change the available commands on the Palette. It is meant to provide easy access to tools without having to search for them in the Menu bar.

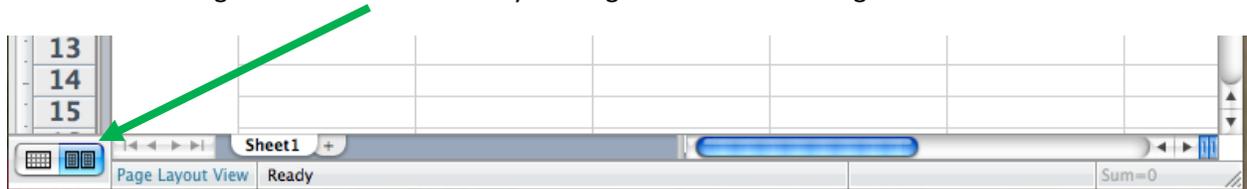
Appearance of Microsoft Excel

Microsoft Excel allows you to create spreadsheets much like paper ledgers that can perform automatic calculations. 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 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 contain text, numbers, or mathematical formulas.

After opening Microsoft Excel, you will be taken to a blank workbook and see the following screen.



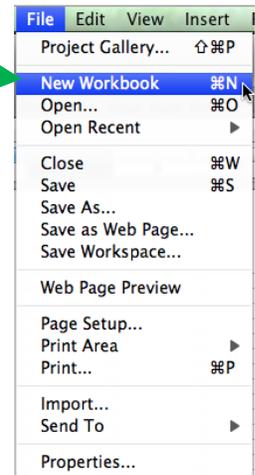
You can also change the **Workbook View** by clicking the view icons along the bottom of Microsoft Excel.



Creating a New Workbook

To begin a new workbook, click **“File”** in the top menu bar and then click **“New Workbook”**. A new blank workbook will open up on the desktop.

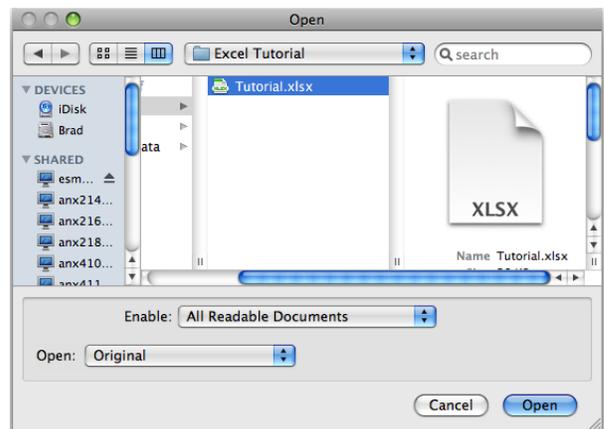
You can also create a new workbook by selecting the toolbar icon that says **“New”** on the Microsoft Excel 2008 toolbar.



Opening a Workbook

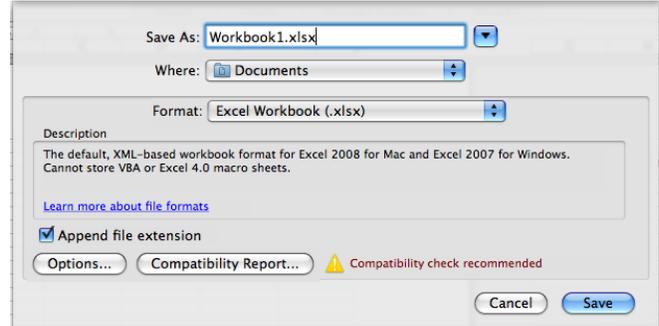
To open an existing workbook, click **“File”** → **“Open”**. The **Open** window will appear. Select the location where you have saved the file, then click on the file name from the list and click the Open button. You can also double click on the file from the list to open the workbook.

You can also open a workbook by selecting the toolbar icon that says **“Open”** on the Microsoft Excel 2008 toolbar.



