Name: _____ Date: _____

Central Tendency and Spread

1. The table shows the scores from the top 10 players of our Homecoming basketball game.

   Which player scored more than the upper quartile of the data?

   A. Matt
   B. Michael
   C. Jim
   D. Bobby

Player	Points	Player	Points
Michael	12	Dave	9
Brendan	6	Heath	15
Andrew	21	Jack	3
Jim	14	Bobby	10
Andre	5	Matt	18

For #2-3, use the graph to the right.

2. Which statement below is NOT true?
   A. 2nd period had the highest score on the test
   B. The median for 2nd period is 5 less than the median for 3rd
   C. The LQ for 2nd period is 5 less than LQ for 3rd period
   D. The UQ for 3rd period is 94

3. Fill in the blanks:
   - The median for 2nd period is _____
   - The median for 3rd period is _____
   - The lowest score for 3rd period is _____
   - The lower quartile for 2nd period is _____
   - The spread of the middle 50% for 2nd period is _____

Test Scores
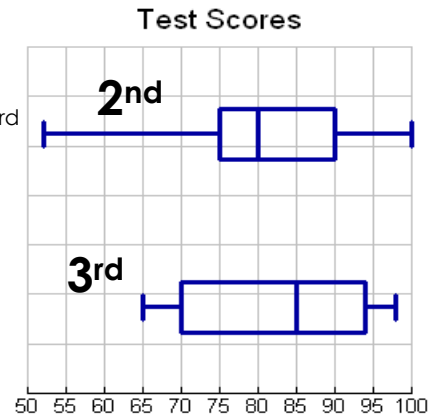
Sample A: 2, 4, 4, 4, 8, 8, 10, 12, 12, 14   **Sample B: 0, 1, 4, 7, 9, 9, 10, 12, 12, 15**

4. Which statement accurately compares the two samples?
   A. The mean for Sample A is 1 greater than the mean of Sample B.
   B. The mean for Sample B is 1 greater than the mean of Sample A.
   C. The mean for Sample A is 0.1 greater than the mean of Sample B.
   D. The mean for Sample B is 0.1 greater than the mean of Sample A.

5. Forty-five people were asked about how many miles they walked in one week. The results are shown in the graph. How does the median number of miles walked for boys compare with the median number of miles walked for girls?
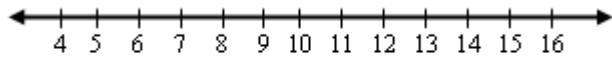

Average Distance Walked

Performance Task: The Basketball Star - Is Bob or Alan a Basketball Star?
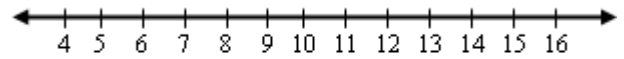
Bob's Points per Game

8, 15, 10, 10, 10, 15, 7, 8, 10, 9, 12, 11, 11, 13, 7, 8, 9, 9, 8, 10, 11, 14, 11, 10, 9, 12, 14, 14, 12, 13, 5, 13, 9, 11, 12, 13, 10, 8, 7, 8

1. Bob believes he is a basketball star and so does his friend Alan. Create a dot plot and box plot of Bob's points for the last 40 games.
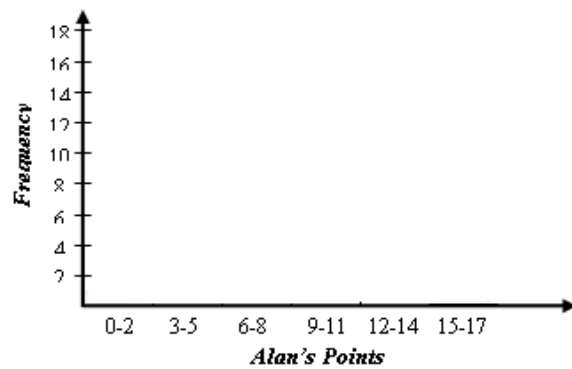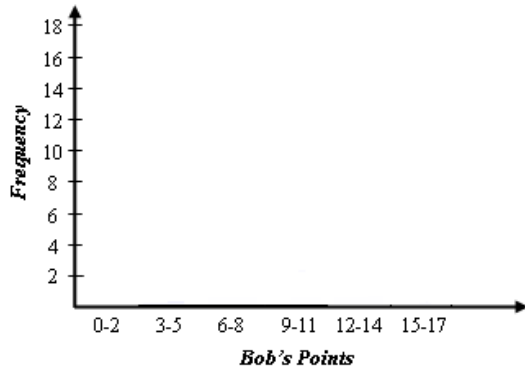

Bob's Points

Bob's Points

2. Describe Bob's data in terms of center, spread, and shape.

Alan's Points per Game

1, 3, 0, 2, 4, 5, 7, 7, 8, 10, 4, 4, 3, 2, 5, 6, 6, 6, 8, 8, 10, 11, 11, 10, 12, 12, 5, 6, 8, 9, 10, 15, 10, 12, 11, 11, 6, 7, 7, 8

3. Create a histogram of both Bob's and Alan's data.

Bob's Points

Alan's Points

4. Describe the shape of the two histograms from problem #3.

5. Use summary statistics to compare Bob and Alan's points per game.

	Min	Quartile 1 (Q1)	Median (Q2)	Quartile 3 (Q3)	Max	Mean	Range	IQR
Bob								
Alan								