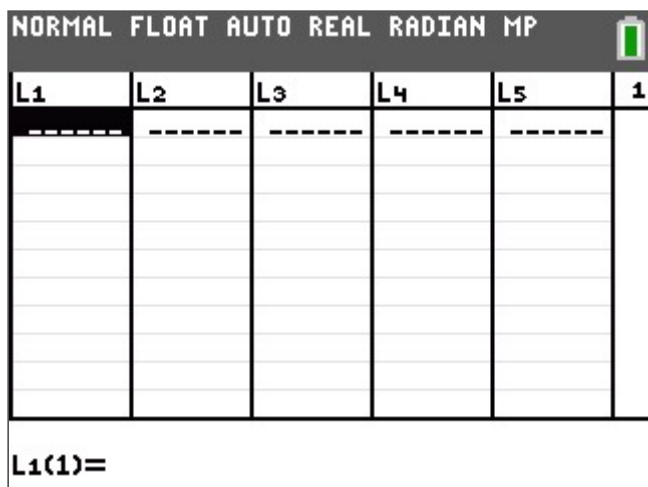
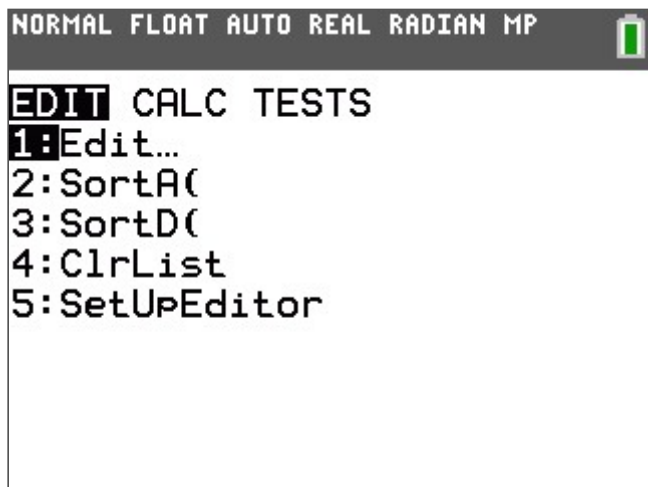


How do I calculate and graph a linear regression using the TI-84 Plus C Silver Edition?

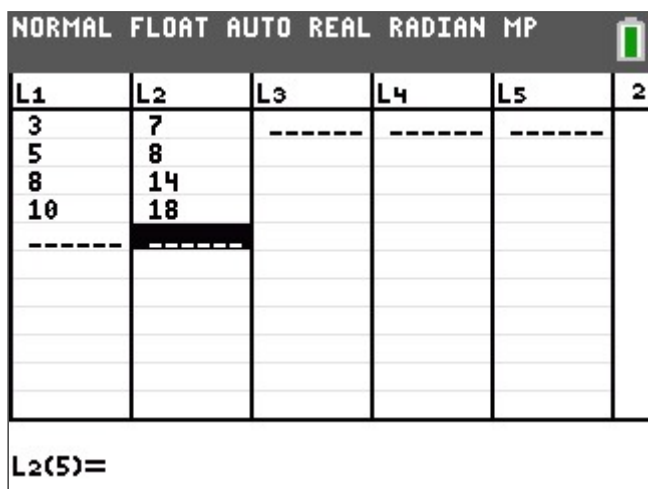
The following example will demonstrate how to calculate a linear regression using the TI-84 Plus C Silver Edition.

First, you will need to enter the data:

- Press [STAT] [1] to enter the Stat List Editor.

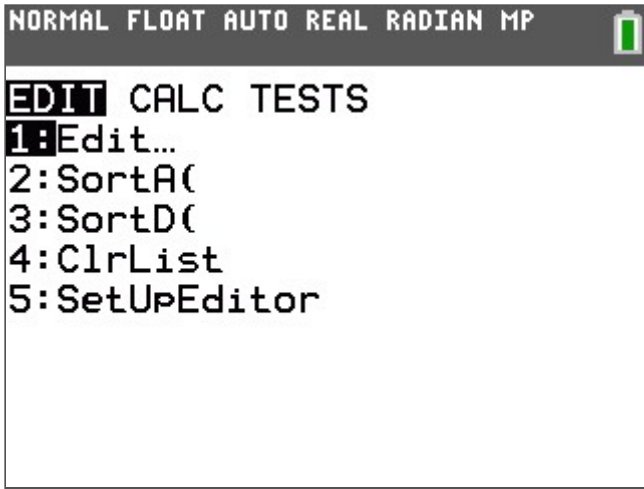


- Enter the data {3,5,8,10} in the L1 list and {7,8,14,18} in the L2 list, pressing [ENTER] after each entry to move down along the list.

