Lists & Spreadsheet and its Connection to Graphs & Geometry
by – Texas Instruments and edited by Winnie Miller

Activity overview
This activity is intended to be an introduction to the TI-Nspire Lists and Spreadsheets feature and could be used for students, preservice teachers, and teachers. Participants will begin by putting data on a spreadsheet and using a formula to find additional values. Create a scatter plot and find a line of best fit.

Concepts
Linear function, spreadsheet, scatter plot, regression equation

Teacher preparation
Define, discuss and bring in examples of linear functions as well as spreadsheets.

Classroom management tips
Work in pairs or small group for assistance and collaboration.

TI-Nspire Applications
Lists and Spreadsheets; Graphs and Geometry

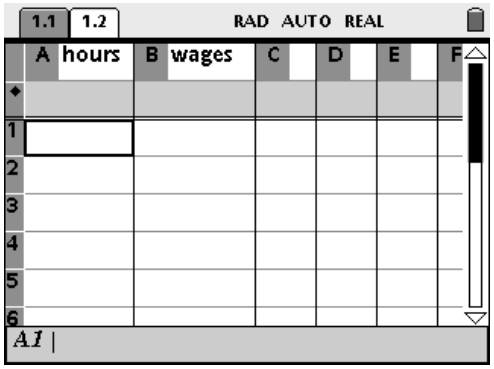
Step-by-step directions

Jerry earns $9 per hour working at a store. How much does he make for various number of hours?
What is the formula to figure out how much he makes for X number of hours?

Press the [Home] key.

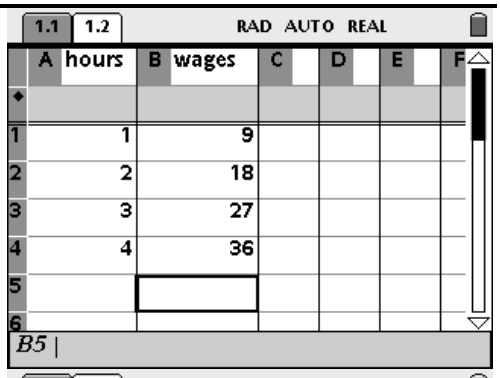
Choose 3: Lists & Spreadsheets

In one column, label it hours. In the second column, label it wages. You may have to re-size. Press [menu] [1] [2]. Use NavPad to resize. Press [enter][esc].



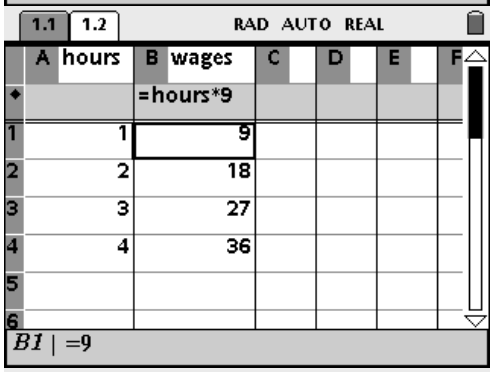
Populate the Hours column from 1 to 4.

For the wages column, put in row 1: 9
Row 2: 18
Row 3: 27
Row 4: 36

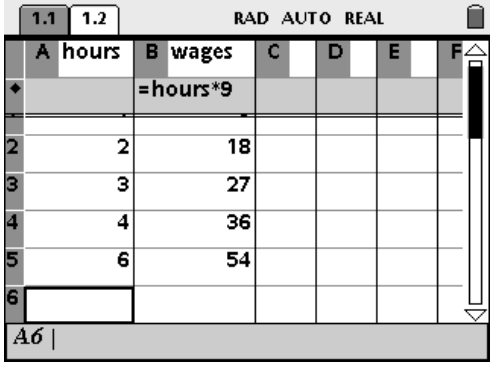


You can input a formula like in Excel. In the diamond column for the Wages column, insert:

