TI-Nspire™ Software Script

Creating a scatter plot using data entered in a list (Tutorial C2)

http://www.atomiclearning.com/k12/en/movie/28237/play_window?type=Tutorial&sid=1674

[00:00:00.00]
To create a scatter plot using data entered in a list, I'll first
insert the Lists & Spreadsheet application into a new page by

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clicking Insert, and choosing Lists & Spreadsheet. Next, enter
your list of coordinates. To do this, I'll click on the white

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space just to the right of the letter A at the top of column A.
I'll type "x" "c" "o" "o" "r" "d" and then press Enter. This defines

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any values I enter into column A as a list linked directly to
the variable called "xcoord," which includes the x-coordinate

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values. Note that if you just watched the previous movie and entered
the data along with that tutorial, the data auto-populates in

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your new Lists & Spreadsheet column. Now, I'll name column B
"ycoord" using this same technique, first by clicking on the white

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space to the right of the letter B, and then typing "y" "c" "o"
"o" "r" "d," followed by the Enter key. I have a series of coordinates

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to enter. I'll enter the x coordinates in column A and the y coordinates
in column B. Remember that you can pause this movie at any time

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while you enter the data. Let's start with the x-coordinates,
pressing "Enter" after you type each number. I'll manually enter

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in 0.5, 1.5, 2, 6, 8, 15, 19, and 45 into column A. Next, I'll
go up to cell B1 and enter "0". Notice that the y-coordinates

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increase by 10 every time. To save myself from typing, I'll express
each coordinate as a function of the coordinate preceding it. To

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do this, in cell B2 I'll type "=" and then type "b1," followed
by "+10". The full cell formula now reads "=b1+10". Now, I'll

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click the Data button on the Application Toolbar or right-click
and select the Fill Down command. Now, I'll just use the down

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arrow key to highlight the cells through cell B8 and then press
"Enter." Notice that the values have been populated all the way

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through 70. I'll insert a new page with the Graphs and Geometry
application in it by clicking "Insert" and then choosing "Graphs &

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Geometry." Next, I'll switch the graph mode to Scatter Plot by
clicking on the Graph Type button on the Application Tool bar, and

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then choosing "Scatter Plot." Now, I'll click on the x drop-down
menu and choose "xcoord" which is what I named column A in my

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Lists and Spreadsheet application. Next, I'll click the "y" dropdown
menu choose "ycoord," which is what I named column B in my

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Lists & Spreadsheet application. Immediately, I can see some
points have been plotted on my graph. Because of the graph's current

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scale, however, I'm unable to see them all. To quickly readjust
my graph scale to include all my coordinates, I'll right-click

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on the graph and choose Zoom, Zoom-Data. Now I can see all my
points in this work area.

[00:03:32.00]