

Mean	The average of the numbers: a calculated "central" value of a set of numbers.
Median	Is the " middle " value in the list of ordered numbers.
Mode	The number which appears most often in a set of numbers.
Range	The difference of smallest number from the largest number.
Standard Deviation	Describes how closely a set of data clusters about the mean.

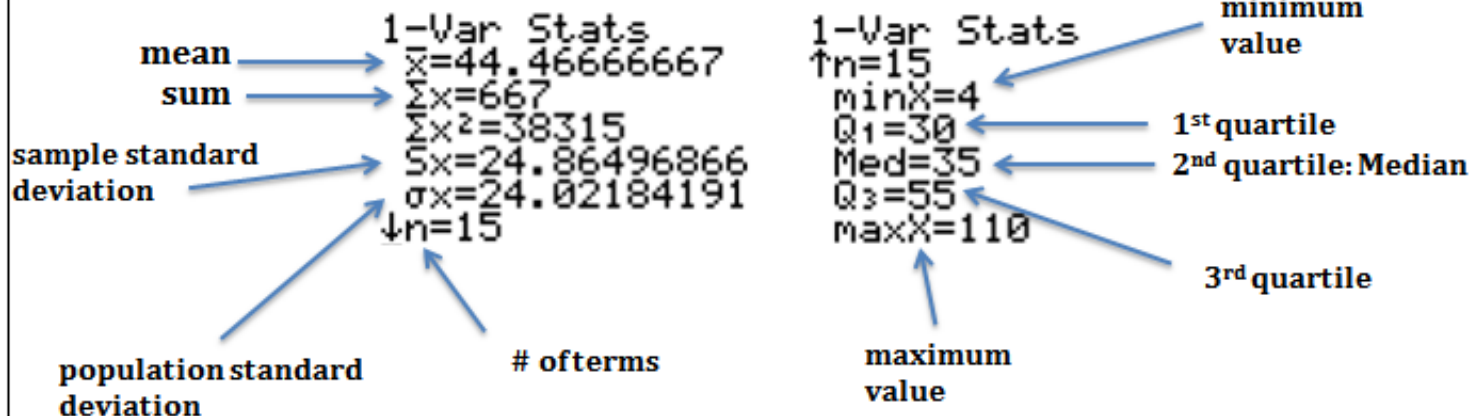
How do I find the mean, median, standard deviation, and box plot data?

1. **STAT**
2. Arrow over to CALC
3. Choose 1: 1-Var Stats
4. **ENTER**
5. **ENTER**

```

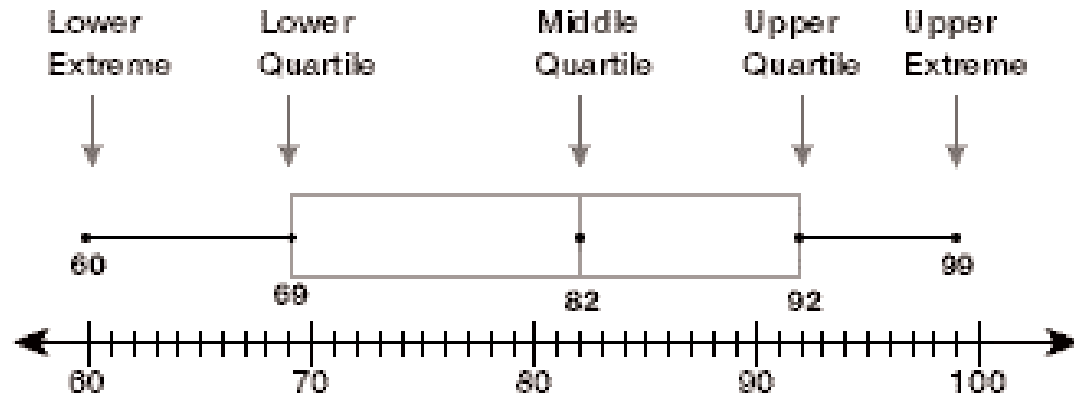
2ND 2ND CALC TESTS EDIT 2ND 2ND TESTS
1:Edit... 1:1-Var Stats
2:SortA( 2:2-Var Stats
3:SortD( 3:Med-Med
4:ClrList 4:LinReg(ax+b)
5:SetUpEditor 5:QuadReg
6:CubicReg
7:QuartReg

```



PLOT THE 5 VALUES FROM THE STATISTICAL SUMMARY TO CREATE A BOX PLOT!

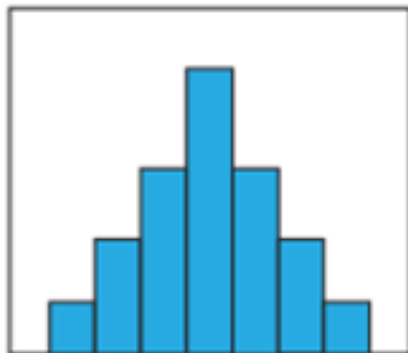
Min x = 60
Q1 = 69
Med = 82
Q3 = 92
Max x = 99



INTERQUARTILE RANGE

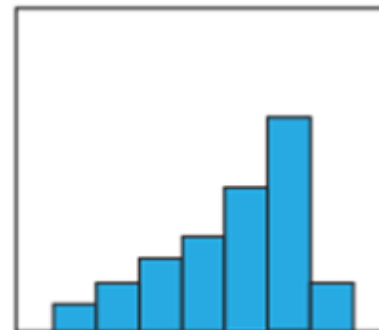
IQR: Q3 - Q1
IQR = 92 - 69
IQR = 23

Symmetric



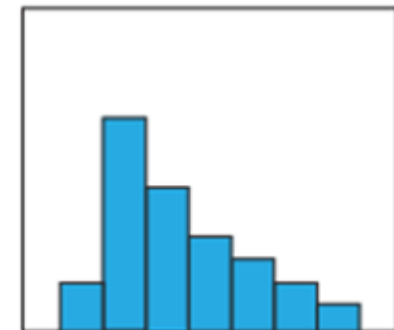
When the data is **SYMMETRICAL**, the **MEAN** would be a typical value to use.

Skewed Left



When the data is **SKEWED**, the **MEDIAN** would be a typical value to use.

Skewed Right



How do I find the mean, median, standard deviation, and box plot data?

1. **STAT**
2. Arrow over to CALC
3. Choose 1: 1-Var Stats
4. **ENTER**
5. **ENTER**

```

3000 CALC TESTS EDIT
1: Edit...
2: SortA(
3: SortD(
4: ClrList
5: SetUpEditor

1-Var Stats
2: 2-Var Stats
3: Med-Med
4: LinReg(ax+b)
5: QuadReg
6: CubicReg
7: QuartReg
    
```

mean → $\bar{x}=44.46666667$
sum → $\Sigma x=667$
sample standard deviation → $Sx=24.86496866$
population standard deviation → $\sigma x=24.02184191$
of terms → $n=15$

minimum value → $\min X=4$
1st quartile → $Q_1=30$
2nd quartile: Median → $Med=35$
3rd quartile → $Q_3=55$
maximum value → $\max X=110$

