

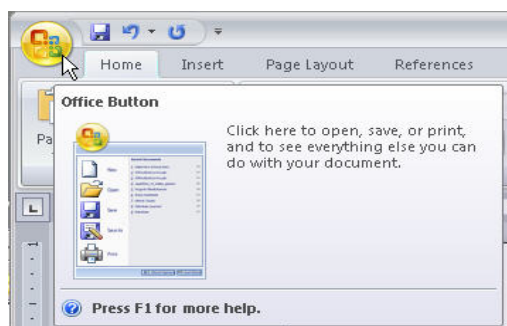
# Excel For Algebra

## Conversion Notes: Excel 2007 vs Excel 2003

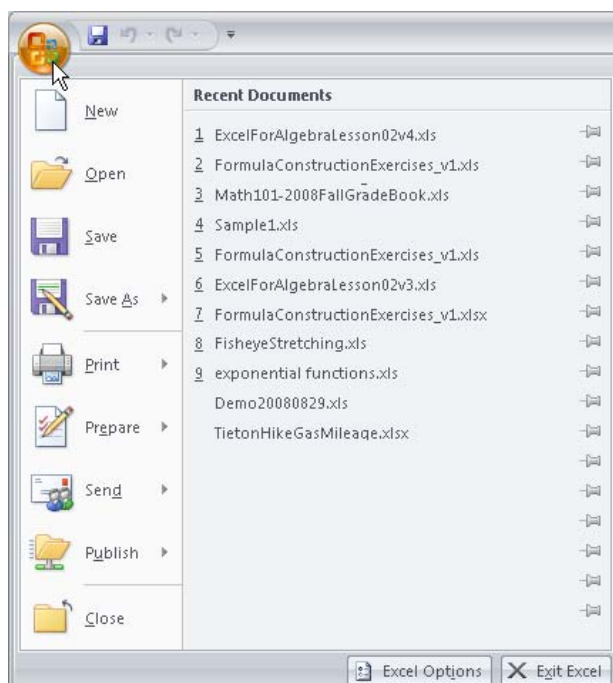
If you're used to Excel 2003, you're likely to have some trouble switching over to Excel 2007. That's because Microsoft completely reworked the high level menu system. Everything looks different, even though once you get past the menu system, everything works pretty much the same as it always did.

### Open / Save / Print / Print Preview / Close / Exit / Recent Documents

In 2003, these commands were under the File menu. In 2007, they're hiding behind the "Office Button" at the extreme upper left. If you hover over the button, some explanation appears.



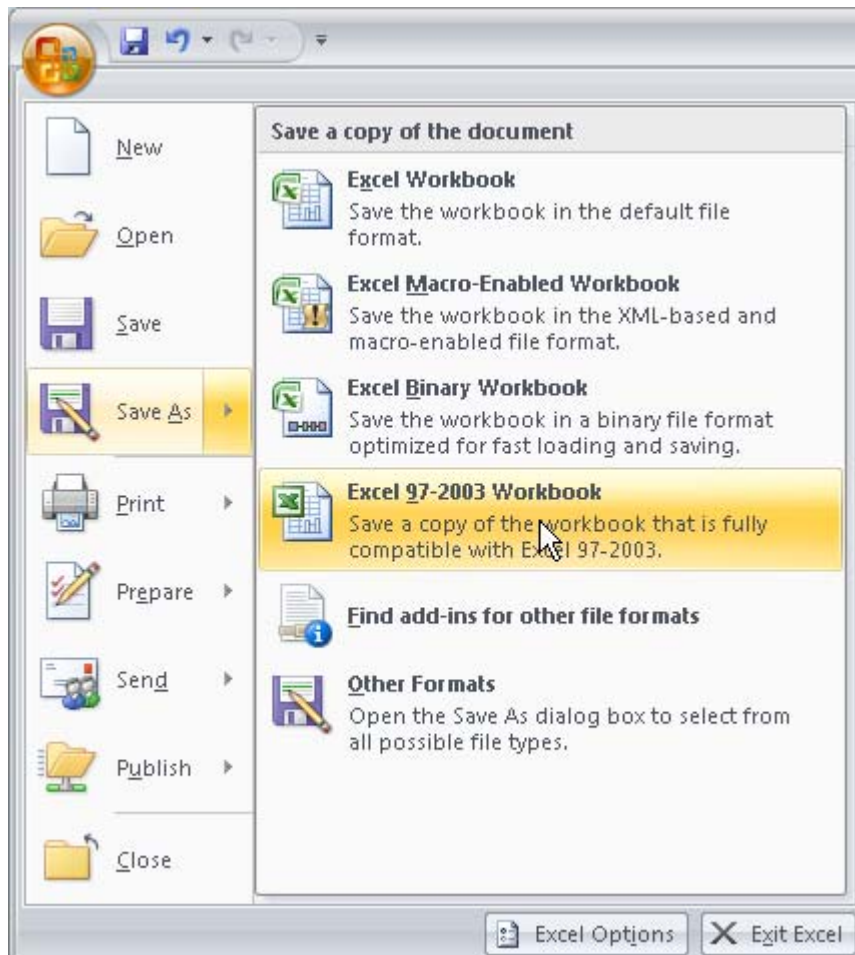
If you click the Office Button, a new dialog appears with more buttons in it.



