

## How to use the TI 83-84 for linear regression

- 1- If this is a new calculator you must set it to give the coefficient of correlation r.
  - a- Press 2<sup>nd</sup> key and 0 key.
  - b- Move down with the arrow key to DiagnosticOn

```
CATALOG
De9ree
De1Var
DependAsk
DependAuto
det(
Dia9nosticOff
▶Dia9nosticOn
```

- c- Press ENTER key twice. That will set your calculator. From now on your calculator will give the r value.

```
Dia9nosticOn
Done
█
```

- 2- Enter in one list your x values (L1) and in a second list your y values(L2).
- 3- Press STAT key.
- 4- Move to the right to CALC.
- 5- Choose 4:LinReg(ax+b)

```
EDIT [STAT] TESTS
1:1-Var Stats
2:2-Var Stats
3:Med-Med
4:LinReg(ax+b)
5:QuadReg
6:CubicReg
7:QuartReg
```

- 6- Press ENTER key
- 7- For TI 84

```
LinReg(ax+b)
Xlist:L3
Ylist:L4
FreqList:
Store RegEQ:
Calculate
```

Press calculate.

- 8- For TI 83 , after choosing 4:LinReg(ax+b)  
LinReg(ax+b) L1, L2 (your lists)

- 9- This is the line and coefficient

```
LinReg  
y=ax+b  
a=1.72745239  
b=125.4073302  
r2=.3495991312  
r=.5912690853
```

$$y = 1.73x + 125.41$$

$$R=0.591$$