TI-Nspire™ Handheld Script

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

http://www.atomiclearning.com/k12/en/movie/85854/play_window?type=Tutorial&sid=2410

[00:00:00.00]
To manually enter a list of coordinates, I'll first insert
the Lists and Spreadsheet application into a new page by

[00:00:06.00]
pressing the Home key, and then choosing Lists and Spreadsheet.
Next, I'll use the Touchpad to highlight the white space

[00:00:14.00]
at the top of column A. I'll type "x" "c" "o" "o" "r" "d"
and then press Enter. This defines any values I enter into

[00:00:29.00]
column A as a list linked directly to the variable called
xcoord", which includes the x-coordinate values. Now, I'll

[00:00:37.00]
name column B "ycoord" using this same technique, first
by highlighting the white space at the top of column B,

[00:00:43.00]
and then typing "y" "c" "o" "o" "r" "d," followed by the
Enter key. I have a series of coordinates to enter. I'll

[00:00:56.00]
enter the x coordinates in column A, and the y coordinates
in column B. Remember that you can pause this movie at

[00:01:02.00]
any time while you enter your data. Let's start with the
x-coordinates, pressing Enter after you type each number.

[00:01:10.00]
I'll manually enter 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.

[00:01:33.00]
You may have noticed that the y-coordinates increase by
10 every time. To save myself from typing, I'll express

[00:01:42.00]
each coordinate as a function of the coordinate preceding
it. To do this, in cell B2, I'll type "=" and then "b1"

[00:01:50.00]
and then "+10." The full cell formula now reads "=b1 +10.
Now, I'll press the Menu key and choose Data. Then I'll

[00:02:06.00]
select the Fill command. Now, I'll just use the Touchpad
to highlight the cells through cell B8 and then press Enter.

[00:02:16.00]
Notice that the values have been populated all the way
through 70. I'll insert a new page with the Graphs application

[00:02:24.00]
in it by pressing the Home key, and then choosing Graphs.
Next, I'll switch the graph mode to scatter plot by pressing

[00:02:33.00]
Menu, and then choosing Graph Entry/Edit, and then Scatter
Plot. Now I'll highlight the x entry line if it's not already

[00:02:44.00]
highlighted by pressing the Tab key. Next, I'll press the
Var key and choose "xcoord," which is what I named column

[00:02:54.00]
A in my Lists & Spreadsheet application, then I'll press
Enter. I'll highlight the y entry line by pressing Tab

[00:03:02.00]
to highlight it, and then I'll press the Var key. Next,
using the arrow keys on the Touchpad, I'll highlight "ycoord,

[00:03:10.00]
which is what I named column B in my Lists & Spreadsheet
application, and then I'll press Enter. Finally I'll press

[00:03:18.00]
Enter one more time. Immediately I can see some points
have been plotted on my graph, because of the graph's current

[00:03:26.00]
scale, however, I'm unable to see them all. To quickly
readjust my graph scale to include all of my coordinates,

[00:03:32.00]
I'll press Menu and then choose Window/Zoom, Zoom-Data.
Now, I can see all my points in this work area.

[00:03:45.00]