## Making Files That Excel 2003 Can Read

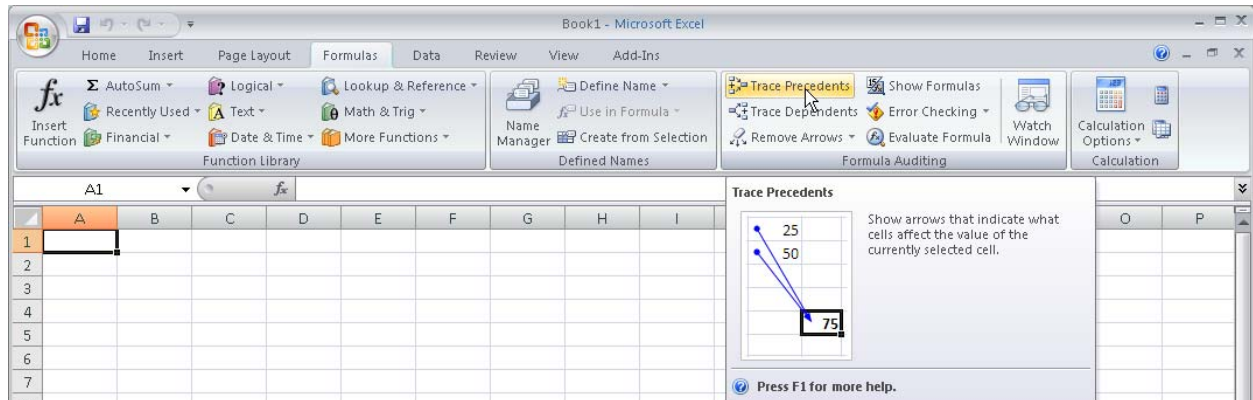
There are compatibility issues between Excel 2007 and Excel 2003. Basically, 2007 can read any file that 2003 wrote, but 2003 can only read files in the old format. By default, 2007 saves files in the same format that it read, so if you load one of the course spreadsheets from Blackboard, modify it, and just save it, you should be fine.

**But...** If you want to create a new file in 2007 and read it in 2003 (say, to bring it to campus!), then you have to explicitly tell 2007 to save it in the old format. That's done like this:

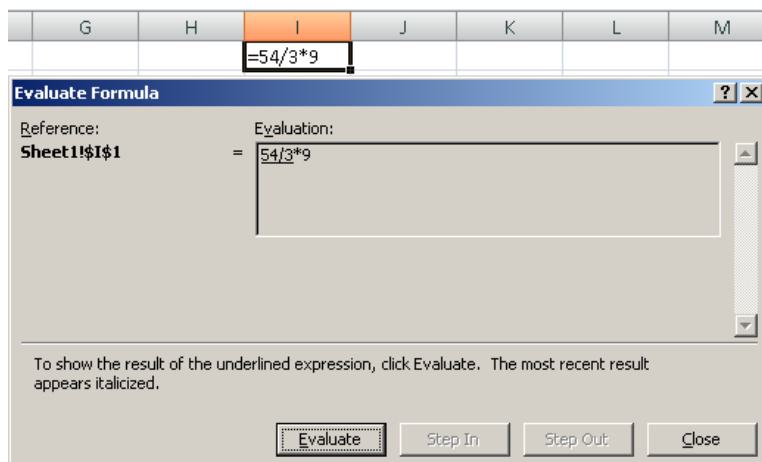
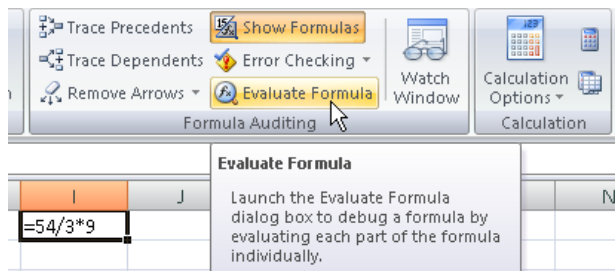


## Auditing Tools

In Excel 2003, you have the Auditing Toolbar that has buttons to Trace Precedents, Trace Dependents, and so on. In Excel 2007, those same functions live in the Formula Auditing panel of the Formulas toolbar.

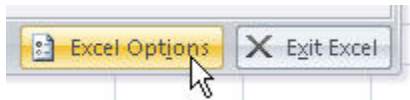


Excel 2007 does have some new functions that can be handy if you're experiencing problems with a formula that's not behaving as you want. One that is particularly nice is the Evaluate Formula debugger. Pressing the Evaluate button will step you through Excel's evaluation of a formula. This is a great tool if you have parentheses errors so that you and Excel have different opinions about what's supposed to be done first!

