

Finding the Line of Best Fit

Using a graphing calculator (Texas Instrument 83 or 84):

Step 1: Turn on the calculator (Bottom left button)

Step 2: Press "STAT" (Middle column, third from the top)

Step 3: Press ENTER on "Edit" under EDIT

Step 4: Place all points into the calculator

Under L_1 type all the x values from the points

Under L_2 type all the y values from the points

Step 5: Once all the points are entered Press "STAT"

Step 6: Push the arrow key to the right and highlight "CALC"

Step 7: Find and highlight LinReg(ax+b) and press ENTER

OR... Just push the number 4

Step 8: If LinReg(ax+b) appears on the screen press ENTER

IF something else appears move down to Calculate

Step 9: Fill in a for m in the equation and b for b.

Example

Find the Line of best fit for the following data using a graphing calculator:

$(-7, 3)$, $(-4, 2)$, $(-2, 0)$, $(2, 0)$, $(3, -3)$, & $(6, -3)$

After pressing STAT and enter on Edit the screen should show...

L₁	L₂	L₃
-7	3	
-4	2	
-2	0	
2	0	
3	-3	
6	-3	

Continued on the next page

Example Continued...

When your lists are entered correctly...

Press STAT

Press the right arrow key

Either go to LinReg(ax+b) or press the #4

After this your screen should look like...



LinReg(ax+b)

If it does, then press ENTER again.

Continued on the next page

Example Continued...

After pressing ENTER you should see...

<p style="text-align: center;">LinReg</p> <p>y=ax+b a=-.4801136364 b=-.3267045455</p>
--

This means that your answer should be somewhere close to...

$$y = -0.48x - 0.33$$

