

## Use CASIO FX-280 to Find Sample Mean $\bar{X}$ & Sample S.D. $S$

To Compute  $\bar{X}$  and  $S$  for data: 12, 15, 4

- Press MODE
- Press  $\frac{\square}{\square}$  (You should see SD at the top right corner of the window)
- Type 12 into the window, then press M+
- Type 15 into the window, then press M+
- Type 4 into the window, then press M+
- Press SHIFT, then press n (You should see 3, which is the total # of obs. you entered)
- Press SHIFT, then press  $\bar{X}$  (You should see 10.33333333, which is the sample mean)
- Press SHIFT, then press  $\sigma_{n-1}$  (You should see 5.686240703, which is the sample s.d.)
- Press SHIFT, then press AC (to clear all data entered)
- Press MODE, then press 0 (to return to usual mode, and sign **SD** disappears in window)

## Use TI-30XIIS to Find Sample Mean $\bar{X}$ & Sample S.D. $S$

To Compute  $\bar{X}$  and  $S$  for data: 12, 15, 4

- Press **2nd Data** (to get into Stat Mode)
- Press **Enter** to select 1-var mode
- Press **Data**
- Type **12** after  $X_1 =$
- Press **∇**, then type **1** after FRQ =
- Press **∇**, then type **15** after  $X_2 =$
- Press **∇**, then type **1** after FRQ =
- Press **∇**, then type **4** after  $X_3 =$
- Press **∇**, then type **1** after FRQ =
- Press **STATVAR**, then move key **▷** to see  $n = 3$ ,  $\bar{X} = 10.3333333$ ,  $S_x = 5.686240703$ , etc., where  $S_x$  is the sample s.d.  $S$
- Press **2nd STATVAR** (to quit)

**YouTube Link:** <http://www.youtube.com/watch?v=NvqJPh3LFUY>

## Using the TI-82 to Find the Sample Mean and Sample Standard Deviation

Suppose that you want to find the mean and the standard deviation of the data set given below using the TI-82 graphing calculator.

17    15    23    19    14    21    25    29    20    22

First, you will need to enter the data from the Edit sub-menu. Press the STAT key and press ENTER to select the 1: (Edit...) option. You may see the following screen:

L1	L2	L3	1
████████	-----	-----	
L1(1) =			

The TI-82 will store up to six lists of data. If you wish to clear any particular list, arrow up to the list name, press CLEAR and then press ENTER.

Enter your data values, pressing ENTER after each entry. You should see the following screen after entering the data above:

L1	L2	L3	1
14			
21			
25			
29			
20			
22			
████████			
L1(1) =			

To calculate the descriptive summary measures, press STAT, right arrow to CALC, and press ENTER to select the 1: 1-Var Stats option. You must now indicate the name of the data list that you want to analyze. In this case, you wish to use list #1 (L1) in the analysis. Press 2<sup>nd</sup> 1 (L1) to select the first list. Then press ENTER. You should see the following screen:

1-Var Stats
$\bar{x}=20.5$
$\Sigma x=205$
$\Sigma x^2=4391$
$s_x=4.576510073$
$\sigma_x=4.341658669$
$n=10$
█

This screen indicates that the sample mean is  $\bar{x} = 20.5$  and the sample standard deviation is  $s \approx 4.5765$ .