

How to graph a regression line on the TI calculator

1. First clear all equations.
2. Hit stat then edit and enter the X data in L1 and the Y data in L2.

```

2:000) CALC TESTS  L1 | L2 | L3 | 1
1:Edit...
2:SortA(
3:SortD(
4:ClrList
5:SetUPEditor
L1 =
  
```

3. Once you have the data in the two lists. Go to the home screen and calculate the linear regression equation. Start by hitting stat, then one to the right, select number 4. Before you hit enter, you need to put the Y1 behind it, so it will store it in Y=. Hit VARS, one to the right, Enter, Enter.

```

L1 | L2 | L3 | 1 | 2:000) CALC TESTS | EDIT | 2:000) TESTS | LinReg(ax+b)
4 | 4 | | | 1:Edit... | 1:1-Var Stats
7 | 6 | | | 2:SortA( | 2:2-Var Stats
9 | 7 | | | 3:SortD( | 3:Med-Med
10 | 10 | | | 4:ClrList | 4:LinReg(ax+b)
11 | 15 | | | 5:SetUPEditor | 5:QuadReg
 | 19 | | | 6:CubicReg
 | | | | 7:QuartReg
L1(?)=

VARS Y-VARS | VARS Y-VARS | 2:000) | LinReg(ax+b) Y1
1:Window... | 1:Function... | 1:Y1
2:Zoom... | 2:Parametric... | 2:Y2
3:GDB... | 3:Polar... | 3:Y3
4:Picture... | 4:On/Off... | 4:Y4
5:Statistics... | | 5:Y5
6:Table... | | 6:Y6
7:String... | | 7:Y7

LinReg
y=ax+b
a=2.102702703
b=-7.005405405
r^2=.8171342171
r=.903954765
  
```

4. You should end up with the equation of the model and the (r) value. The r value is the correlation coefficient, and is used to determine the strength of the line.
5. To graph the equation and the scatter plot, turn on PLOT 1 and hit zoom 9.