

Graphing in Excel

Make a Scatter graph (line) in Excel

1. Open a new Excel 2010 spreadsheet. Identify two or more variables you want to include. For example, to graph the height a plant grows in a given time, use the variables “time” and “height”.
2. Highlight the data set you just created including the variable titles. Click the “Insert” tab and select “Scatter” in the “Charts” section. Choose the “Scatter with only markers” option. A basic scatter graph will appear in your Excel 2010 spreadsheet. Check that the independent variable is on the x-axis and the dependent variable on the y-axis.
3. To add a trendline...click on a data point – it will highlight all of them. Right click and choose “Add Trendline”. At the new menu make sure “linear” is selected and click the boxes at the bottom to display the equation on the chart and the R-squared value.
4. Go to the “Design” tab and click the bottom arrow of the “Charts layouts” selection to bring up a drop down menu. Choose the option that will give you a title, x-axis label, y-axis label, and a legend if required. Click on each chart label to properly label your chart.
5. Use the “Layout” tab and the “Format” tab of the “Chart Tools” area to further format your graph. The “Layout” tab will allow you options to change the axis names, grid lines, legend or chart title. The “Format” tab will allow you to modify the color, shape and appearance of the bar graph.
6. The information from the data set can be used to create a table in Word. “Copy” the data set (including labels) and “Paste” the data into Word. Choose a “Paste” option within Word that allows you to “Use Destination Styles”; this will keep the formatting and create a bordered table in Word. Once the table is created be sure to add an appropriate title.
7. The graph can also be copied and pasted into Word. Click on a blank area of the graph and choose the “Copy” function. “Paste” the graph into your Word document.

Independent variable – It is the variable that stands alone and isn’t changed by the other variables you are trying to measure. For example someone’s age might be an independent variable. Other factors such as how much someone eats, exercises, etc. isn’t going to change the person’s age.

Dependent variable – It is the result of the experiment or the variable whose value is decided by the independent variable. It depends on other factors. For example, a test score could be dependent on how much studying you did, how much sleep you got, or if you are hungry.

Put your variables in the following sentence to determine which is the independent variable and which is the dependent variable: (Independent variable) causes a change in (dependent variable) and it isn’t possible that (dependent variable) could cause a change in (independent variable).

Helpful Graphing Websites:

http://www.ehow.com/how_8589466_use-scatter-plots-excel.html

http://spreadsheets.about.com/od/excelcharts/ss/line_graph.htm