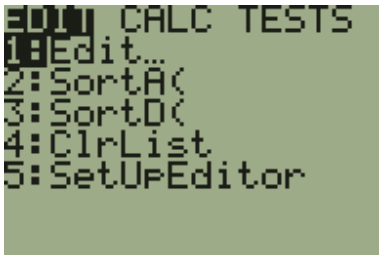
Linear Regression

Weekly Sales Data Based on Marketing Research

Price per box	Boxes sold
$2.40	38,320
$2.60	33,710
$2.80	28,280
$3.00	26,550
$3.20	25,530
$3.40	22,170
$3.60	18,260

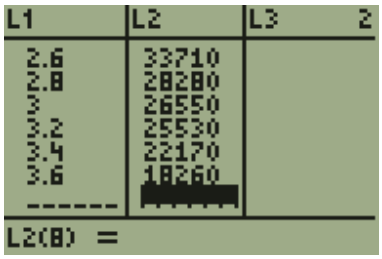
Enter the Data:

Press **STAT**



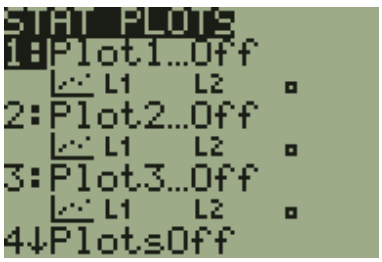
Arrow right to **Edit**

Enter x-coordinates in L1 and y-coordinates in L2



Plot the Data:

Press **2nd Y=**



Press **Enter** to get options

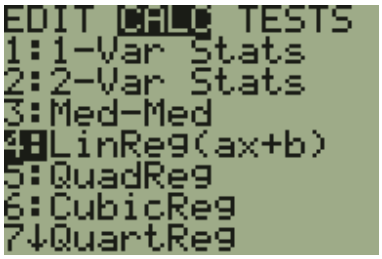
Press **Enter** to turn Plot1 On

Press **ZOOM→ZoomStat**

Press **GRAPH**

Calculate the Regression Line

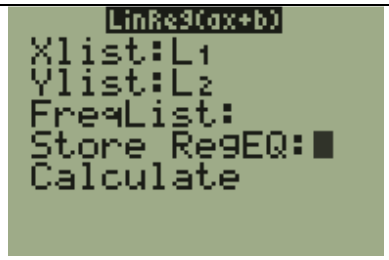
Press **STAT**
Arrow right to **Calc**
Arrow down to **4:LinReg**
Press **Enter**



What you see at this point depends on your calculator…

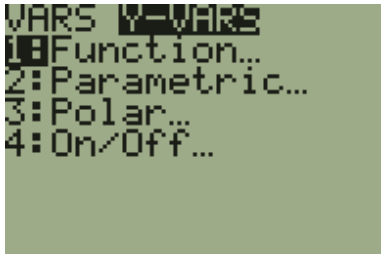
TI-84+

Arrow down to **Store RegEQ:**



Press **VARS**
Arrow right to **Y-Vars**

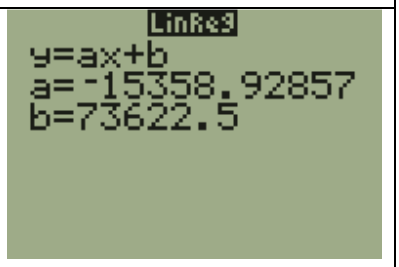
Press **Enter** to select **1:Function**



TI-83 (and some TI-84)

Press **Enter** again.

You should see this screen.

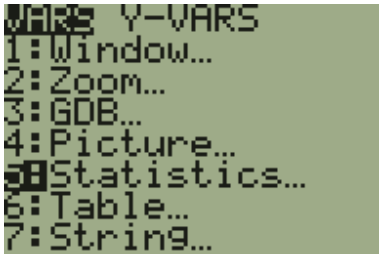


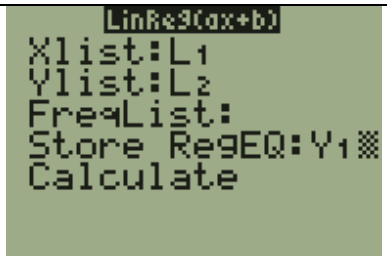
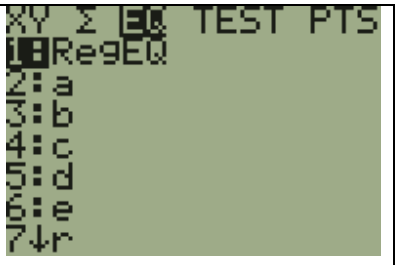
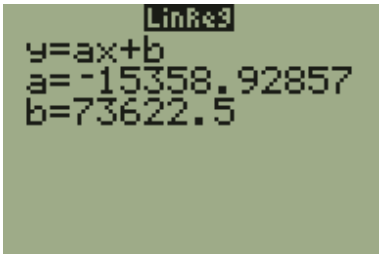
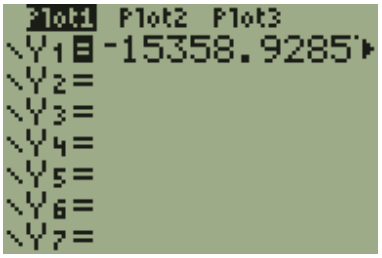
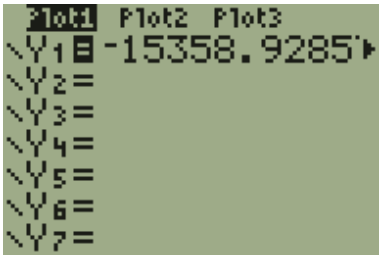
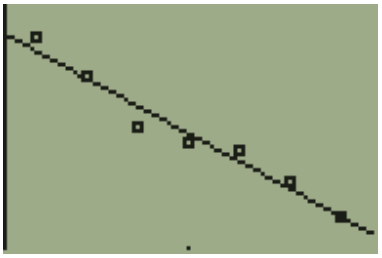
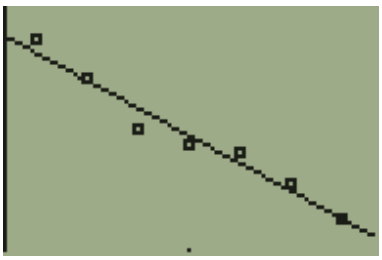
Store the equation in Y1:

Press **Y=**
Press **VARS**

Arrow down to **5:Statistics**

Press **Enter**



Press **Enter** again to select Y1		Arrow right to **EQ** Press **Enter** to select **1:RegEQ**	
Press **Enter** twice You should see this screen.		The regression equation is in Y1.	
Press **Y=** The regression equation is in Y1.		Press **GRAPH**	
Press **GRAPH**			
You can now use the regression equation to answer questions.			