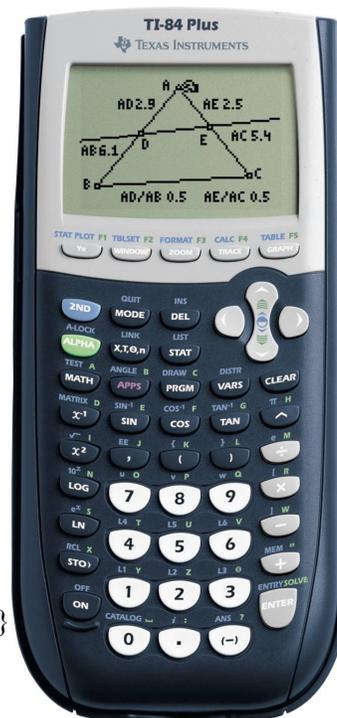


Linear Regression on TI-83 & 84 Calculators

Given that Alberta Ed has placed some rather heavy demands on the ability of students to *precisely* calculate slopes and y-intercepts based on graphed data for numerical response questions, it has become necessary to know how to do linear regressions on a graphing calculator.

There are several methods and processes I have found on the net. This is my explanation based on several of those. All buttons to be pressed are shown as **[THIS]**. Menu options to be selected are shown like {this}.



Section A: Clear Old Graphs

- It is possible that you have other stuff already graphed. This must be cleared before we continue!!!
- Press **[Y=]** and then press **[CLEAR]**.

Section B: Entering x and y Values

1. Press **[STAT]**, choose {1:Edit}, and hit **[ENTER]**.
2. If there is any data already here, use the arrow keys to scroll on top of {L1} and press **[CLEAR]** and then **[ENTER]**. You will repeat this for {L2} and the rest if necessary.
3. {L1} are your x values. Start in the {L1} column and start typing in all your x values from your data points. Hit **[ENTER]** after each one.
4. {L2} are your y values. Start at the top and type in your corresponding y values, hitting **[ENTER]** after each one.

Section C: Line of Best Fit, Slope, and y-Intercept

1. Press **[STAT]** and use the arrow keys to move over to {CALC} at the top.
2. Choose {4:LinReg(ax+b)} and hit **[ENTER]**.
3. It will jump to a new screen saying LinReg(ax+b).
 - a) On most updated TI 84, all you do now is press **[ENTER]** a few times until it shows you your “a” and “b” values.
 - b) If not, hit **[VARS]**, use the arrows to scroll to {Y-VARS} at the top. Choose {1:Function} and hit **[ENTER]**. It should show that function {1:Y1} is selected. Hit **[ENTER]**. It now says LinReg(ax+b)Y1. Hit **[ENTER]** and wait a moment. For your “a” and “b” values

Section D: Plot the Data (Optional)

This section is optional; if you don't care about seeing what the data looks like on a plot, just skip it.

1. Press **[2nd]** and **[Y=]**.
2. Choose {1:Plot1} and hit **[ENTER]**.
3. Choose {On}. As long as the {Type} is a scatter plot, and the {Xlist:} and {Ylist:} show {L1} and {L2}, you are ready to go.
4. Choose **[ZOOM]** and select {9:ZoomStat}. Hit **[ENTER]**.