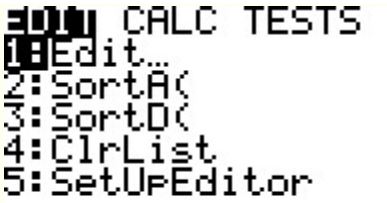
How to find the Standard Deviation

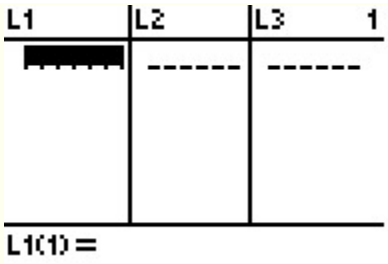
All modern TI graphing calculators (that I know about) allow you to calculate various types of statistics. The TI-84 Plus, in particular, has a powerful suite of statistics tools.

Demonstration problem: Calculate the standard deviation of the following set of data { 50, 20, 33, 40, 55 }

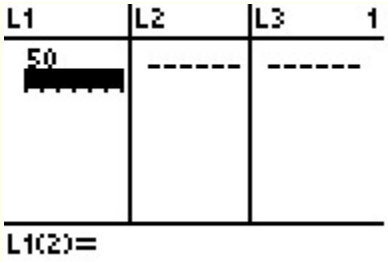
Part I enter the data into $List_1$ **Step 1)** Press "Stat"



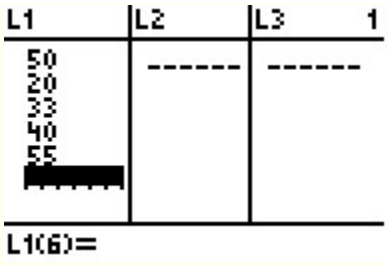
Step 2) Hit "enter" button and you should see the three lists on the right. In the next step we will enter all of the scores into L1



Step 4) Press "50" then "enter"

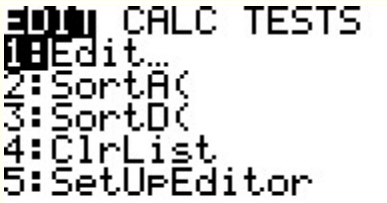


Step 5) Enter the rest of the data into the calculator by pressing each of the numbers then 'enter' :20, 33, 40, 55



Step 6) Return to the main calculator screen by pressing "2nd" then "quit"

Step 7) Press "Stat"



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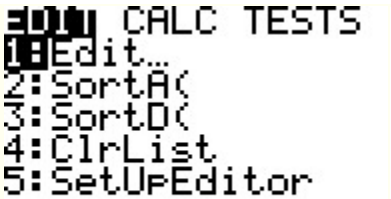
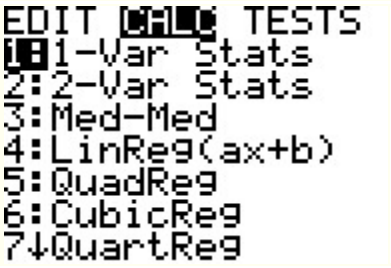
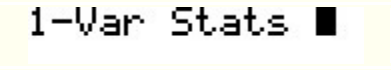
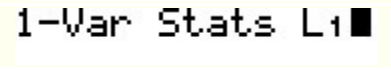
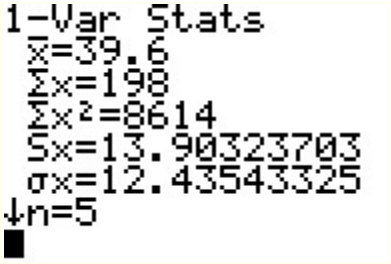
Part I enter the data into $List_1$ **Step 1)** Press "Stat"	
Step 8) Scroll right to highlight "Calc"	
Step 9) Hit "enter"	
Step 10) hit "2nd" then "L1"	
Step 11) Press "enter	

Your good old TI Graphing Calculator came to the rescue. All of the information that you see in the picture above is quite useful

X represents the arithmetic mean

σx represents the standard deviation

Therefore, this set of data has a mean of 39.6 and a standard deviation of 12.4