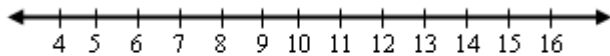Name: _____ Date: _____

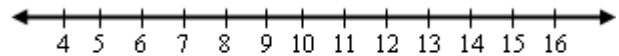## Performance Task: The Basketball Star

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.
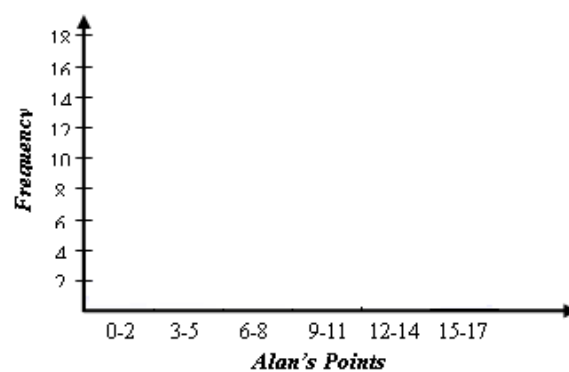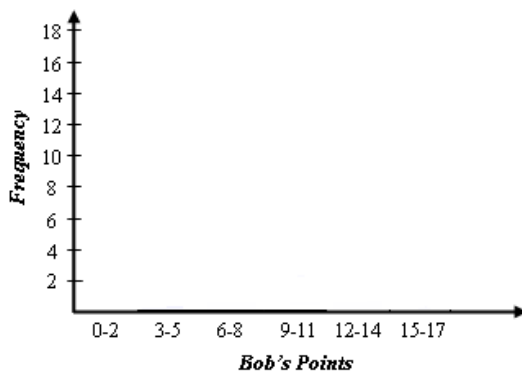

Bob's Points

Bob's Points

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

Bob's friend Alan has the following points:

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								

6. Determine if there are any statistical outliers for Bob or Alan.

7. Which graphical representation best displayed Bob's and Alan's data?

8. Based on the summary statistics is either friend a basketball star? Justify your answer.