Stick Quiz

Find the measures of central tendency and compare.

Tom kept a record of how many points players scored at the 2 o'clock basketball game.

Number of Points Scored	Frequency
2	3
3	3
4	4
5	6
6	5
7	3

$\bar{x} = 4.7$
med = 5
mode 5
rng 5

Julie kept a record of how many points players scores at the 5 o'clock basketball game.

Number of Points Scored	Frequency
0	3
3	5
5	4
7	3
9	5
11	4

6
6
3 9
11

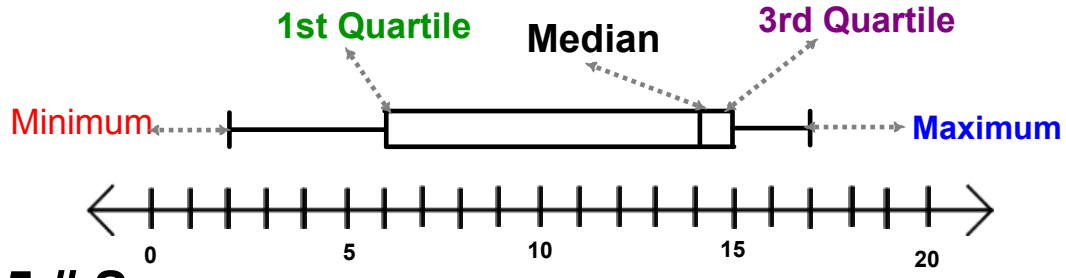
Questions On Homework

Stat 2

Box and Whisker Plots

5-number Summary

Box Plots:



5 # Summary:

Erase to uncover definitions

Minimum -- smallest # in data set

1st Quartile --the median between the minimum and median. (not including the median)

Median -- the middle number when numbers in a set are ordered from smallest to largest; if there are two numbers in the middle, the two numbers are averaged to find the median.

3rd Quartile -- The median between the median and the maximum. (but not including the median)

Maximum -- the largest number in the set.

Outliers -- extreme numbers that lie outside the expected range.

Find any outlier by determining the Inter Quartile Range(IQR)
any number 1.5 times above or below that range is an outlier.

63, 88, 89, 89, 95, 98, 99, 99, 100, 100

Med

min 63 | 89 | 96.5 | 99 | max 100

IQR 99-89=10

10(1.5)=15

74 114

IQR = 99-89 = 10 ⇒ 10(1.5)=15

1st Q - IQR(1.5) = 89-15=74 63 is an Outlier!

3rd Q + IQR(1.5) = 99+15 = 114

Example: Ms. Lingle's First period calss took a test and had the following scores.

81, 97, 92, 65, 77, 89, 84, 68, 74, 93, 91, 85, 79, 84, 86, 90, 91, 84, 78, and 80.

What is the 5-number Summary?

Put the numbers in highest to lowest.

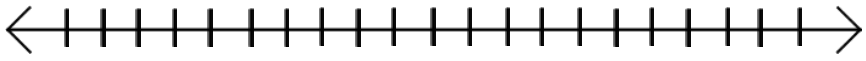
58, 60, 68, 77, 78, 79, 80, 81, 84, 84, 84, 85, 86, 89, 90, 91, 91, 92, 93, 97

Min 1st Q Median 3rd Q Max

IQR =

1st Q - IQR =

3rd Q + IQR =



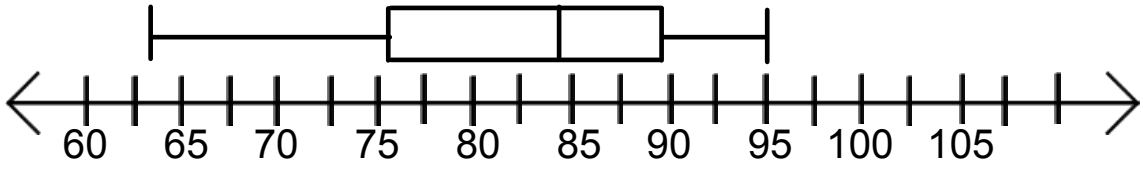
Example: Ms. Lingle's first period class took a test and had the following scores.

79, 95, 90, 63, 75, 87, 84, 66, 72, 91, 89, 85, 77, 84, 86, 88, 89, 84, 76, and 78

What is the 5-number Summary?

Are there Outliers?

Create a Box and Whisker Plot.



You Try!!

Create a box plot to represent the following data:

10.2, 14.1, 14.4. 14.4, 14.4, 14.5, 14.5, 14.6, 14.7, 14.7, 14.7, 14.9, 15.1, 15.9, 16.4

Minimum

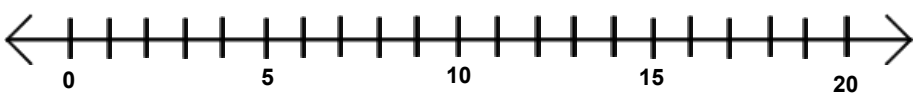
1st Quartile

Median

3rd Quartile

Maximum

Outliers



Rubber Band Launch Ideas are due March 21st

Homework

Stat 2 Worksheet

Box Plots and 5-number Summary