

Plotting a line of regression (Tutorial C4)

http://www.atomiclearning.com/k12/en/movie/86414/play_window?type=Tutorial&sid=2421

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You can plot a line of regression based on data you've entered. I'll create a new page by clicking Insert, and

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then choosing Lists & Spreadsheet. I'll enter some x-coordinate data, pressing the down arrow key, or the Enter key after

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each value. I'll enter 5, 8, 12, and 22 in Column A. Next, I'll name the column by selecting the cell next to the

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letter A at the top of Column A. I'll call this column "xp" by typing x-p, and then pressing the Enter key. Now

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I'll enter some corresponding y-coordinate data by pressing the right arrow key, and then the down arrow key to move to cell B1.

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Next I'll enter 4, 9, 14, and 24. I'll name the column by selecting the cell next to the letter B at

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the top of Column B, and I'll call this column "yp" by typing y-p, and then pressing Enter. I'll click Insert

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and choose Data & Statistics. I want to plot the "xp" data on the x-axis, and the "yp" data on the y-axis. So I'll

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roll over the rectangle at the bottom of the screen, and then click. From the menu that pops up, I'll click on "xp."

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Now I'll roll over the rectangle on the left side of the screen, click on that, and choose "yp." I'll plot a line

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of regression based on the linear model $y=mx+b$ by clicking on Analyze in the Document Tools, and then rolling over Regression,

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and choosing Show Linear ($mx+b$). I can see the line appear, and an equation for the line of best fit. I can hide this

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line and show a different one by clicking Analyze, rolling over Regression, and then choosing Hide Linear ($mx+b$). Now

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I'll click Analyze, roll over Regression, and this time I'll show the Quadratic regression by choosing Show Quadratic.

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I can easily change my data points directly in the scatter plot by rolling over a point, and then clicking and dragging

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to move it to a new location; keep in mind this is dramatically changes the x and y values for that point in my lists.

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Notice that the line of regression moves to fit the new set of data. Now, if I switch back over to the Lists & Spreadsheet

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application by clicking to show the Page Sorter on the left side of the screen, and then clicking on page 1, I

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can see that the values for that point have been changed.

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