

## To run a type of regression on the TI-83/84

Enter the data in a list.

- Press {STAT} then {EDIT}. If you have information in each list L1, L2, etc you can clear that info by going to the top of the list (L1) and hitting {Clear}. When all the data is entered the screen may look like this.

L1	L2	L3	1
100	100	-----	
90	90		
88	88		
75	75		
62	62		
55	55		
50	50		
L1(1)=1			

- You can then plot those points on a graph by hitting {2<sup>nd</sup>} {STAT PLOT} then press {1}. Make sure your screen is set up like this.

Plot1	Plot2	Plot3
Off	Off	Off
Type: [ ]	[ ]	[ ]
Xlist: L1		
Ylist: L2		
Mark: [ ] + .		

- To graph the points you can then hit {ZOOM} and {9} for ZoomStat
- You can now run a regression which is a feature that will give you an equation that fits your data. For this example, I will run an Exponential Regression. Hit {STAT} then the {right arrow} for CALC. Run the type of regression you need, for me it is ExpReg so I hit {0}. Example shown in the screen to the right. Then {ENTER}

EDIT	TESTS
7: QuartReg	
8: LinReg(a+bx)	
9: LnReg	
0: ExpReg	
1: PwrReg	
2: Logistic	
3: SinReg	

- If you wish to see if your regression fits your line closely you can also graph the regression equation. Hit the {Y=} button and clear out any equations in the calculator. Hit the {VARS} button then {5} for Statistics {right arrow} {right arrow} and {1} for RegEQ. Your equation should now appear in the Y1 equation then hit {GRAPH} to see your data points along with the curve of your regression equation. Your screen will look something like the one at the right.

