

xStat	yStat	fStat
1.000	1.000	1.000
2.000	3.000	1.000
2.000	3.000	1.000
4.000	5.000	1.000
5.000	6.000	1.000
5.000	6.500	1.000

fStat(6) = 1

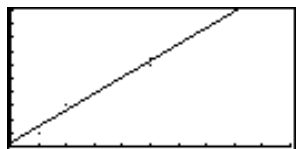
(3-1)

2-Var Stats	
\bar{x}	=3.167
Σx	=19.000
Σx^2	=75.000
s_x	=1.722

(3-2)

LinReg	
$y = a + bx$	
a	=.258
b	=1.208
corr	=.987

(4-1)



(5-1)

3. Two-Variable Statistics

Enter the STAT mode and clear old data as described in “One-Variable Statistics.”

Enter the data for “xStat”, “yStat”, and “fStat.” Note that with two variable statistics, each row of “xStat” and “yStat” are data pairs. All “fStat” rows should still be set to 1 even if there are several identical x-y pairs (3-1).

<Exit> back to main screen

<2nd> <+> for STAT mode

<F1> (Calc)

<F2> (TwoVa) for Two Variable calculations

<Enter>

Use up and down cursor keys to look at the various two variable data (3-2).

4. The Linear Regression Line

Note: This can only be done with two-variable statistics.

<2nd> <+> for STAT mode.

<F1> (Calc)

<F3> (LinR) for Linear Regression variables.

<Enter>

The TI 86 expresses the equation “ $y = mx + b$ ” as “ $y = a + bx$ ” where

a = the y intercept point

b = the slope of the line

corr = the correlation coefficient of the line (4-1)

The TI 86 will also show

n = the total number of data pairs

5. Graphing the Data Points and Linear Regression Line

Note: The pairs of “xStat” and “yStat” data points can be plotted at any time as described below but **“The Linear Regression Line” above must be done prior to plotting the linear regression line.**

Go to the Graph-Window screen as described in “Histogram of One Variable.”

Set “xMin” and “xMax” to the minimum and maximum values of the “xStat” data points.

Set “xScI” to 1.

Set “yMin” and “yMax” to the minimum and maximum values of the “yStat” data points.

Set “yScI” to 1.

<Exit> to main screen.

<2nd> <+> to enter STAT mode.

<F4> (Draw)

<F2> (Scat) to plot the individual points of data pairs in the “xStat” and “yStat” tables.

<More>

<F1> (Drreg) to draw the linear regression line.

Go to the Graph-Window screen and adjust the variables as necessary to get a good graph on the screen.

<Clear> to remove the menu from the bottom of the screen (5-1).

<Exit> back to the main screen when you are finished.