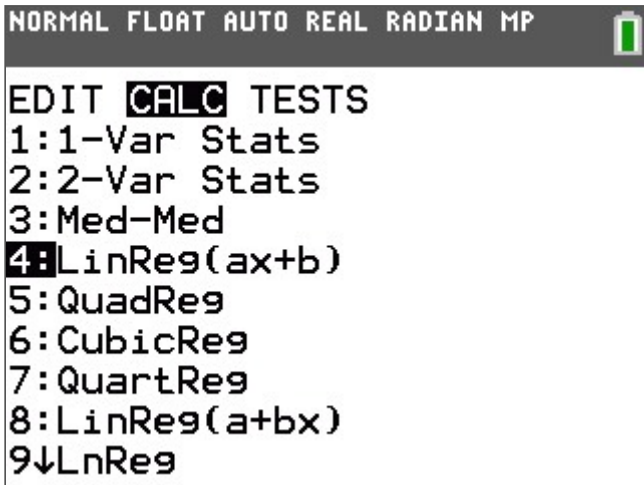


To calculate the Linear Regression ($ax+b$):

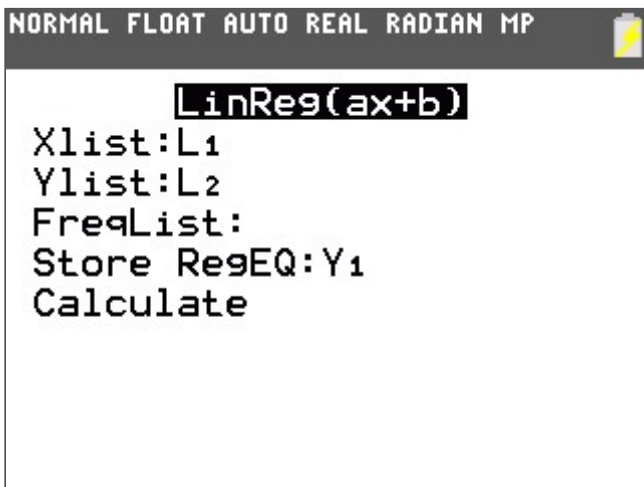
- Press [STAT] to enter the statistics menu.



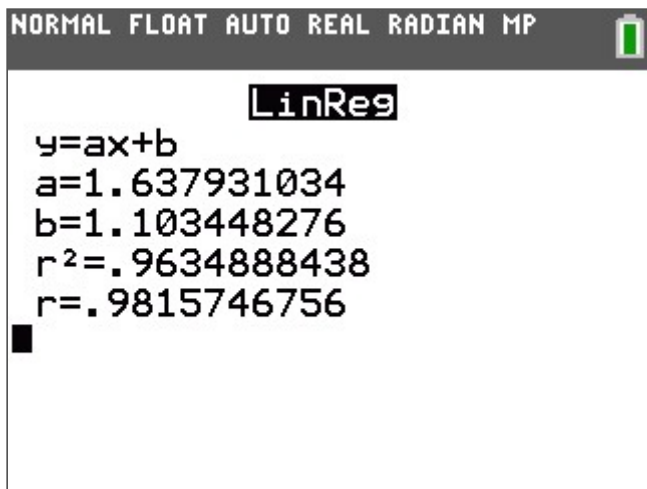
- Press the right arrow key to reach the CALC menu and then press 4: LinReg(ax+b).



- Ensure Xlist is set at L1, Ylist is set at L2 and Store RegEQ is set at Y1 by pressing [VARS] [→] 1:Function and 1:Y1.



