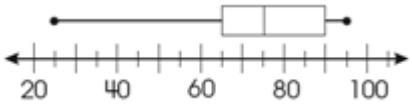
Unit 6-1 Test Review Problems **Name:_____**

1. The table below shows the mean absolute deviation of the number of points scored per person on a baseball team.

Team	Mean Absolute Deviation
Braves	2.4
Phillies	3.5
Dodgers	4.2
Yankees	1.2

On what team did the number of points per person vary the most? Tell why using math vocabulary.

2. Colby graphed some data as shown in this box-and-whisker plot.



Which statement is true about Colby's data?

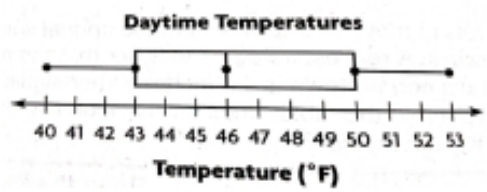
A. Then range of the data is 25

B. One-half of the data is below 65.

C. The median of the data is 60.

D. Three-fourths of the data are below 90.

3. The box and whisker plot shows statistics for the daytime temperatures in Denver, Colorado for two weeks.



Which conclusion is **TRUE** using these statistics?

A. About 50% of the time the temperature is greater than 43° F.
B. On half of the days during the two weeks, the temperature was at least 46° F.
C. The range of the daytime temperatures is 8°F.
D. The interquartile range of the data is 4°F.

4. The table below shows the number of twitter followers of 8 sixth grade students. **Find the mean absolute deviation** of the data set and explain what it means.

Number of Twitter Followers			
48	55	59	54
62	60	52	58

A) 2.67 is the average distance each value lies from the mean.
B) 56 is the average of all the numbers.
C) 3.75 is the average of all the numbers.
D) 3.75 is the average distance each value lies from the mean.

5. Mrs. Jones was studying the effects of fertilizer on two groups of rose bushes for her garden club. She measured the bushes growth in inches after one season and listed them below. Which statement would best describe the data?

26, 24, 11, 34, 20	**2, 19, 11, 12, 9**
Group A	**Group B**

A) The median height of both groups is the same, but group B has more consistent results as it has a smaller range.
B) The mean of Group A is greater, so it is more effective, but it is inconsistent as its interquartile range is greater.
C) Both fertilizers are equally effective with the similar measures of center, and variability.
D) The mean of Group B is greater, so it is more effective, but it is inconsistent as its interquartile range is greater.

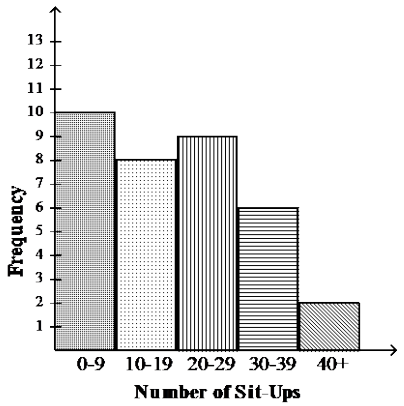
6. Tom and Rachel are running laps on the school track each day. The number of miles run by each of them over a 5-day period is shown in the table below.

Number of Miles Run per Day by Tom and Rachel	
Tom	**Rachel**
4	1
2	2
6	6
4	1
3	2

Who typically runs farther and is more consistent in the distances they run? How do you know?

A) Rachel typically runs farther. She is more consistent because she has 2 modes, 1 and 2.
B) Rachel typically runs farther. But Tom is more consistent.
C) Tom typically runs farther because his mean is larger. Tom is more consistent, as his range is smaller.
D) Tom runs farther because when you add up all his miles, he has more. But Rachel is more consistent.

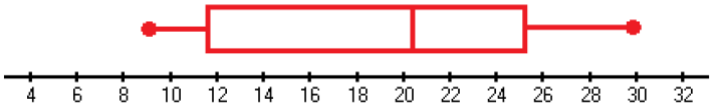
7. The histogram below displays the number of sit-ups that a student can do in 1 minute. According to the graph, how many students can do at least 20 sit-ups in 1 minute?



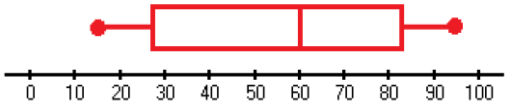
8. Describe the distribution shape of the histogram above.

Use the plots below to answer questions #9-13

PLOT A



PLOT B



9.) What is the median for Box Plot B?

10.) Find the interquartile range Plot A.

11.) Find the interquartile range Plot B.

12.) Which box plot shows more consistency and why? Explain how you know using math vocabulary and calculations.

13.) Between which two numbers does the middle 50% of the data lie in Box Plot B?

14. What type of measure is used to represent a data set as a whole?

15. What type of measure is used to determine consistency?

16. Derek's math test scores are 76,80,78,84, and 80. His social studies scores are 100, 80, 73, 28, and 71. What measure of center would be best to use to compare his math and social studies scores and why?

17. Look at the line plots:

a. What is the mean, median and mode number of emails for both Pedro and Annika?

b. What is the best measure of center to use to compare the data and why?

c. Who has the greater variability? Explain.