Saving a Workbook

To save an existing workbook, click **File** → **Save**. If this is a new workbook that you are saving for the first time, the **Save As** dialog box will open. Select the location where you would like the file to be saved, enter a file name and click the **Save** button in the lower right corner of the dialog box. We have set Microsoft Office Excel 2008 to save in the new Excel file format (.xlsx); however, users outside of Eastman may have difficulty opening the workbook if they are on a previous version of Microsoft Excel. In this case, you can change a document to be saved in the Excel 2003/older file format (.xls).



You can also save a workbook by selecting the toolbar icon that says **Save** on the Microsoft Excel 2008 toolbar.



If you have previously saved the workbook, clicking **Save** on the toolbar will save changes to the existing file.

If you prefer to have your changes saved to a different file, click **File** in the top menu bar and then click **Save As**

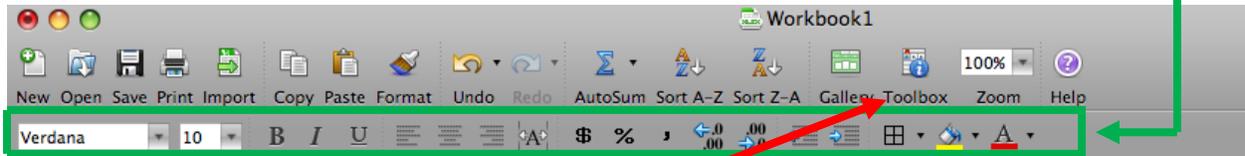
In addition to saving as a .xls and .xlsx, Excel 2008 has the ability to save directly to a PDF file. To save an Excel workbook as a PDF, click **File**, then **Save As**, and change Format to PDF. You also have the option to save the entire workbook or just one specific sheet as a PDF. Select the location where you would like the file to be saved, enter a file name and click **Save**. Note: You should also save the workbook as an Excel file as you won't be able to edit the PDF document that you created from within Microsoft Excel.

Styling your Workbook

The Formatting toolbar can be used to style your workbook, including the formatting of fonts and cells.

Font Formatting

Select the cell(s) you want to format and then select the font, size, style, and color on the formatting toolbar. The formatting toolbar can be accessed by clicking on “**View**”, then highlighting “**Toolbars**” and then selecting “**Formatting**”. If there is a checkmark next to “**Formatting**”, the format toolbar appears above your Excel Workbook.



For more options you can click on the “**Toolbox**” icon on the toolbar.

Copy/Paste Cell

Highlight the cell(s) you wish to copy, click “**Copy**” on the toolbar, move your cursor to the desired cell, and click “**Paste**” on the toolbar.

Cut/Paste Cell

Highlight the cell(s) you wish to move, click “**Edit**” on the menu bar and select “**Cut**”, move your cursor to the desired cell, and click on “**Paste**” on the toolbar.

Cell Formatting

Cell formatting options are available in the Formatting Palette, which appears when you click on the “**Toolbox**” icon on the toolbar.

The Alignment and Spacing group allows the vertical and horizontal alignment of each cell to be set along with the direction of text.

The Number group sets options for the type of number in a cell, such as a percentage or financial figure.

Clicking on the Cell Styles button under the Styles group will allow you to pick a pre-defined cell style.

Find & Replace

A word or phrase can be found within your workbook by using the Find command. Select “**Find**” under “**Edit**” on the top menu, enter the word or phrase in the “**Find what**” box and click the **Find Next** button.

A word or phrase can be replaced within your workbook by using the replace command. Select “**Replace**” under “**Edit**” on the top menu, enter the word or phrase in the “**Find what**” box and enter the word or phrase that should replace the existing word or phrase in the “**Replace With**” box.

Inserting Objects

Insert various types of objects, including pivot tables, tables, illustrations, charts, links, headers & footers, text, and symbols.

Headers and Footers

To have a consistent header on each page of a workbook, double click just above the top row of cells. A cursor will appear and you can enter in a header. A box will also appear and this will let you add additional information into the header. When you are done editing the header, click the **“Close”** button.