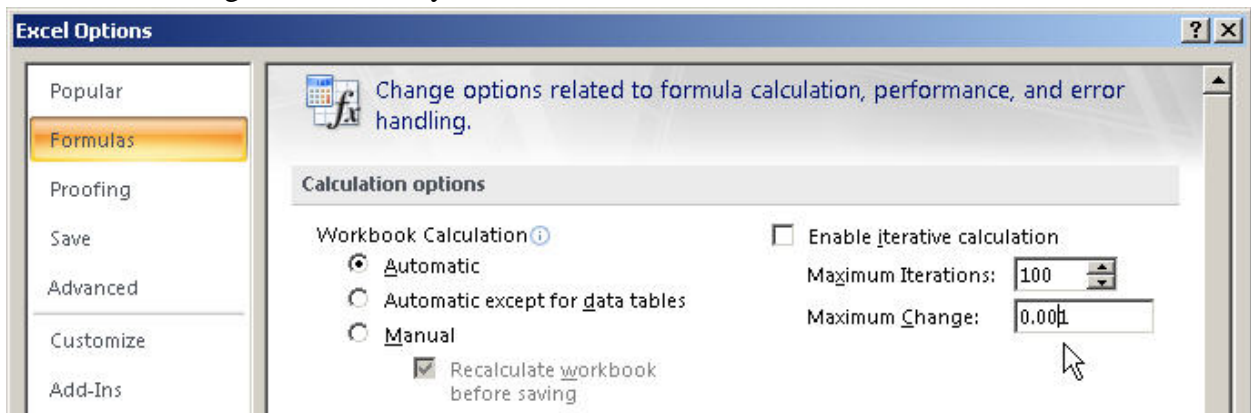


## Tools > Options — Calculations tab (to set accuracy for Goal Seek)

In Excel 2003, you set the accuracy of calculations for Goal Seek by going to the Tools > Options menu entry, then clicking on the Calculations tab. In 2007, you click the Office Button (see previous page). Then at the bottom of the panel that Office Button brings up, you click the Excel Options button.

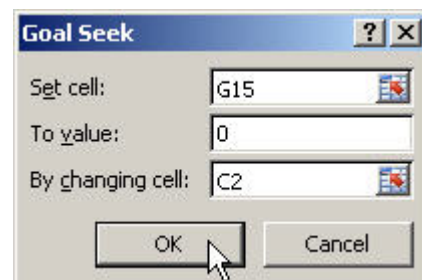
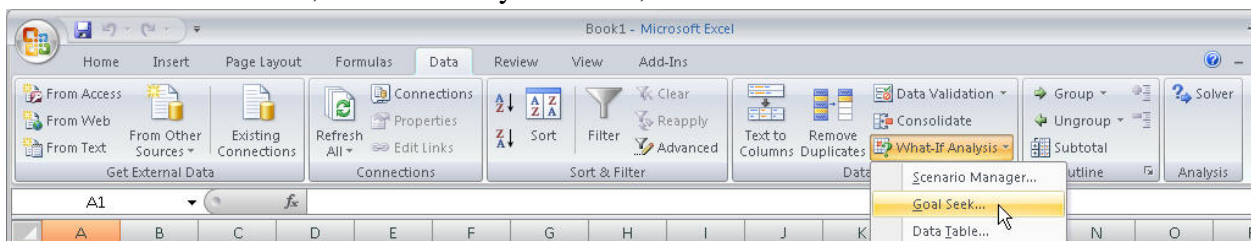


That opens a new dialog, where you have to click the Formulas button, and then you can see the “Maximum Change” field where you need to insert those extra 10 zeros.



## Goal Seek

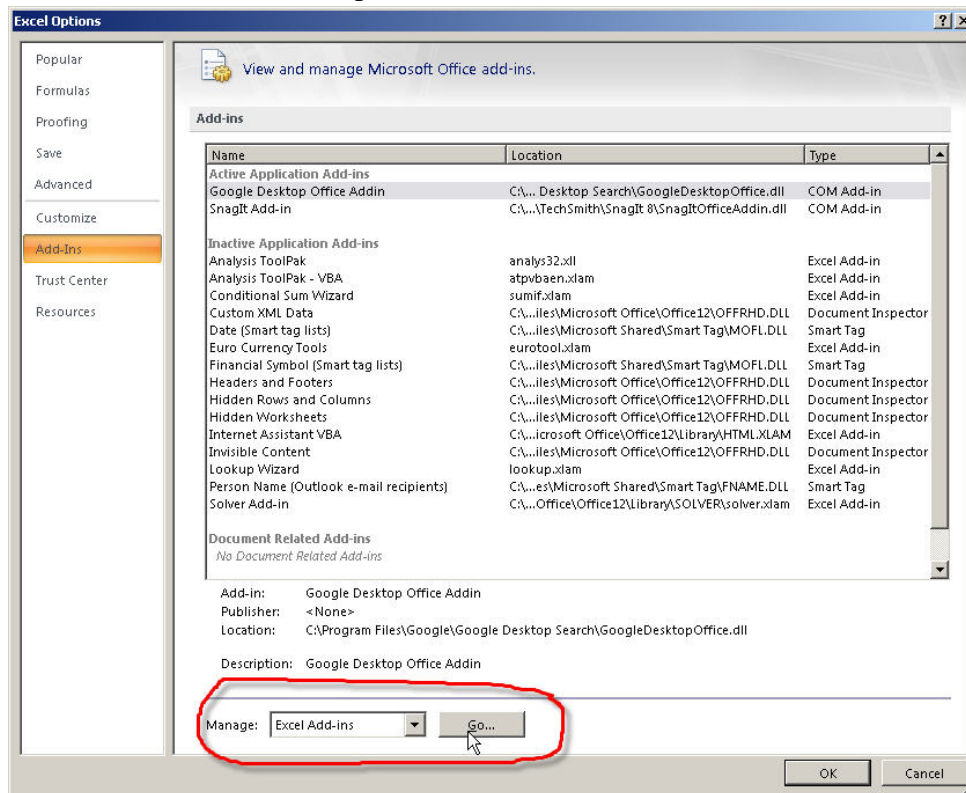
The Goal Seek function itself has also been moved. It used to be in the Tools menu. Now it is reached via the Data tab, What-If Analysis button, then Goal Seek...



