

Manually entering a list of data (Tutorial C1)

http://www.atomiclearning.com/k12/en/movie/27957/play_window?type=Tutorial&sid=1670

[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 pressing

[00:00:07.00]

the Home key, and then choosing Lists and Spreadsheet. Next, I'll use the NavPad to highlight the white space just to the right

[00:00:16.00]

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 any values I enter into

[00:00:33.00]

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

[00:00:43.00]

B "ycoord" using this same technique, first by highlighting the white space to the right of the letter B, and then typing "y" "c"

[00:00:53.00]

"o" "o" "r" "d," followed by the Enter key. I have a series of coordinates to enter. I'll enter the x coordinates in column A,

[00:01:08.00]

and the y coordinates in column B. Remember that you can pause this movie at any time while you enter the data. Let's start with

[00:01:17.00]

the x-coordinates, pressing Enter after you type each number. I'll manually enter in 0.5, 1.5, 2, 6, 8, 15, 19, and 45 into column

[00:01:38.00]

A. Next, I'll go up to cell B1 and enter "0". Notice that the y-coordinates increase by 10 every time. To save myself from typing,

[00:01:51.00]

I'll express each coordinate as a function of the coordinate preceding it. To do this, in cell B2, I'll type "=" and then "b1" and then

TI-Nspire™ Handheld Script

[00:02:05.00]

“+10”. The full cell formula now reads “=b1 +10”. Now, I’ll press the Menu key and choose Data. Then I’ll select the Fill Down command.

[00:02:23.00]

Now, I’ll just use the NavPad to highlight the cells through cell B8 and press Enter. Notice that the values have been populated

[00:02:34.00]

all the way through 70. You can also use a list name as a function in another list. For example, if I wanted to take all of the x-

[00:02:44.00]

coordinate values in column A, then square them and add six, and enter these values into column C, I can highlight the formula

[00:02:54.00]

cell for column C, which is the cell just above C1, and then type equals, “(xcoord)”, followed by “^2” then “+6”. Now, when I press the Enter

[00:03:24.00]

key, the application will evaluate this expression based on the list linked with the variable “xcoord”, which is what we named

[00:03:33.00]

column A.

[00:03:35.00]