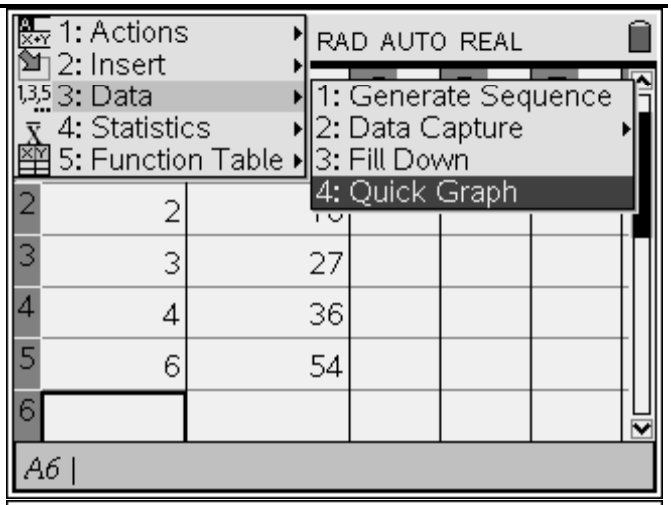
=hours*9



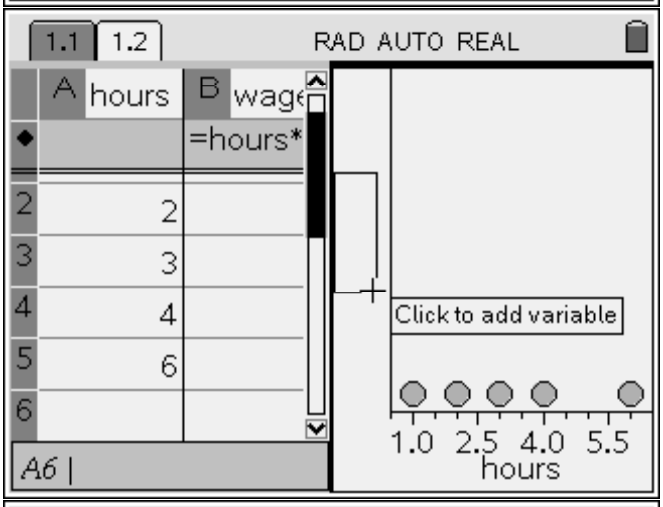
Type a new value in the Hours column and watch the corresponding cell in the wages column automatically populate due to the formula.



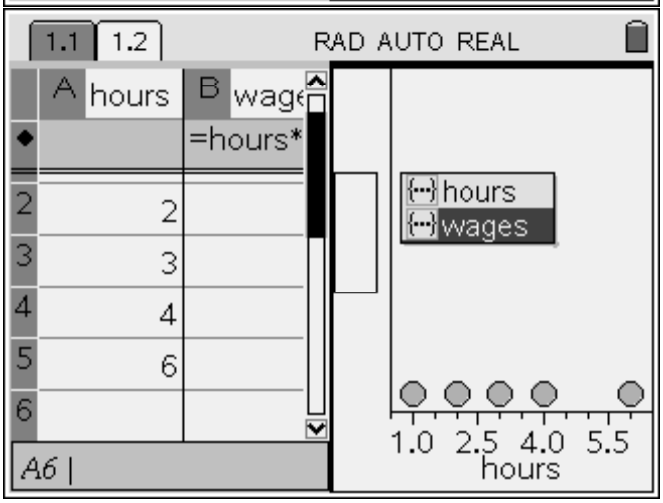
Create a Scatter plot by pressing:
[menu][3][4][enter]



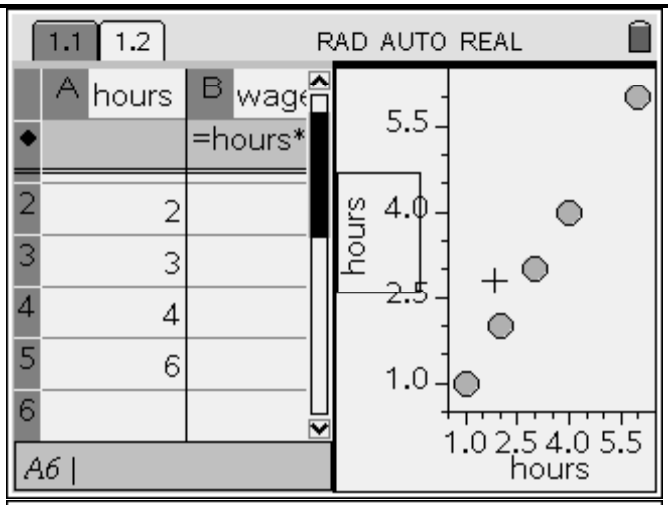
Use the NavPad to move the cursor to left side of graph.



