

Excel 2007 Basics

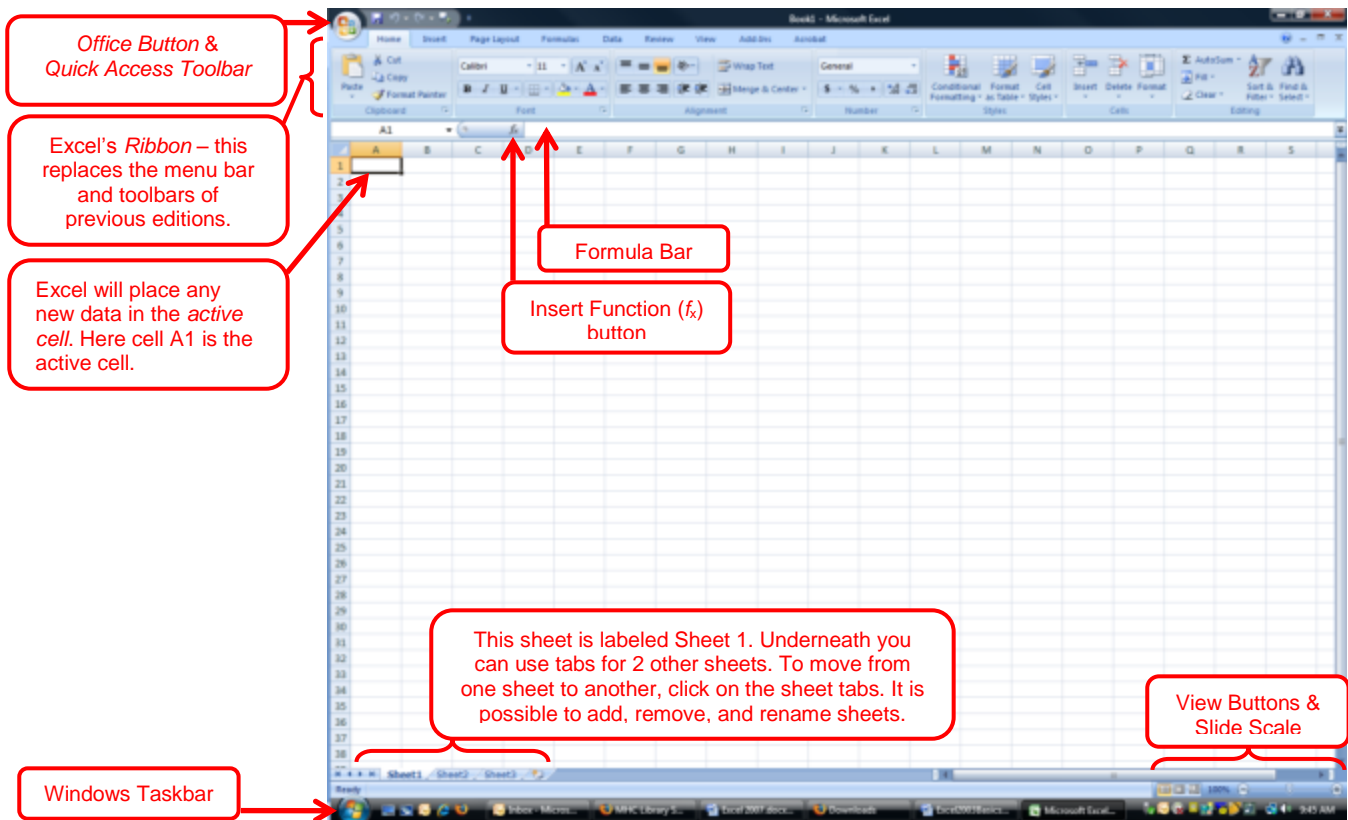
Excel is a spreadsheet application; it is a means to record numerical data in columns and rows, and manipulate the data to derive information. The spreadsheet is one of the most useful computer applications and has revolutionized the way accounting is done.

This handout is meant as a short guide to get you started. If the information you need is not covered here, or you need more detail consult the help function in Excel or checkout an Excel instruction book from the library.

STARTING EXCEL

Click on: *Start* button (Task Bar) > *All Programs* > *Microsoft Office* > *Microsoft Office PowerPoint 2007*. Excel will open with a blank spreadsheet and you may begin to type in this document.