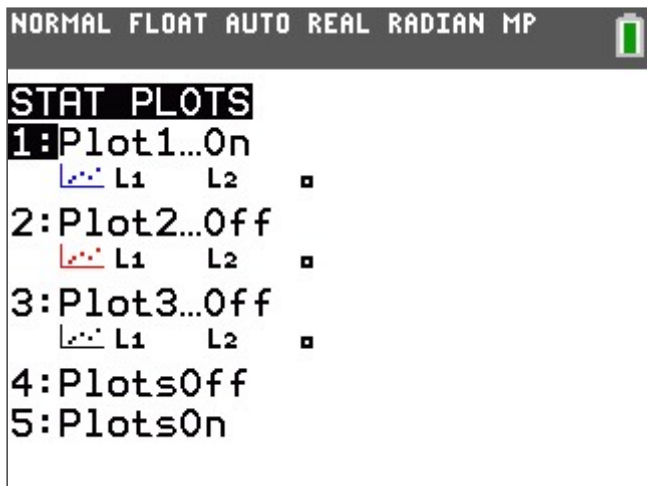
- Scroll down to Calculate and press [ENTER].



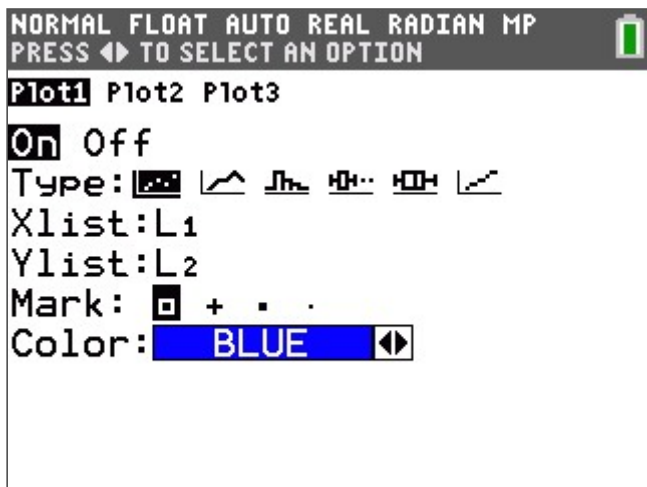
The graphing calculator will display the form of the equation as $y=ax+b$ and list the values for the two coefficients (a and b). It will store the regression equation to your Y1 function. The correlation coefficient (r and r^2) will be displayed if the diagnostics are on. Note: To turn the diagnostics on, from the home screen, press [2ND] [CATALOG]. Then in the catalog press [ALPHA] [D] to go down to the "D's". Scroll down through the list and select the instruction DiagnosticOn, and press [ENTER] twice and the display should show DONE.

In order to graph the data:

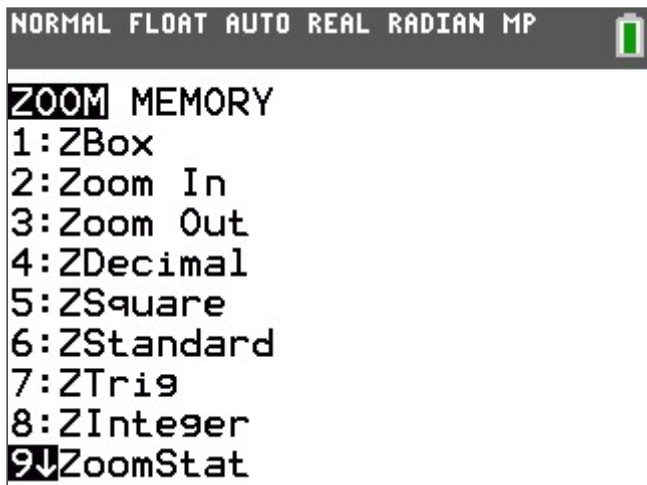
- Press [2ND] [STAT PLOT] to enter the stat plot menu.
- Press [1] to enter plot 1.



- Highlight ON and press [ENTER] to turn the stat plot on and be sure that Xlist is L1 and Ylist is L2.



- Press [GRAPH].
- Press [ZOOM] [9] to select ZoomStat.



• Your graph screen will display the following:

