

# How do I create a residual plot on a TI-84 calculator?

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## RECOMMENDED CITATION

stats writer (2024). *How do I create a residual plot on a TI-84 calculator?*.

PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=140818>

To create a residual plot on a TI-84 calculator, follow these steps:

1. Enter your data values into the calculator using the STAT button and selecting Edit.
2. Once the data is entered, go to the STAT PLOT menu by pressing the 2nd button followed by the Y= button.
3. Select Plot 1 and turn it on by pressing ENTER.
4. Choose the type of plot you want by selecting a scatter plot or a line plot by pressing the PLOT TYPE button.
5. Press ZOOM and select ZoomStat to get a better view of the plot.
6. Now, go to STAT PLOT and press ENTER to select the plot.
7. Finally, press GRAPH to generate the plot.

The residual plot will be displayed on the screen, showing the differences between the actual and predicted values for each data point. This can be useful for analyzing the accuracy of a regression model.

## Create a Residual Plot on a TI-84 Calculator

**A residual plot is used to assess whether or not the in a regression analysis are normally distributed and whether or not they exhibit .**

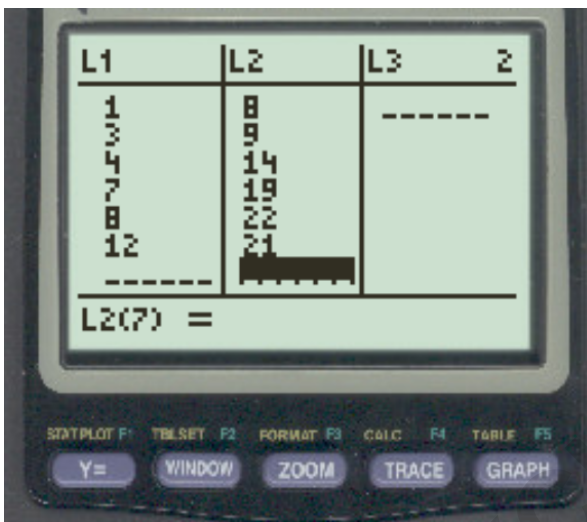
**This tutorial provides a step-by-step example of how to create a residual plot for the following dataset on a TI-84 calculator:**

x	y
1	8
3	9
4	14
7	19
8	22
12	21

## Step 1: Enter the Data

First, we will enter the data values.

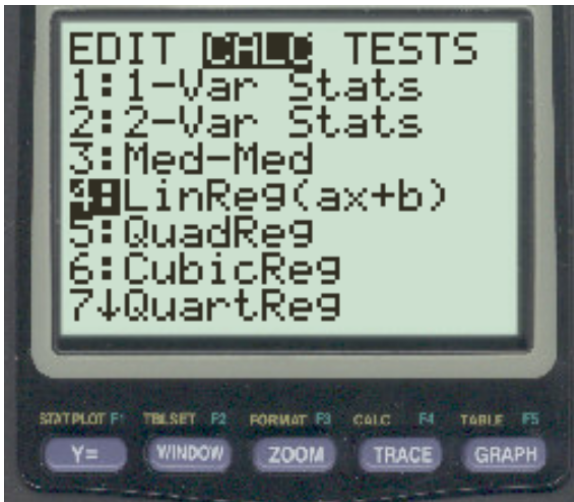
Press Stat, then press EDIT. Then enter the x-values of the dataset in column L1 and the y-values in column L2:



## Step 2: Perform Linear Regression

Next, we will fit a linear regression model to the dataset.

Press Stat, then scroll over to CALC. Then scroll down to LinReg(ax+b) and press ENTER.



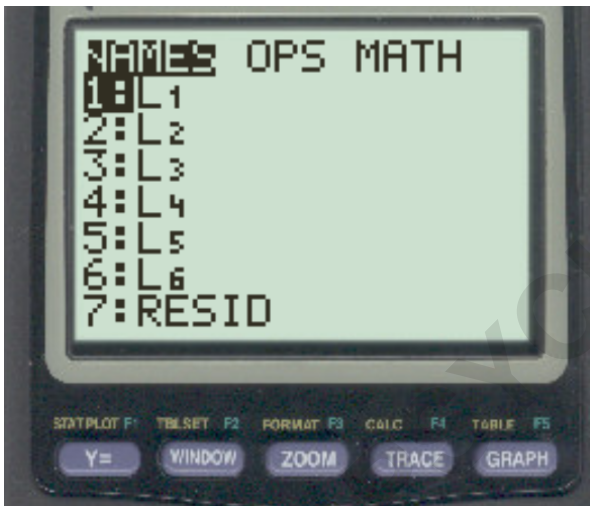
Press ENTER once again to perform linear regression:



The fitted regression model is:  $y = 7.397 + 1.389x$

Step 3: Create the Residual Plot

Next, press 2nd and then press Y=. In the new screen that appears, press ENTER on the first plot option.



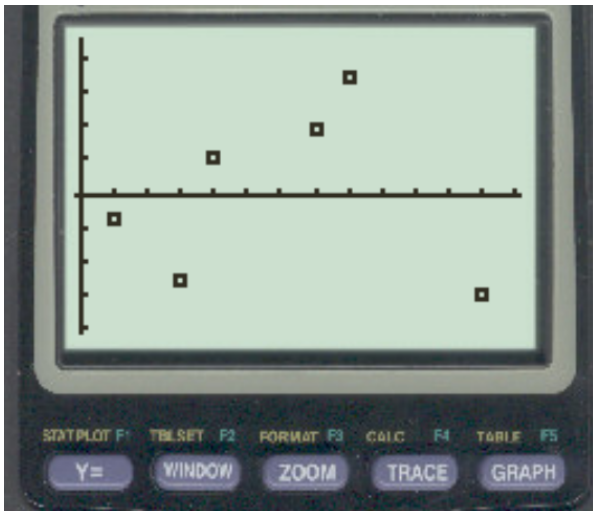
**The term "RESID" will then appear next to Ylist:**



Lastly, press **ZOOM** and then scroll down to **ZoomStat** and press **ENTER**.

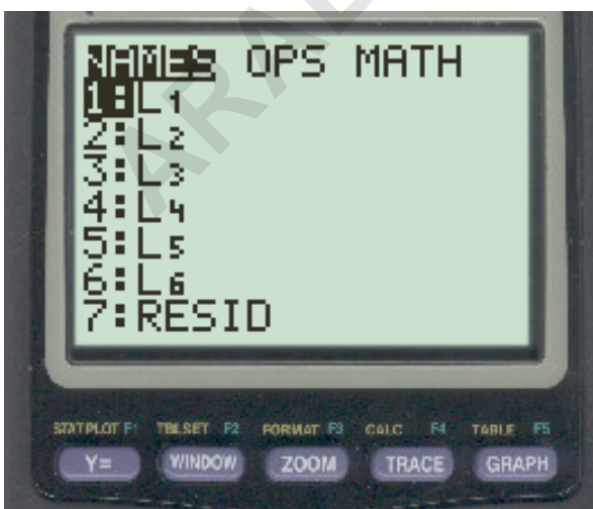


The residual plot will appear:



The x-axis displays the x values from the dataset and the y-axis displays the residuals from the regression model.

To see the actual values of the residuals, press 2nd and then press STAT. Then press "7" to choose the residuals:



**Press ENTER once more to display the residuals.**



**Scroll to the right to see the values for each of the residuals.**