Each time a new spreadsheet is started, a screen similar to the following will open:



The active cell is marked with a thick, dark border and named according to the row and column it is in. There are three ways to move the active cell:

- ~ Use the up, down, left and right arrow keys
- ~ Use the mouse to click on a particular cell
- ~ Press F5 then type in the cell's address

SELECTING CELLS

To modify the contents of a cell they must first be selected. The procedure is similar to that in a word processing program.

- ~ To select one cell, place the mouse pointer over the cell and click.
- ~ To select a group of cells, place the cell pointer on the first cell of the group, and hold the mouse button down while dragging the mouse to the last cell of the group. As you hold and drag the mouse, the active cell box will enlarge and all the cells except for the initial cell will be shown in reverse colour.

DELETING CELLS

To delete contents from a single cell, click on the cell with the mouse pointer and press <Delete>. To delete a range of cells select a range (as describe above) and press <Delete>.

ENTERING AND EDITING DATA

Entering data. To enter data click on the cell that will contain your new data, click once on a cell. Once the cell is active you may type your new data

Editing data. Click on the cell that has the data that you want to edit. If you simply want to *replace the data*, type your new data into the cell.

If you want to change the data in the cell you must double-click on the cell.

- ~ To *replace part of the data* in the cell use your mouse to drag and select the data to replace. Then you can type your new data (similar to many word-processing programs).
- ~ To *delete part of the data* in the cell select the data and then hit <Delete> or <Backspace>.

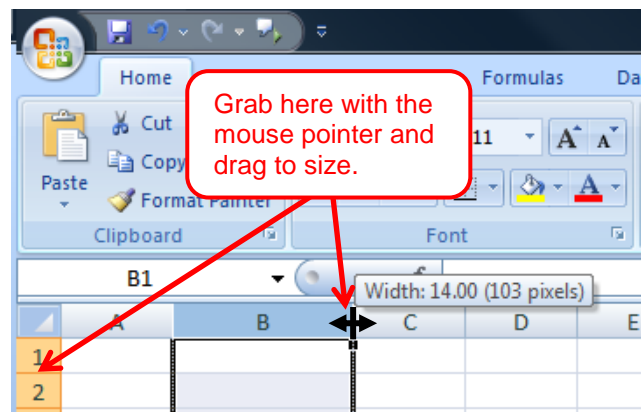
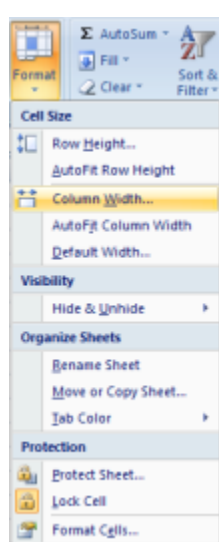
After you are done entering the data you can use the <Tab> key to move to the cell to the right, or the <Enter> key to move one cell down.

SIZING ROWS AND COLUMNS

You can adjust the width and height of the columns and rows in the worksheet. To widen a row or column move the mouse pointer and place it on the boundary between columns (or rows) inside the column (or row) bar (the bar that contains the names of the columns or rows), then click and hold down the mouse button. The pointer will change to a double pointer arrow (↔). While holding, drag the pointer until the column is the correct width (or the row is the desired height).

METHOD 2: You can select the *Format* button in the *Cells* panel on the *Home* tab of the *Ribbon*. Select your desired option and manually enter the row height or column width.

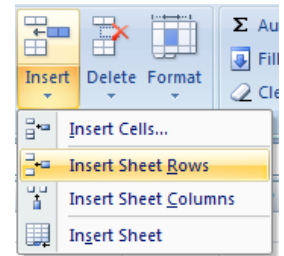
METHOD 3: A third method would be to right click on the row (1, 2, 3, etc.) or the column letter (A, B, C, etc.). With this method, a contextual menu will appear and you can select the option to modify row height or column width.



INSERT COLUMNS AND ROWS

Excel will always add columns to the left of the active cell or insert a new row above it – it depends on which function you want to perform. To insert a new column or row, select the appropriate cell. Select the *Insert* button (in the *Cells* panel on the *Home* tab of the *Ribbon*)

Insert a row. Excel will always insert a new row above the active cell. To insert a new row, select the appropriate cell. From the *Insert* menu select *Rows*. Excel will insert the new row.