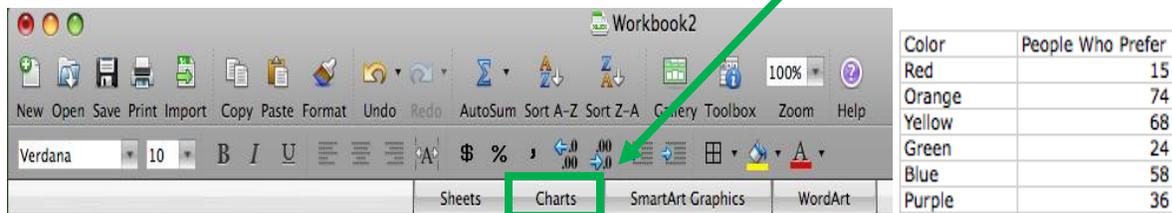
To have a consistent footer on each page of a workbook, double click just below the bottom row of cells. A cursor will appear and you can enter in the footer. A box will also appear and this will let you add additional information into the footer.

Pictures

Place your cursor where the picture is to be inserted and then click **“Insert”** from the top menu. Then highlight **“Picture”** and select the option you wish to get the picture from. If you choose **“From File”** you will have to navigate to where the picture is stored on your computer.

Charts

To create a chart, enter your data in a worksheet and then click the **“Charts”** button. Once you click charts, another toolbar will open that has examples for you to pick from.



Once a chart is selected from the charts group, the chart will appear on the worksheet.

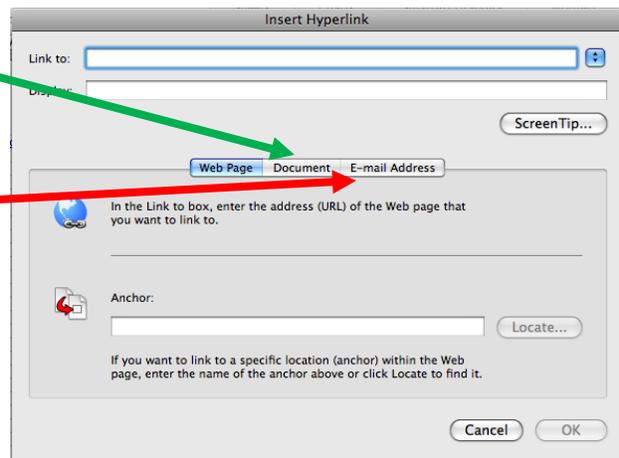
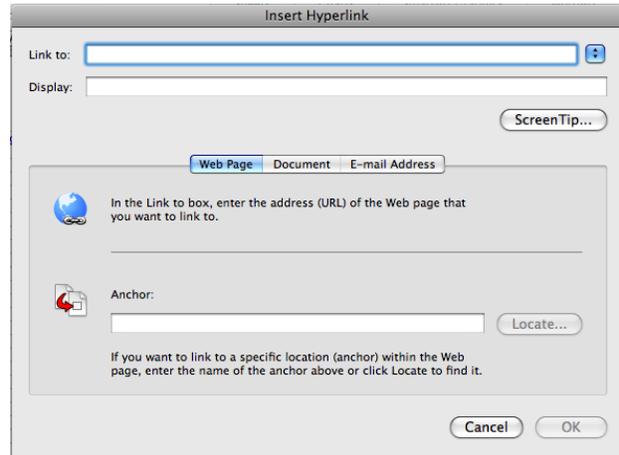
Links

Links to websites or other locations within an Excel workbook can be created by using the hyperlink option under “**Insert**” in the top menu.

To add a website link, in the “**Link to**” section, put the full web address of the website. In the “**Display**” box you can put the text you want to show up for the link. For example, enter <http://www.esm.rochester.edu/esmtmp/ecs/passwords/changepass.php> in the “Link to:” section and “Change your Eastman Password” in the “Display” box.

To put a link to another document, you can click on the “**Document**” button and then you can click “select” and pick the location of the file you want to link.

To put a link to an E-mail address, click on the “**E-mail Address**” button and then you can enter in the Email address in the “**To**” box and the subject in the “**Subject**” box.

