Regression on the TI-85
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Keys are written between brackets [ ].
Function key selections are written in italics.

1. Enter the data points.
   - Data sets are best entered in the Stat Editor.
   - Press [STAT] EDIT [ENTER] [ENTER]. By pressing [ENTER] twice you accepted the default xStat and yStat lists as your data xlist and ylist. Your screen should look something like this:

   ![Data entry screen]

   - Clear any existing data in xStat and yStat by selecting CLRxy.
   - Enter the data pairs as points \((x_n, y_n)\). Use the arrow keys to scroll through the data and correct errors. To insert or delete a data point select the INSi or DELi function key.

2. Plot the data (or skip this step and go to step three).
   - Press [2nd] DRAW SCAT. You will see this screen:

   ![Data plot screen]

   - If your data does not appear on the screen then you must input new range variables. Press [GRAPH] RANGE, and change the \(x\) and \(y\) range to include your data. Then press [STAT] DRAW to return to the graph.
   - Press [CLEAR] to get rid of the menu bar at the bottom of the screen. Press [GRAPH] to restore the menu bar.

3. Perform the regression calculation.
   - Press [STAT] CALC [ENTER] [ENTER]. By pressing [ENTER] twice you accepted the default xStat and yStat lists as your data xlist and ylist.
   - For a linear regression select LINR.
– Your screen should now look something like this:

![Image of calculator screen]

The coefficients of a linear equation \( y = bx + a \) are displayed.

– The regression equation must be pasted into the equation editor to be graphed. Press [GRAPH] \( y(x) = . \)

– Clear any existing equations from the equation editor and position the cursor after \( y_1 = . \)

– Press [STAT] VARS [MORE] [MORE] RegEq. Your screen should look like this:

![Image of calculator screen]

– The regression equation was stored in the RegEq variable and is now entered into \( y_1 \). Press [GRAPH] GRAPH to graph the line. If your range variables were set in step two you will immediately see the linear regression line drawn. If you skipped step two and don’t see the line then press [GRAPH] RANGE and change the \( x \) and \( y \) range variables to include your data.

– The scatter plot will disappear when the line is graphed. To graph the line and scatter plot together, press [STAT] DRAW SCAT and you will see this:

![Image of scatter plot and line]

– The menu bars at the bottom of the display may be removed by pressing [CLEAR]. Press [GRAPH] to get them back.