NAME: _____

Mean, Median, Box & Whisker Plots

Data Set 1:
In a park that has several basketball courts, a student counts the number of players playing basketball each day over a two-week period and records the following data.

10, 90, 30, 20, 50, 30, 60, 40, 70, 40, 30, 60, 80, 20

Data Set 2:
In another park that has several basketball courts, another student counts the number of players playing basketball each day over a two-week period and records the following data.

50, 40, 30, 30, 40, 50, 50, 30, 40, 50, 60, 60, 50, 50

How are the two data sets similar and how are they different?

Mean (μ) data set #1 =   Mean (μ) data set #2 =

Median data set #1 =   Median data set #2 =

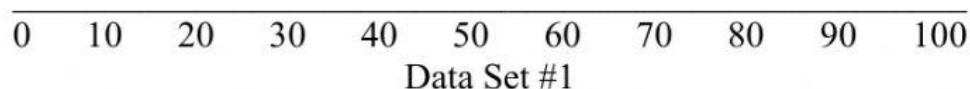Mode data set #1 =   Mode data set #2 =

Range data set #1 =   Range data set #1 =

Make Box and Whisker Plots for each set of the basketball data.

Data Set #1

Median: _____   Inter-Quartile Range: _____
Lower Quartile: _____ 3rd Quartile Value: _____
Upper Quartile: _____ 1st Quartile Value: _____
Lower Extreme: _____   Range: _____
Upper Extreme: _____

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|____|____|____|____|____|____|____|____|____|____|
0    10   20   30   40   50   60   70   80   90  100
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Data Set #1

Data Set #2

Median: _____   Inter-Quartile Range: _____
Lower Quartile: _____ 3rd Quartile Value: _____
Upper Quartile: _____ 1st Quartile Value: _____
Lower Extreme: _____   Range: _____
Upper Extreme: _____

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|____|____|____|____|____|____|____|____|____|____|
0    10   20   30   40   50   60   70   80   90  100
```
Data Set #2
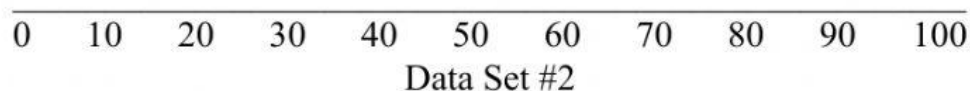
How to Make a Box and Whisker Plot:

1. Put all numbers in numerical order.
2. Find the Median of all the numbers. (Median)
3. Find the Median of the lower set of numbers. (Lower Quartile or Quartile 1)
4. Find the Median of the upper set of numbers. (Upper Quartile or Quartile 3)
5. Find the Smallest number. (Lower Extreme)
6. Find the Largest number. (Upper Extreme)
7. Plot all of the above points on the number line. Draw a box around the Lower and Upper Quartiles and Whiskers out to the Extremes.