



Instructions for graphing with Excel (Pre-Office 2007)

1. Double click on the **Excel** icon
2. A new worksheet (spreadsheet) will appear with columns (vertical) and rows (horizontal), and a Tool bar at the top
3. Type in your X (horizontal axis) quantity's data in each cell (box) in a column and repeat for your Y (vertical axis) quantity
4. Click and drag the mouse starting at the top left cell to the bottom right cell of the data you wish to graph - note that the top left cell will not look highlighted - it is!
5. Go to the **Insert** menu and select **Chart**
6. Follow the instructions in the **Chart Wizard** (a series of dialogue boxes that prompt you for graphing options) - note that you can **Back Up** at any time and click **Next** to move to the next step
 - Step 1 - shows graph formats (**XY - Scatter** is usually the best choice for data analysis). Be sure to choose a chart sub-type.
 - Step 2 - shows the top left cell to the bottom right cell of the data you wish to graph. Choose series in Columns.
 - Step 3 - enter Graph Title and axis titles with units, select the **Legend** tab click on the box next to **Show Legend**. Be sure there is no check mark in this box.
 - Step 4 - Choose as new sheet. This will create a separate page with the graph.
Click-**Finish**
7. Click once on any of your data points to select them
8. Go to the **Chart** menu and select **Add Trendline**
 - a) select the type of function you wish (Ex: **Power**, $y = kx^n$)
 - b) select the **Options** tab and select **Display Equation on Chart** and **Display R-squared on Chart**
9. If you want to change the number of decimal places displayed in the best fit equation, right click on the equation and select **Format Data Labels**. Click on the **Number** tab, and select **Number** or **Scientific Notation** (if your slope is very large or very small). From here you can pick the number of decimal places displayed.
10. If you want to move the equation and R-squared text, click once next to the equation and a box will appear around both, click and drag at the corner of the box to move the box
11. If you want to change the maximum or minimum values, divisions, etc., double click on the axis (not the numbers)
12. To get rid of the gray background, double click any where inside the gray region (except on a data point, trendline, axis, etc.), click and drag on the arrow and select the **White** color box.
13. You are now ready to print! Make sure to use **Print Preview**  to check that you only print out what you need to. Select the **Printer icon** at the top left of the first Toolbar, or select **Print** from the **File** menu, or use the **control + P** key.

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3. Type in your X (horizontal axis) quantity's data in each cell (box) in a column and repeat for your Y (vertical axis) quantity
4. Click and drag the mouse starting at the top left cell to the bottom right cell of the data you wish to graph. Note that the top left cell will not look highlighted - it is!
5. Go to the **Insert** tab and click on the Scatter Plot icon under the **Charts** section. Select the plot without the connected dots.
6. Click on the **Design** tab. Select the leftmost option in the **Chart Layouts** section.
 - a) Give your chart a reasonable title.
 - b) Add labels to the axes, including appropriate units.
 - c) Click once on the legend (where it says Series 1) and press the delete key to remove the legend (unless you have more than one set of data on the graph).
7. Right click once on any of your data points to select them. Select **Add Trendline**.
 - a) Select the type of function you wish (Ex: **Power**, $y = kx^n$).
 - b) Select the **Options** tab and select **Display Equation on Chart** and **Display R-squared on Chart**.
8. If you want to move the equation and R-squared text, click once next to the equation and a box will appear around both, click and drag at any of the lines surrounding the box to move it.
9. If you want to display more decimal places in your best fit equation, right click on the equation or R^2 value. Select **Format Trendline Label**. Click on the **Number** tab and select **Number** or **Scientific** (if your slope is really small or large) from the Category list. You can then change the number of decimal places that Excel displays.
10. If you want to edit the variables in the best fit equation, click once on the equation and wait for the text cursor to appear. Then click again where you want to edit the text.
11. If you want to change the maximum or minimum values, divisions, etc. on the graph axes, double click on the axis (not the numbers).
12. You are now ready to print! Make sure to use **Print Preview**  to check that you only print out what you need to. Select the **Printer** icon in the Quick Access toolbar, or select **Print** from the **Windows Icon** menu, or press **control + p**.