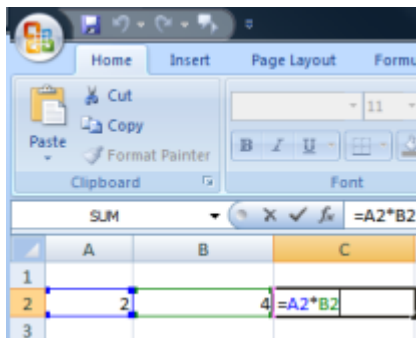
FORMULAS AND FUNCTIONS

Excel allows you to use formulas (mathematical formulas that you input) and functions (mathematical formulas that are available in Excel) to calculate results from your data.

Creating your own formula. To enter a formula in a cell, click on a cell and type the formula.

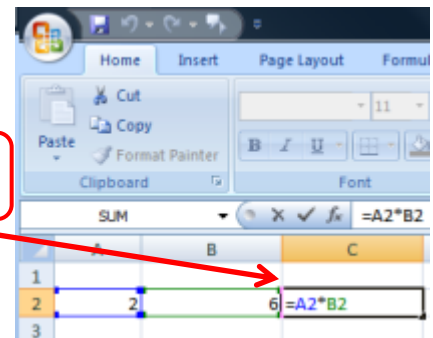
Note that:

- ~ All formulas begin with the equal (=) symbol
 - o The following operators can be used to build a formula: * (multiplication), / (division), + (addition), - (subtraction)
- ~ If you build your formula with numbers it will always remain the same.
 - o For example, the formula $=2*4$ will always produce the result 8.
- ~ If you build your formula using cell references you will produce a result that changes as the reference cells change.
 - o For example, the formula $=A2+B2$ will produce a result based on the number contained in those two cells.

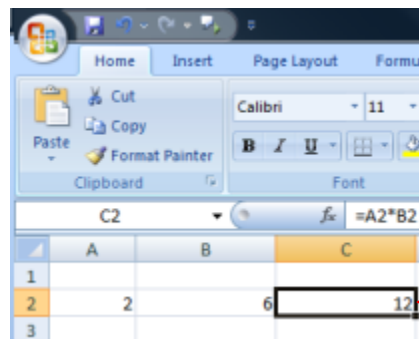


Here $A2*B2$ would give the result 8.

Here $A2*B2$ would give the result 12.




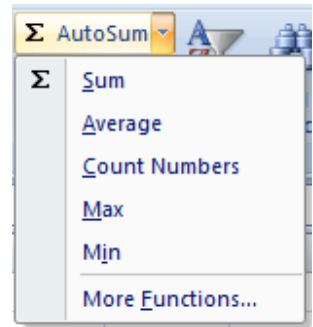
If you click on a cell with a formula, the formula will be displayed at the top of the worksheet.



After you type the formula and exit the cell, Excel will calculate and display the result.

- ~ You can use parentheses to help you build your formula. Any part of the formula in parentheses will be calculated before the rest of the formula.
 - o For example, $=(A3*C2)-A3$ will subtract data in cell A3 from the multiplied product of cells A3 and C2.

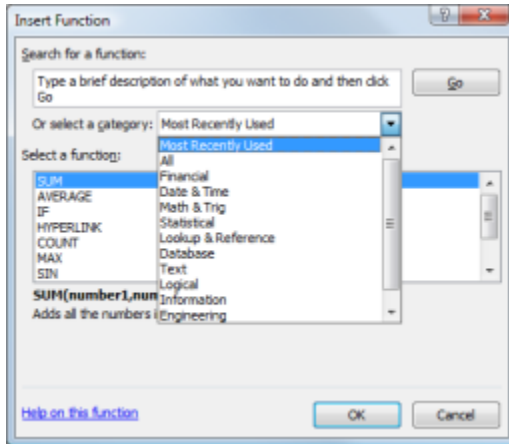
Inserting functions. Excel has many formulas built into the program. To access additional functions, select the drop arrow to the right of the Σ (sigma) icon in the *Editing* panel of the *Home* tab toolbar, a drop menu will appear. From the drop menu, select *More Functions* to access additional Excel functions. You can also access the additional functions by selecting the  (*Insert Function*) icon immediately to the left of the *Formula Bar*.



