Finding the Line of Best Fit

Using DESMOS:

Step 1: Press the Plus (+) key with the down arrow next to it.
Step 2: Choose Table
Step 3: Enter the points given into the table
Under x_1 put all the x values of the points.
Under y_1 put all the y values of the points.
Step 4: Move the cursor to the next line and type...
y1~mx1+b this will type in to look like $y_1 \sim mx_1+b$
(To find the ~, the m, and the b you need to go to the ABC button)
Step 5: Write the equation of the line rounding the decimal to to two points or just write the three decimals they provide to you.

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 Table and entering the points, the screen should show...

x_1	y_1
-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...

- **Click on the next line**
- **Enter $y_1 \sim mx_1 + b$**

After this your screen should look like...

1.

x_1	y_1
-7	3
-4	2
-2	0
2	0
3	-3
6	-3

2. $y_1 \sim mx_1 + b$

PARAMETERS

m = -0.48011 b = -0.3267

This means your answer should be: y = -0.48x - 0.33