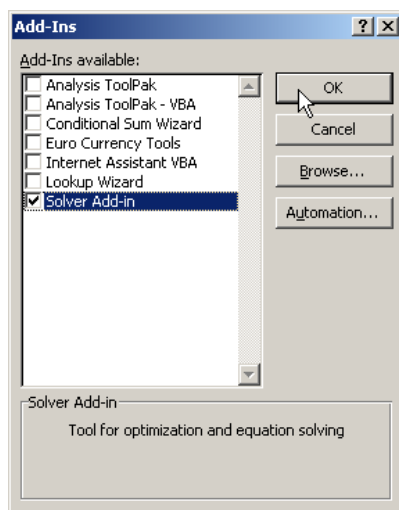
After that, the Goal Seek dialog itself looks just the same:

## Managing Add-Ins: How to Enable Solver

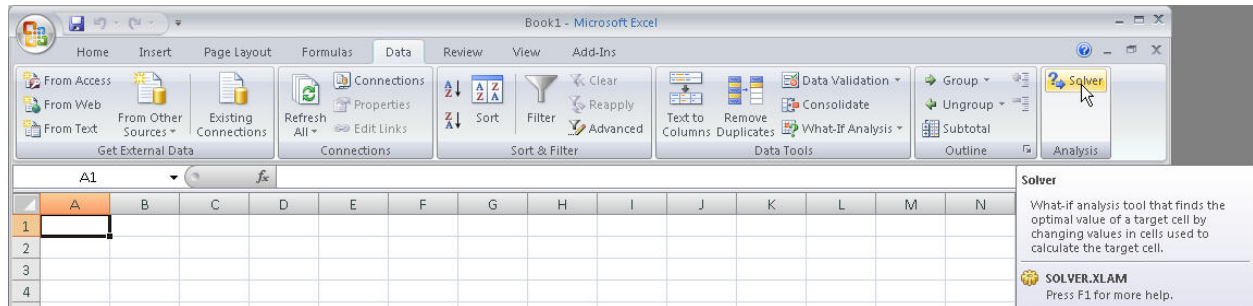
In 2007, the procedure for enabling Solver goes like this... Push the Office Button, then Excel Options (see description earlier), then click the Add-Ins button, be sure that the Manage box shows Excel Add-ins, then press Go.



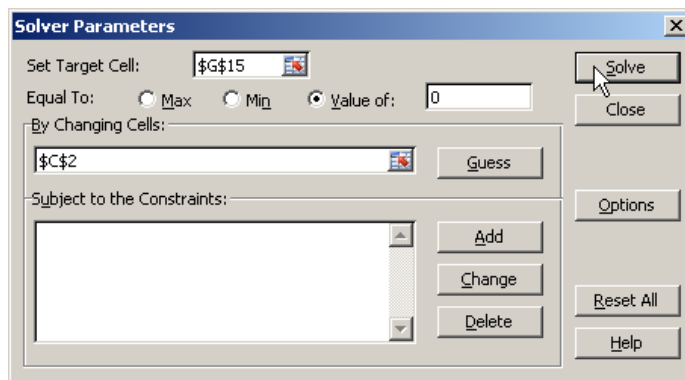
That brings up the Add-Ins dialog, and all you have to do then is to put a check-mark in the box next to Solver, and click OK.



After that, the Solver can be accessed on the end of the Data toolbar:



Pushing that button brings up the Solver Parameters dialog, just like in 2003.



## Graphing

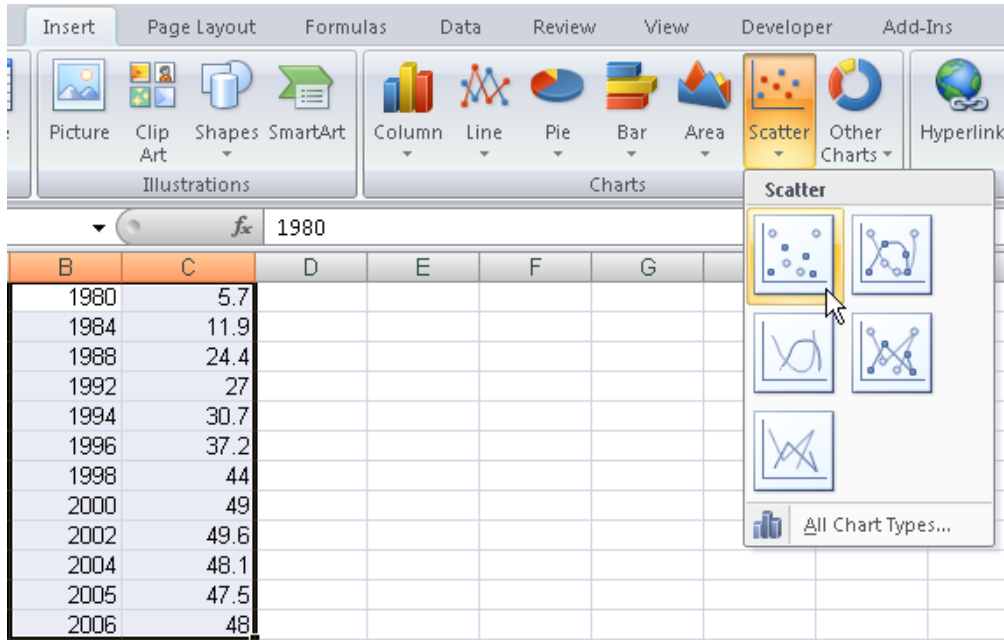
In some respects, the biggest changes between Excel 2003 and 2007 have been in the area of graphing. Not only have the basic menu entries changed, but some of the functionality behind those entries has changed also.