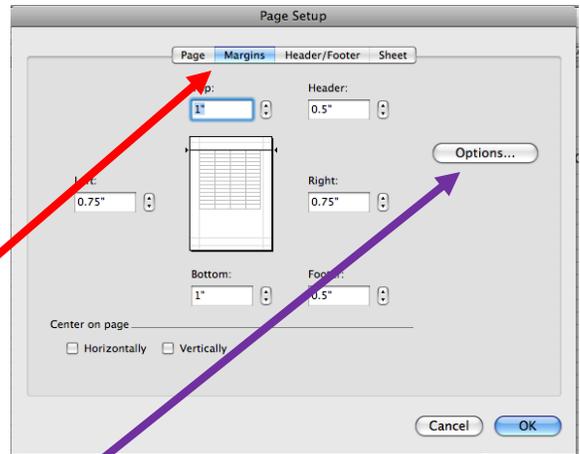


Workbook Layout

Page Setup

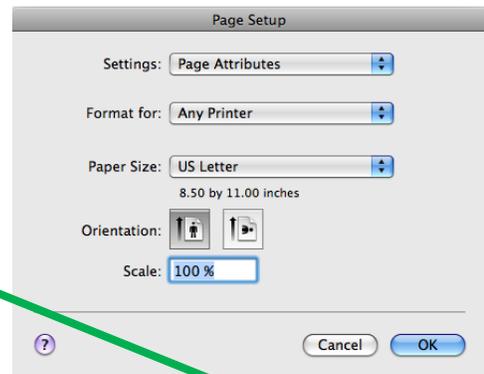
To access Page Setup, click on "File" in the top menu and then click on "Page Setup" and the screen to the right will appear.

To set the margin for your worksheet, click on "Margins" and then adjust the margins by clicking on the up or down arrows, or enter your own margin size in the text boxes.



To change the page orientation of your worksheet, click on "Options" and select a Portrait or Landscape orientation.

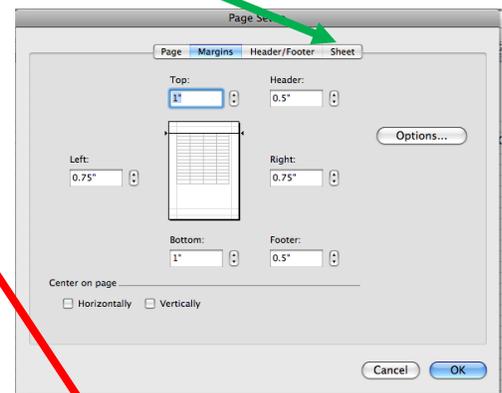
To change the paper size, click on the arrows by the "Paper Size" box and then select from the list of pre-defined paper sizes or click More Paper Sizes to enter a customized size.



Viewing Gridlines & Headings

The "Sheet" button in Page Setup contains the options to specify whether gridlines and headings are displayed when the workbook is being viewed or printed.

The Formatting Palette also gives you these options. The Formatting Palette can be found by clicking on the "Toolbox" in the toolbar.