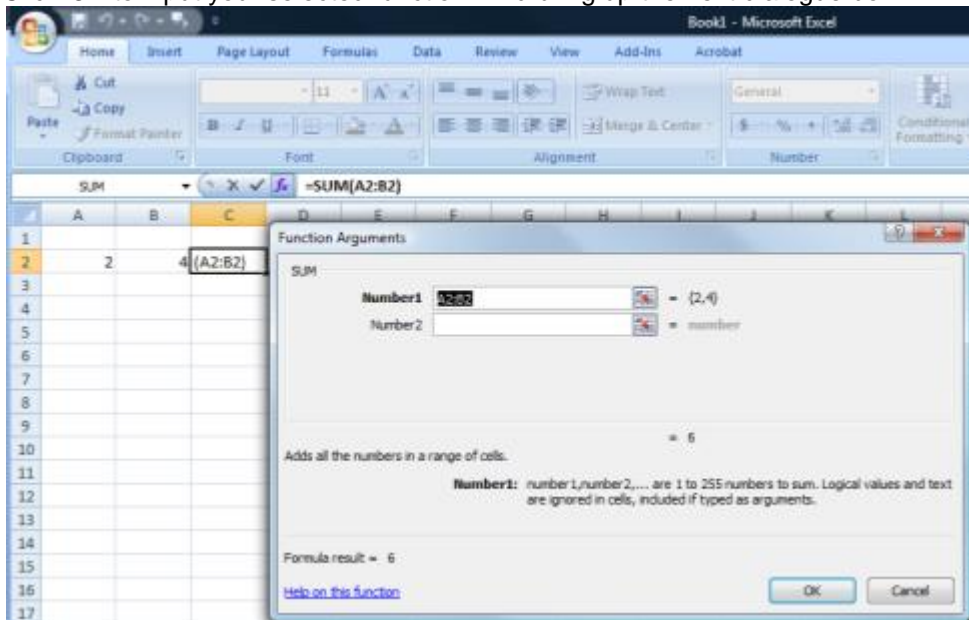
Excel has a library of several hundred math and statistical functions that can be chosen with this button. The *Insert Function* feature helps guide you through the steps to correctly implement a function in Excel.

~ To insert a function:

- o Click in the cell where you want the function.
- o Then open the *Insert Function* window – as described above. This will open the following dialogue box:



- o Click *OK* to input your selected function. And bring up the next dialogue box:



- o NOTE: Excel makes an attempt to choose the list of numbers that you want to sum. If this cell range is incorrect you can change the selection. You can do this by selecting the range with the mouse pointer (you may have to drag the dialog box off to the side to expose the column of numbers). When you select the range to insert into the calculation you will see the cell's reference appear in the text box.
- o Click *OK* to complete the calculation and close the *Insert Function* window.

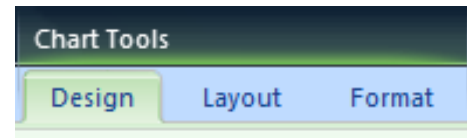
CREATING A CHART

Excel's has the ability to generate charts. These graphic representations of your data will help you better visualize the data that you are presenting.

- ~ Select the data you want to include in the chart or graph. Ensure that all the information you select can be charted sensibly (for example, taking information from data that is not related or not comparable – such as the main title of the worksheet, will not make a sensible chart).
- ~ Select the *Insert* tab on the *Ribbon*, and click on the desired chart style/type in the *Charts* panel.



- ~ A sample of the chart is displayed. If the chart is selected, a new series of tabs will appear in the *Ribbon*. The new set of tabs are collectively called *Chart Tools*. These chart tools will allow you to customize the appearance and contents of the chart.




FORMATTING OPTIONS

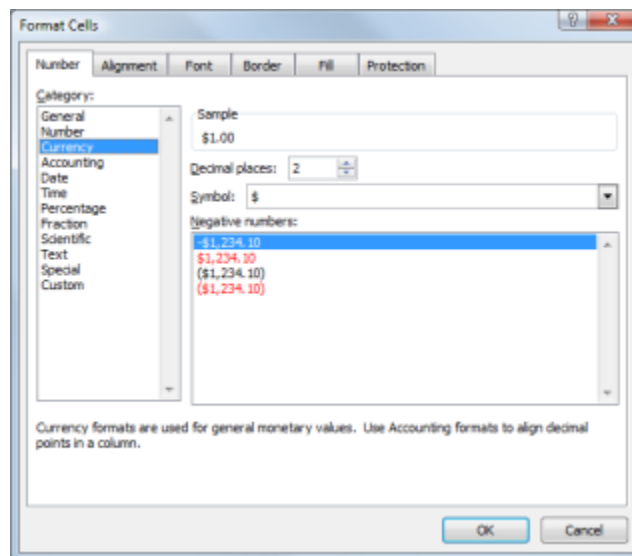
Some of the most common formatting options are accessible via the *Ribbon's Home* tab.