To construct a scatter plot in Excel 2007, proceed as follows:

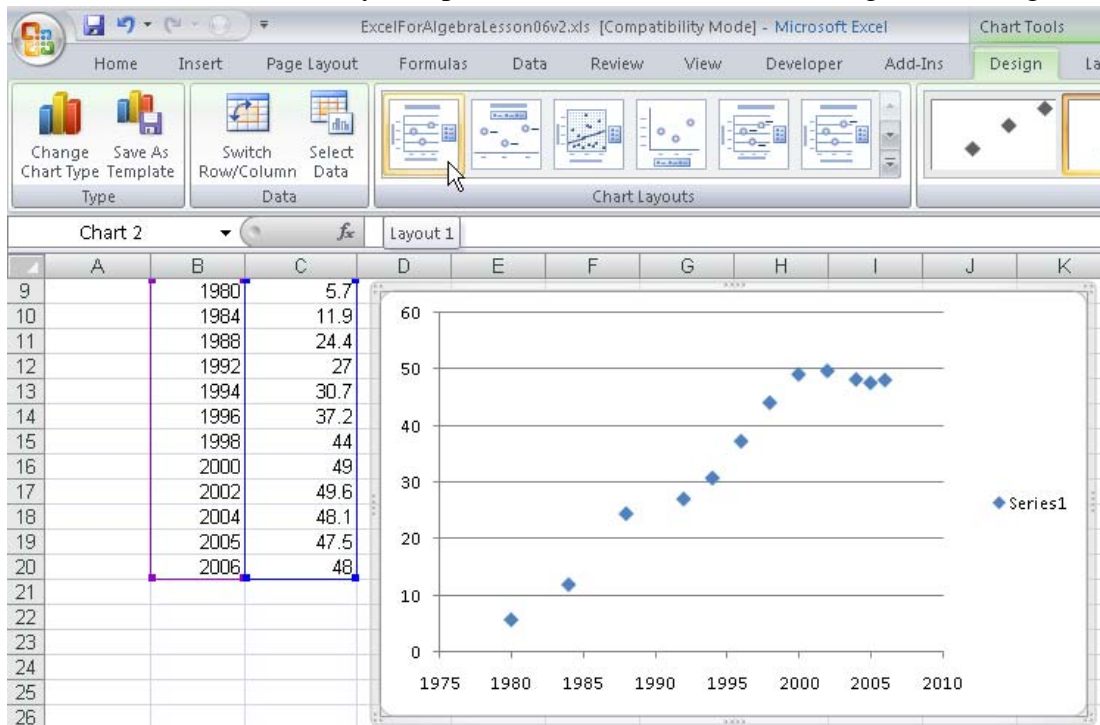
- Organize your data in two columns, x-values on the left and y-values on the right, just as in Excel 2003.
- Select (highlight) both columns of data, then click on Scatter in the Charts section of the Insert tab. This will produce a pull-down graphic menu that lets you choose various



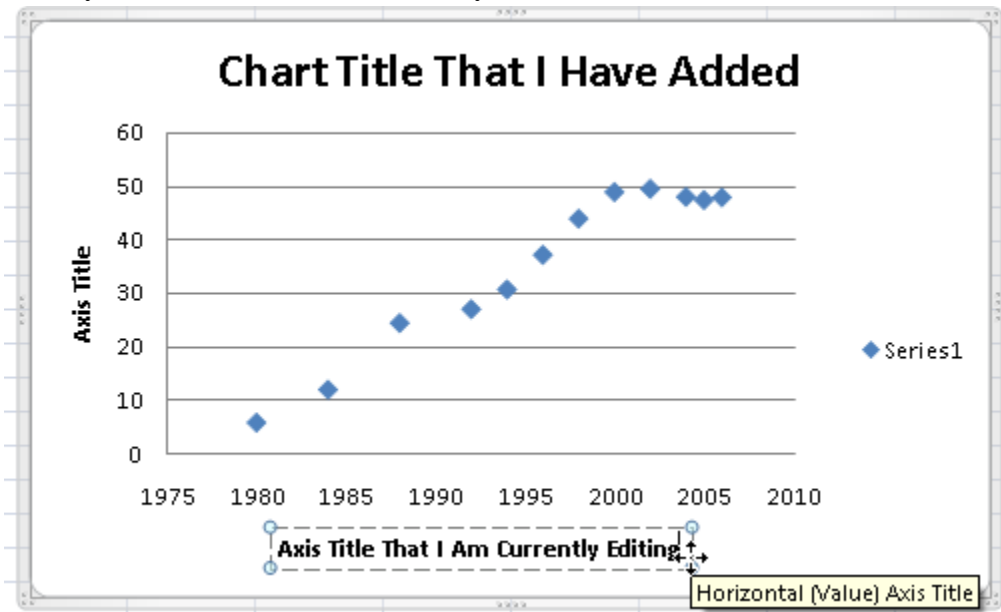
combinations of points and line styles.