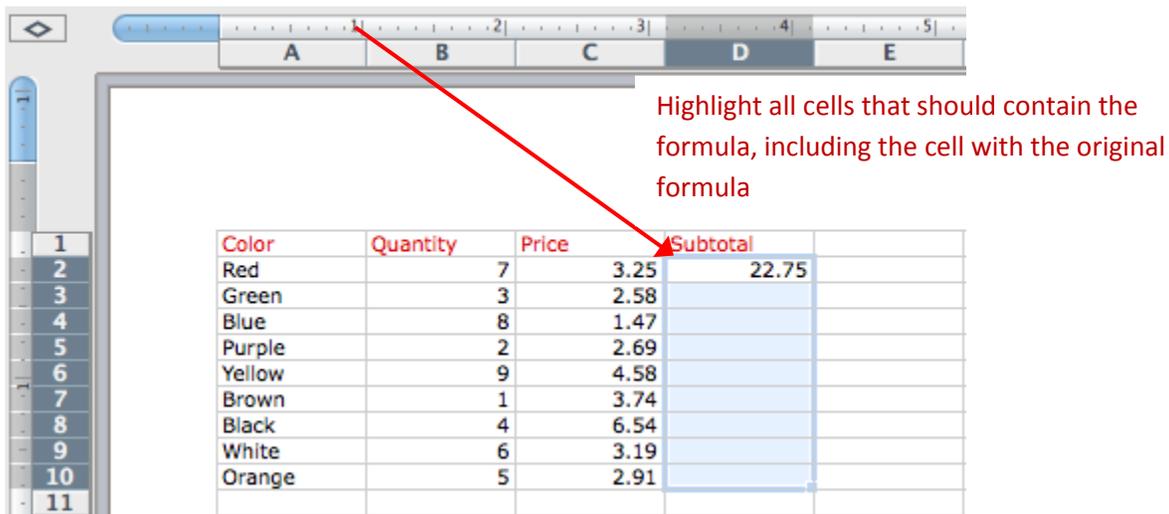
Formulas

Formulas can be used to assist with adding functions to allow calculations to be performed in an Excel workbook. Formulas and functions are typed in the formula bar and are always preceded by an equal sign (=). To get the functions toolbar, click on “**View**” in the top menu and then “**Formulas Bar**”.



A formula is an equation that performs calculations on values in a sheet. For example, to create a formula in the sample sheet that will calculate the quantity times the price, select cell E5 and in the Formula Bar, type **=C2*B2**. This will ensure that cell D2 displays the total subtotal for the entire quantity.

After hitting Enter, the Subtotal will calculate. Rather than typing in the same formula for all the subtotals, you can simply highlight all of the cells where that formula should be used, including the original cell that contains the formula, then click on “Edit” and scroll down to “Fill” and select the direction.



Highlight all cells that should contain the formula, including the cell with the original formula

	Color	Quantity	Price	Subtotal
2	Red	7	3.25	22.75
3	Green	3	2.58	
4	Blue	8	1.47	
5	Purple	2	2.69	
6	Yellow	9	4.58	
7	Brown	1	3.74	
8	Black	4	6.54	
9	White	6	3.19	
10	Orange	5	2.91	

The cells should all fill in with the correct formula. Now, if you change a price or quantity, the Subtotal will still be correct because you used the cell address rather than the value in the formula.

Linking Worksheets

You may want to use the value from a cell in another worksheet within the same workbook. For example, the value of cell A1 in the current worksheet and cell A2 in the second worksheet can be added using the format "sheetname!celladdress". The formula for this example would be "=A1+Sheet2!A2" where the value of cell A1 in the current worksheet is added to the value of cell A2 in the worksheet named "Sheet2".

Basic Functions

Functions can enhance formulas by allowing more complex calculations to be performed.

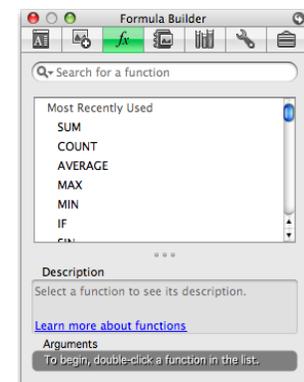
For example, if you wanted to add the values of cells A1 through A9, you could type the formula “=A1+A2+A3+A4+A5+A6+A7+A8+A9”. While this method will work, it’s very inefficient. Instead, the SUM function can be used by entering “=SUM(A1:A9)”.

The calculations performed by a function are done in a particular order, or structure. The structure of a function always begins with the equal sign (=), followed by the function name, an opening parenthesis, the arguments for the function separated by commas, and finally a closing parenthesis.

Here are some of the most commonly used functions within Excel:

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
TODAY	=TODAY()	Returns the current date (leave the parentheses empty)
IF	=IF(E1<100,"OK","Over Budget")	If condition (E1<100) is met, returns true (“OK”), or false (“Over Budget”)

Functions can be added by selecting from among the Function Builder toolbox. Click on the “fx” button on the formula toolbar. Select the cell that should contain the function and then select the function by clicking the function group type and selecting the particular function. For example, to add the average function, click Sum and then click Average. The function will be added to the cell and will automatically guess which cells should be included. If it selects the wrong cells, you can manually change the values by adjusting the formula within the formula bar.



