Finding Descriptive Statistics

Give a set of data, you will be able to find the mean, median, Q1, Q3, standard deviation and more on your TI-83 or TI-84 calculator.

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<u>Step 1</u> : To access the STAT menu, press the STAT button.	TI-84 Plus CE
	stat plot f1 tbl set f2 format f3 calc f4 table f5 y= window zoom trace graph
	quit ins 🔅 🛔
	2nd mode del
	a-lock link list alpha X,T,θ,n stat
	test A angle B draw C distr
	math apps prgm vars clear
Step 2: Select the EDIT menu and number 1) Edit by	EDIT CALC TESTS
hitting ENTER on the calculator keyboard (bottom right corner).	LEEdit 2:SortA(
0 • • • • • •	3:SortD(
	5:SetUpEditor
Step 3: It's now time to enter the data into one of	The list editor without data – ready and
the lists. Let's choose to enter the data into L1 (the	waiting for you data.
populated with data.	
If you have data in 11, here's how to clear it out	
Scroll up until your cursor is on L1.	
2 3	L1(1)=
	Ooopppps the list editor with data that
Push the CLEAR button and then the ENTER button.	2 3
y= window zoom trace graph log 7 8 9 ×	
2nd mode del slock link list	
alpha X,T,B,n stat	
math apps prgm vars clear off catalog i : ans ? enter	L1(4)=
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	

Step 4:O.K. enter the data in L1. Note: you can enter the data in any of lists, but for this example let's use L1.To practice, let's enter the following distribution of data in L1. 0 2 4 6 8 10 12 14 16	L1 L2 L3 L4 L5 1 4 4 5 5 8 9 9 10 15
<u>Step 5</u> : Now it's time to <i>calculate</i> some descriptive statistics (i.e. mean, standard deviation, the five number summary, etc.). Push the STAT button again to bring back our menu choices.	TI-84 Plus CE stat plot f1 tbl set f2 format f3 calc f4 table f5 y= window zoom trace graph quit ins calc f4 table f5 graph quit ins calc f4 table f5 graph G7 G7 G7 G7 G7 G7 G7 G7 G7 G7
<u>Step 6</u> : Scroll over to the CALC menu. Since the first choice 1: 1-Var Stats is what we want, just hit the ENTER button on the keypad.	EDIT CHEC TESTS 1-Var Stats 2:2-Var Stats 3:Med-Med 4:LinRe9(ax+b) 5:QuadRe9 6:CubicRe9 7:QuartRe9 8:LinRe9(a+bx) 9↓LnRe9
<u>Step 7</u> : If your calculator screen <u>DOES NOT look like</u> the image to the right, skip this step and go to the next step. If your calculator screen <u>DOES look like</u> the image to the right, just hit ENTER three times to get the descriptive statistics, and skip to Step 9.	<mark>1-Var Stats</mark> List:L1 FreqList: Calculate
Step 8: If your calculator says 1-Var Stats followed by a blinking cursor, your calculator wants you to enter the list where you stored the data. We stored the data in L1, so look above the number 1 on your keypad. You should see L1. To select L1 push the 2 nd key followed by the 1 key. Then push the ENTER key.	$ \begin{array}{c} r \\ x^{2} \\ y \\ z^{2} \\ y \\ z^{2} \\ y \\ z^{2} \\ y \\ z^{2} \\ z^{2} \\ y \\ z^{2} \\ z^{2} \\ y \\ z^{2} \\ z^$

Step 9: You should now see a bunch of descriptive	
statistics. You can use the arrow pad to scroll up and	
down to see all of the data. Note: S _x represents the	
standard deviation that goes with the following	
formula.	
$S_x = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$	
In this example the standard deviation is 4. and if you scroll down you should see that Q3 is 9.	

Here are some sample data sets for you to practice with.

Example 1: (the standard deviation is 6.741998625, and Q3 is 15.5)