Borders. Highlight the cells to be bordered. On the *Home* tab, select the *Borders* button and then select a border style from the options that are displayed. The cells will now be surrounded by the desired border format.

Formatting Numbers. Select the cells that contain the numbers to be formatted. Select the *Format*

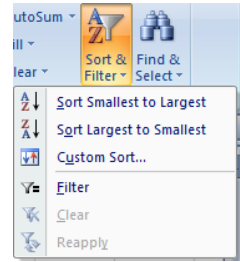
button () in the *Cells* panel on the *Home* tab. Select the *Format Cells...* option from the drop box. The *Numbers* tab will appear first in the *Format Cells* window. It is a matter of selecting what *Category* you want to define your numbers as and selecting the appropriate format options.



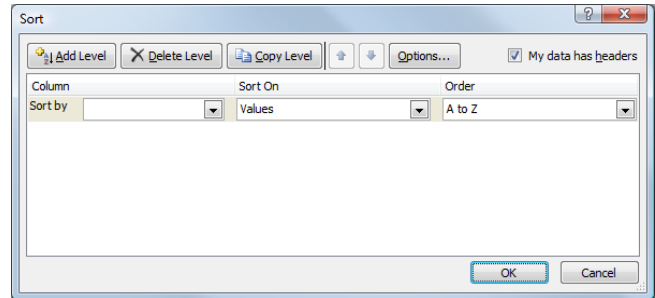
SORTING DATA

Excel provides several ways to sort your worksheet. On the spreadsheet, you will organize your data in columns. That data can be sorted by in either ascending (Z to A) or descending orders (Z to A).

Simple sorting. To access Excel's sorting options, select the *Sort & Filter* button in the *Editing* panel of the *Home* tab. If you are working with simple data sets, the *Sort Smallest to Largest* or *Sort Largest to Smallest* will probably suffice. These sorting functions will work whether the data sets are alphabetical or numerical. **NOTE:** If you have multiple datasets than need to be aligned/correspond, you must highlight all the datasets so that they continue to be aligned after a sort.




Custom sorting. If you are sorting multiple data sets and require customized sorting options, Excel does offer this option. Previously you could only sort 3 datasets at one time, but version 2007 allows you to add as many levels of sorting as you require. To sort the data: highlight the cells to be sorted > select the *Custom Sort* option from the *Sort & Filter* button > add or remove levels (data sets) as required) > and select the sort and order options available for each column of data that you want to sort > select *OK*.

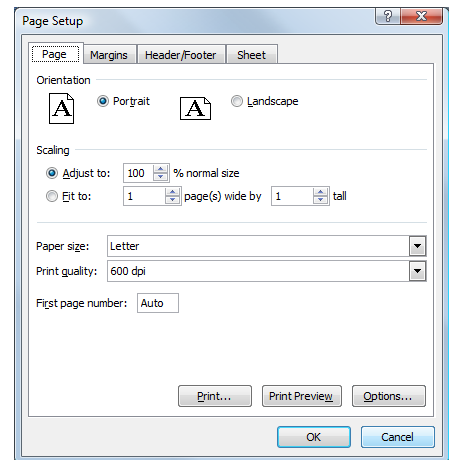


PRINTING

Simple printing. If you want to print a simple spreadsheet, with little or no formatting, select the *Print* option under the *Office Button*.

Custom printing. If you want to create a more customized/formal print layout, select the *Page Setup* dialogue box icon () on the *Page Setup* panel of the *Page Layout* tab. With this dialog box, you will be able to setup the page orientation, margins, headers and footers, printed area, and gridlines, etc.

NOTE: No matter what method you choose to print with, always select *Print Preview*. *Print Preview* will display a graphic representation of your print job. If you use the preview option, you will be less likely to be shocked if your printed output is not desired or you receive hundreds of pages and not the single sheet you wanted.



PRICING

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