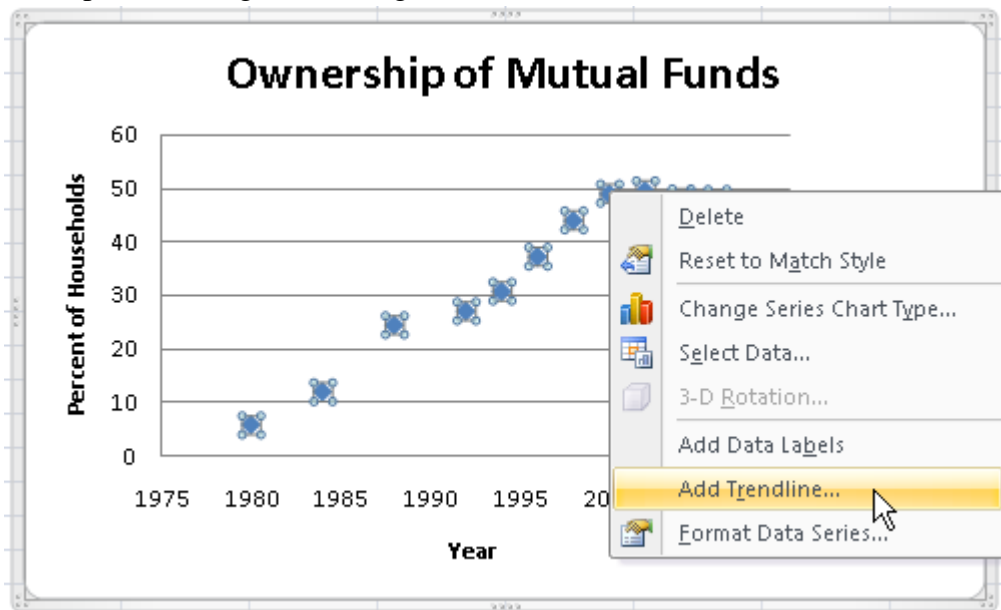
- When you click on one of the indicated types, a graph of the selected type will be immediately constructed and placed on your spreadsheet. In Excel 2003, there would be a multi-page wizard at this point, allowing you to specify options such as titles, labels, and legend. That doesn't happen in 2007. Instead, you immediately get a graph, accompanied by a menu of Chart Tools, and you then have to use some of those tools to change the appearance of your graph. For example, to get a title and axis labels, you would click on the Chart Layout option as indicated in the following screen image:



- Once you have clicked the Chart Layout option to add an overall title and axis labels, you can click on any label to select it, click again to open it for editing, then use the mouse and keyboard to insert whatever text you would like.