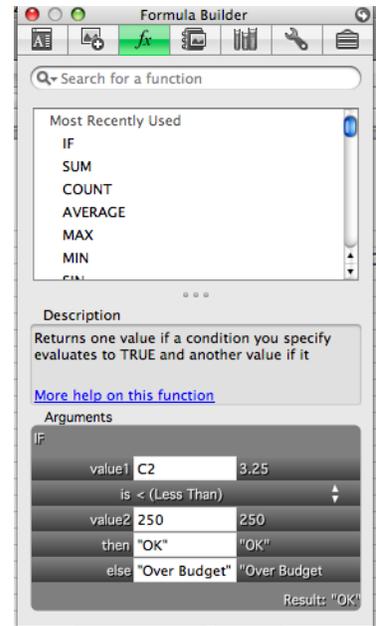
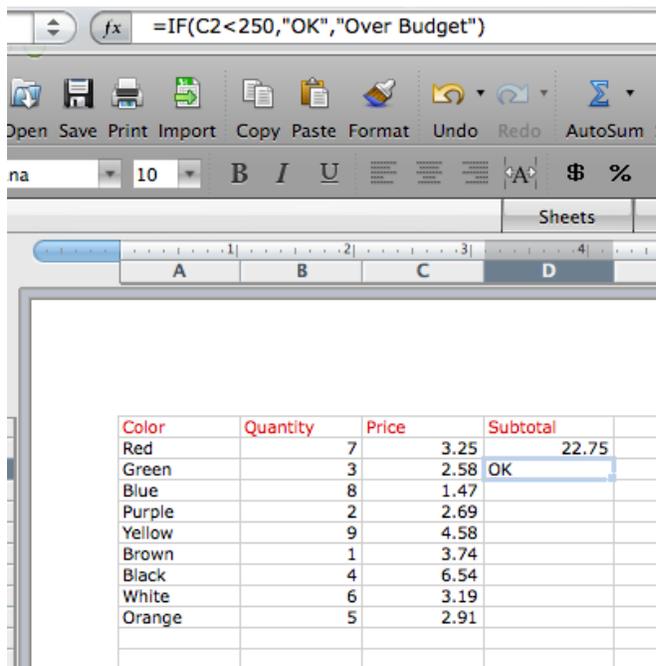
In addition to using the Formula Builder to insert functions, you can type the name of the function directly into the formula bar or use the Insert Function icon next to the formula bar.



Clicking on “Insert” in the top menu and then “Function” icon will bring up the Formula Builder Window. This window provides the list of functions available in Excel, with a brief description of each. Choose the one that you want to use and click ok.

For example, if within our spreadsheet we want to determine if the price is within our budget or not, we can use the IF function. After choosing the IF function, the “Arguments” section appears below. Next to *Logical_test*, fill in the parameters in which you are going to be testing. In our case, we want to see if the total is under our budget of \$250. Therefore, we type G2<250, then under *Value_if_true* we write Ok and under *Value_if_false*, we write Over Budget.

The formula can be seen in the formula box, and the result was placed in the cell.



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 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 that 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. For example, to use absolute referencing with the above example, write the cell as "=(A\$1+\$B\$1)" so that if cell C1 is copied, it will contain the values of A1 + B1 and not A2 + B2. **Mixed referencing** can also be used where only the row OR column is fixed. For example, in the formula "=(A\$1+\$B1)", the row of cell A1 is fixed and the column of cell B2 is fixed.

Data

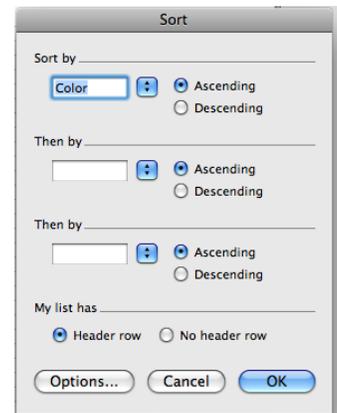
Get External Data

To add data to an Excel workbook from an external source, such as a CSV file, FileMaker Pro database, HTML file, or Text file, click the “Import” icon on the toolbar then select the type of file to import that data from.



