

Using the TI-85 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-85 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 the F2 (EDIT) key. You should see the following screen:



```
xlist Name=xStat
ylist Name=yStat

CALC  EDIT  DRAW  FCST
xStat yStat
```

This screen allows you to name the data set that you are about to enter. If you anticipate using the data on several occasions, you should give it a special name using the alphabet feature of the TI-85. Otherwise, you should just use the generic names provided, xStat and yStat. To use these generic names, press ENTER two times and you will proceed to the next screen. Press F5 (CLRxy) to clear all values of x and y. Before you begin entering your data, you should see the following screen:



```
x=xStat    y=yStat
x1=
y1=

CALC  EDIT  DRAW  FCST
INS   DEL   SORTX  SORTY  CLRxy
```

Enter your data, as the x-values only. Each of the corresponding y-values should be a "1". Press 2nd F1 (CALC). Press Enter twice. Press F1 (1-VAR) for the one variable analysis. You should see the following screen:



```
x=20.5
Σx=205
Σx²=4391
Sx=4.57651007258
σx=4.34165866922
n=10

CALC  EDIT  DRAW  FCST
1-VAR  LINE  LNR   EXPR  PWRB
```

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