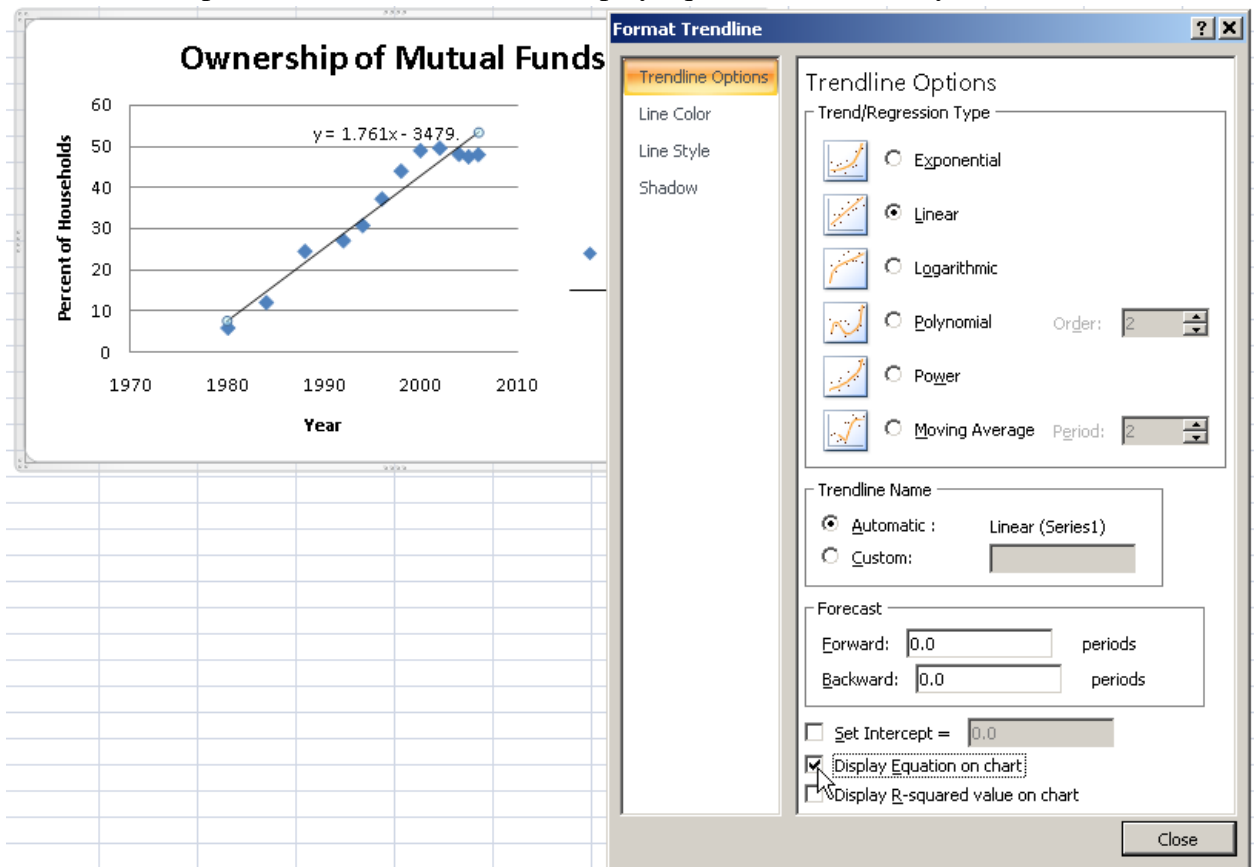


- Adding a trendline is similar to done similarly to 2003. First select the graph, hover over a data point, and right-click to get a context menu:

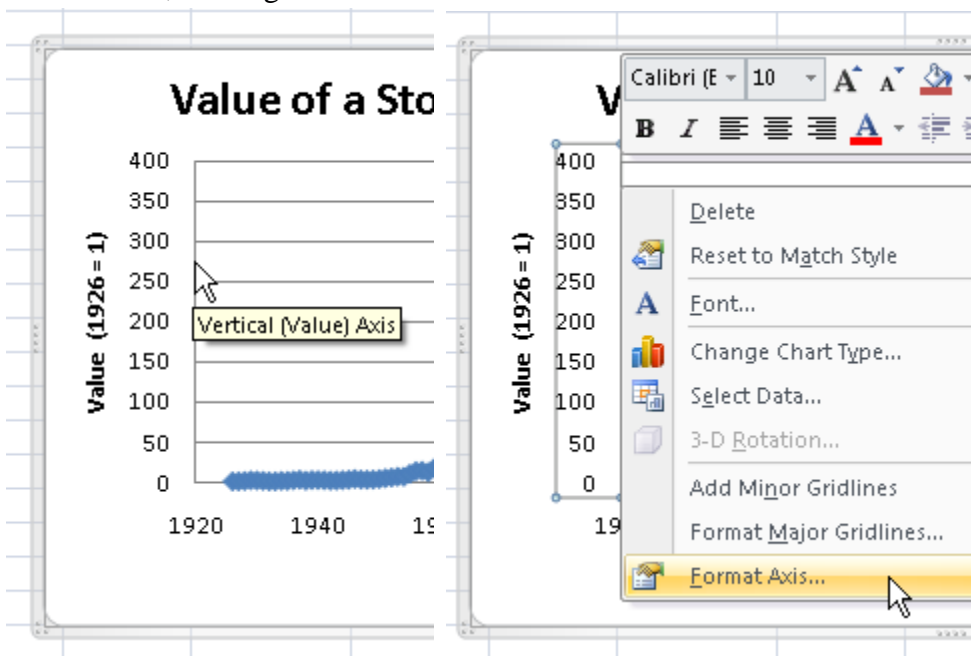




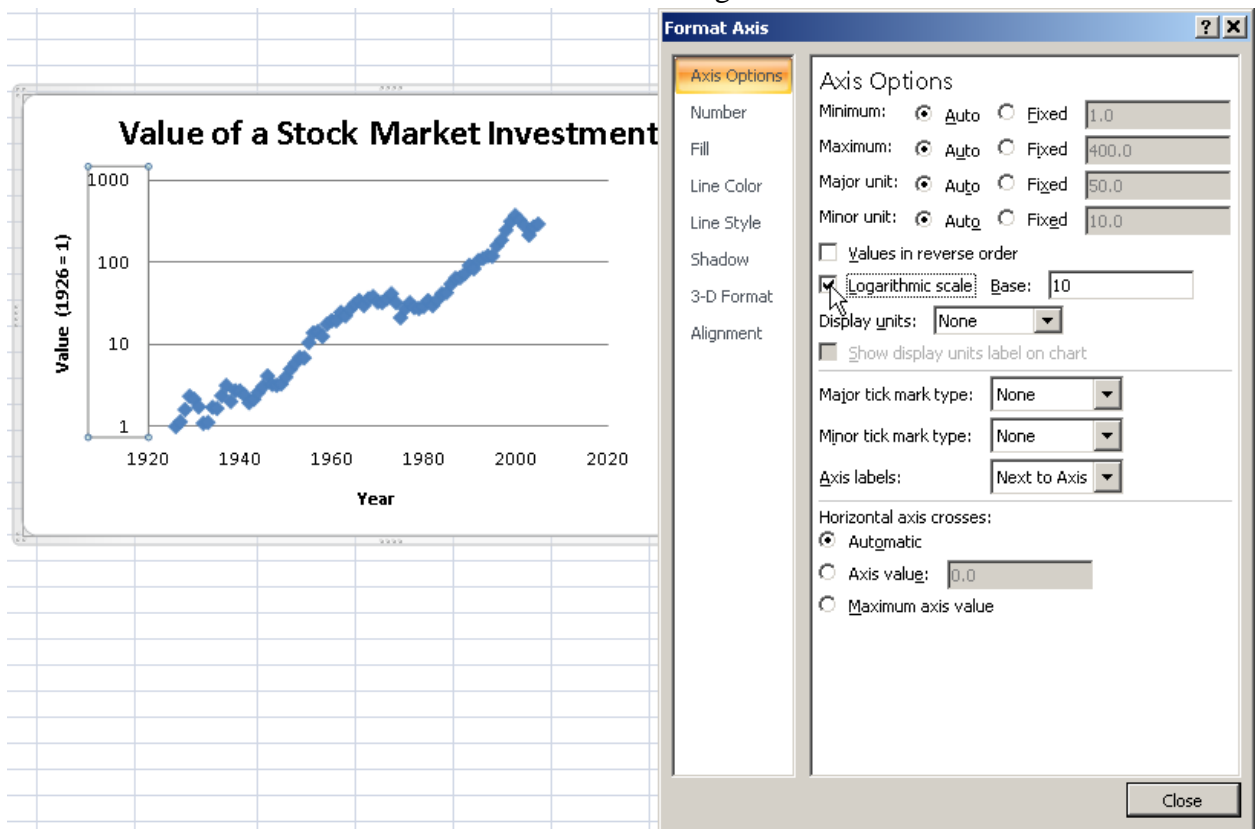
- Select Add Trendline..., then in the popup dialog, select whatever type of trendline you want (linear, exponential, etc.), as well as “Display equation on chart” if you want that.



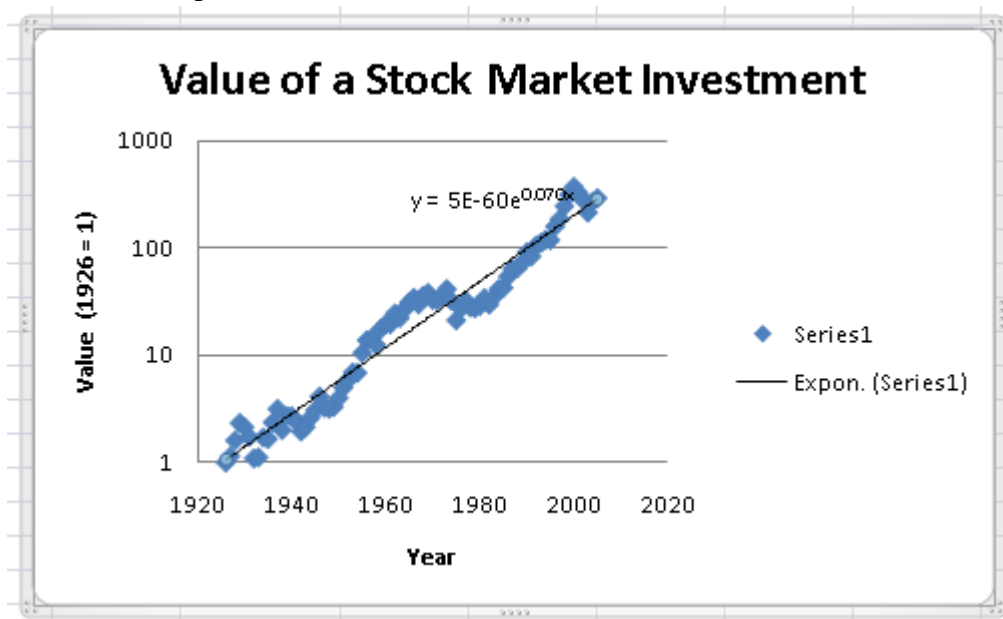
- Changing between linear and logarithmic scales is similar to the method in 2003. Hover over the axis, then right-click and select “Format Axis...”.



- Placing a checkmark on Logarithmic Scale will immediately result in the axis being redrawn. Click on the Close button to dismiss the dialog.



- By default, the trendline equation may be truncated to fewer digits than in 2003. In this case, Excel 2003 would show us “0.0709” as an exponent, while Excel 2007 shows us “0.070”. (No, this is not correctly rounded. It should be “0.071”. Once in a while even Excel screws up.)



To get more digits, you can follow these instructions given at

<http://support.microsoft.com/kb/282135>

(found as the #2 response for a Google search on *excel 2007 trendline equation*):

- Right-click the trendline equation or the R-squared text, and then click **Format Trendline Label**.
- Click **Number**.
- In the **Category** list, click **Number**, and then change the **Decimal places** setting to 30 or less.
- Click **Close**.

Following this procedure to set Decimal places to 4, then increasing the text size, produces the following graph. Notice that we now see more digits in the exponent (the growth rate). This format now shows the coefficient as “0.0000”, but that’s OK in this case since for our purposes there’s no useful information in the coefficient anyway.