Sort & Filter

To sort data within an Excel workbook, highlight the data that you want sorted, click “Data” on the menu bar, and then click “Sort”. A Sort window will appear, giving you the ability to select how the data should be sorted. In the example to the right, our data will be sorted by Color. To remove one of the sort criteria options, click the criteria you want removed and select “None” from the Sort by list.



To apply a filter to data within an Excel workbook, select the cell you want to filter by, click “Data” in the menu bar, select “Filter” and click “Auto Filter”. Click on the drop down icon in the column that you want to filter by and check any values that you want to filter by. Once you select which to filter by, your data will be filtered and you will only see the data that you checked. To see the full list, select “(Show All)”.

Color	Quantity	Price	Subtotal
Red	7	3.25	
Green	3	2.58	
Blue	8	1.47	
Purple	2	2.69	
Yellow	9	4.58	
Brown	1	3.74	
Black	4	6.54	
White	6	3.19	
Orange	5	2.91	22.75

Reviewing & Proofing

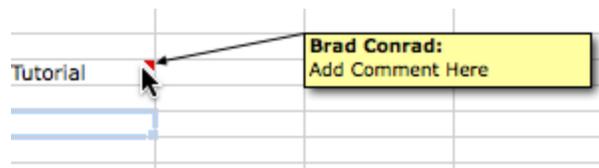
Office 2008 does not have a separate tab for “Reviewing” as various reviewing and proofing options can be found under **Tools**.

Proofing

- To check for spelling problems within the workbook, click “Tools” on the menu bar and then click the **Spelling** icon to check for spelling problems within the workbook.
- To use the **Thesaurus** within the workbook, click “Tools” on the menu bar and then click on **Thesaurus**. If you highlight a word and then use the Thesaurus, the thesaurus will automatically look up the highlighted word.

Comments

To insert a comment in a workbook, highlight the cell you want commented and then click “Insert” from the menu bar and select “Comment”. A comment box will appear to the right of your workbook where you can enter the comment.



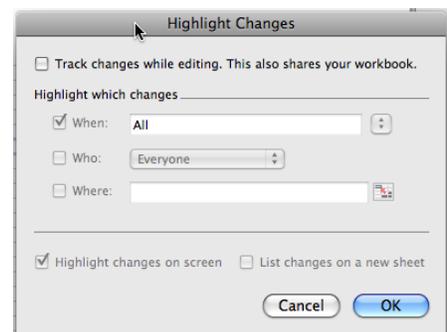
Each cell that has a comment associated with it that will display a little red triangle in the upper-right hand corner of the cell. To display hidden comments, right-click on the cell and select Show/Hide Comments.

To remove the comment, Control-Click on the cell that has the comment you wish to remove and select **Delete Comment** from the popup menu.

Tracking Changes

Tracking changes can be a valuable tool if you are sharing an Excel workbook with someone else. If you turn track changes on and have someone else edit the worksheet, when they send it back, Excel will display the changes they made and allow you to accept or reject them.

To turn tracking changes on, click “Tools” on the menu bar, then select Track Changes and click Highlight Changes. A Highlight Changes window appears. Click *Track changes while editing*. *This also shares your workbook*. Any changes made to the cells in a workbook will display a black triangle in the upper-left hand corner of the cell.



To accept or reject a change, click “Tools” from the menu bar, then select “Track Changes” and click “Accept or Reject Changes”. An *Accept or Reject Changes* wizard will appear, allowing you to specify whether the change should be accepted or rejected.

Viewing Workbook

This section is used to set how you want your workbook to be viewed while you are working on it.

Workbook Views

The default view in Microsoft Excel 2008 is **Page Layout**, displaying each page separately. The workbook view can be changed by selecting one of the other Layout options from the **“View”** menu bar.

Toolbars

Under **“View”** on the menu bar, you can select different components of Excel to be displayed, including the ruler, gridlines, and formula bar.

Zoom

Within the toolbar, the zoom level of the document can be set. To change your zoom level, click the **“Zoom”** icon and select the level.