

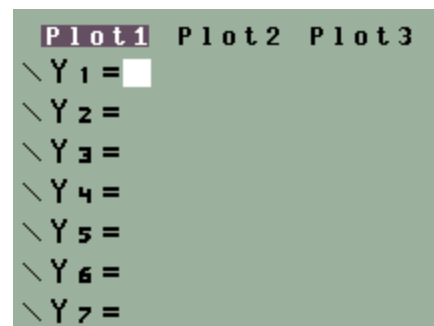
### 1. Draw a scatter plot using your graphing calculator.

1. **Enter the x values** in L<sub>1</sub> and the y values in L<sub>2</sub>.

- Press "**Stat**". The calculator will display **EDIT**, **CALC**, and **TESTS** across the top of the screen.
- Select **Edit**. The top of the screen should display L1, L2, L3 etc.
- Now enter your values for x under L1 and values for y under L2.

To view your data, select **ZOOM**, and scroll down to **ZoomStat** and hit enter.

If nothing appears, it is likely your plot is not turned on. To correct this, hit the **y=** button. Your screen should appear as seen to the right. If Plot 1 is not highlighted, scroll your cursor up to it and hit enter.



### 2. Obtain the correlation coefficient and Linear Regression Equation

- Press "Stat".
- Use right arrow key to highlight **CALC**.
- Select the appropriate power for the function linreg, quadreg, cubicreg, or quarticreg
- Press **ENTER** twice and it should display your regression equation as well as the correlation coefficient.

Your correlation coefficient **r** will be the last number displayed on your screen.

*(Note: If the correlation coefficient **r** is not displayed, then your "Diagnostics" are not on. Go to "2nd Catalog" and scroll down the page until you get to "DiagnosticOn".*

*Press "Enter" and your "Diagnostics" are on and your correlation coefficient **r** will be displayed when you go to "Stat".)*

The **a** and **b** values at the top of the screen are the y-intercept and slopes of the linear regression line.

### 3. Graph the Linear Regression Equation on the Scatter Plot.

- Press **Y=** (Make sure you do not have something in Y=. Press **CLEAR** to erase anything there.)
- Select **VAR**s and **5** (Statistics).
- With the arrow key, move the cursor to **EQ** and press **ENTER**.
- Press **GRAPH**

Your regression line will be drawn through your scatter plot.

### Trouble shooting:

If things go wrong, check the following possible reasons:

Dimension mismatch: When you plugged in values for x and y, every x value must have a y value and vice versa. Here is an example that would create a mismatch

L1	L2	L3
33	4	-----
12	16	
15	25	
4	-----	
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L2(4) =

Make sure that your Stat Plot is pulling your x and y values from the same column that you entered them into. For instance, if you plugged values into the L2 column and L3 column, the calculator will not be able to graph the points because it is looking in the L1 column and L2 column for the values. To view this screen, hit your 2<sup>nd</sup> button and then y=. If you need to edit the XList or YList values, **do not** type the letter L and number 1. Hit 2<sup>nd</sup> and then the 1 key on your calculator in order to get L<sub>1</sub> to appear.



Be sure to read all the directions and do all the things that they tell you to do!