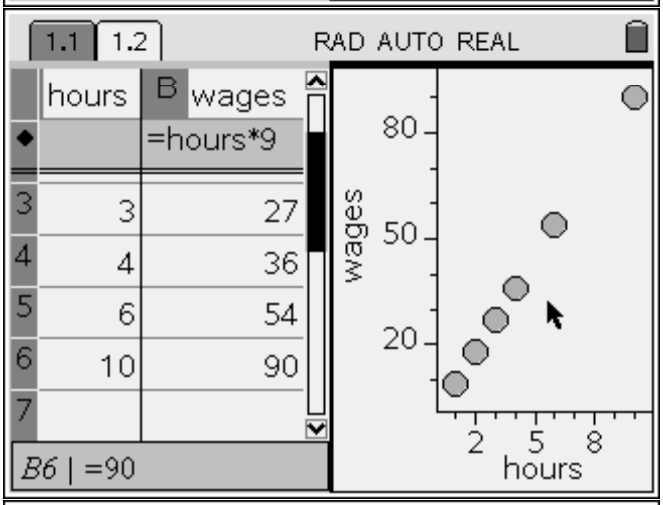
Press ⚙ to get the y-value of the scatterplot to show up. Choose [wages].
Press [enter].



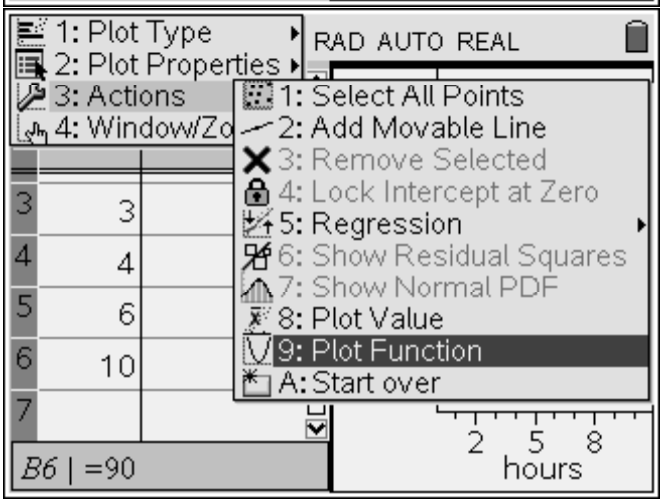
You can add more values to your table and resize the graph as necessary. Use [ctrl] [tab] to move from graph to table and vice versa.



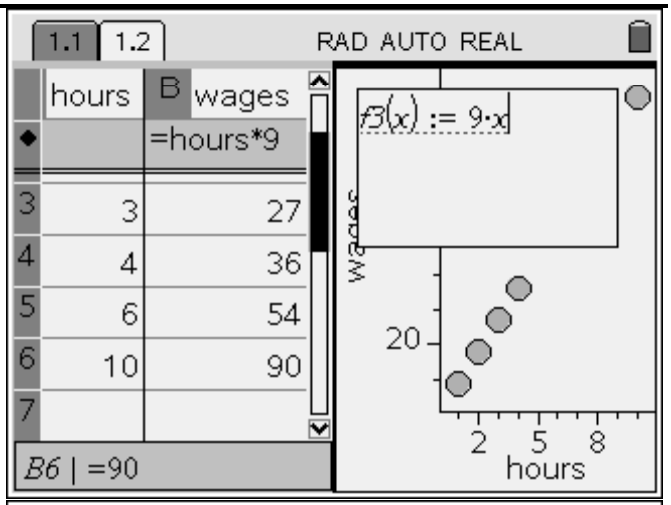
You can change the window by selecting [menu][4][2].



You can plot the function. Press [menu][3][9][enter].



Type in the function.



If you would prefer to get the regression equation for the function, undo by pressing [ctrl][z]. Then press [menu][3][5][1].