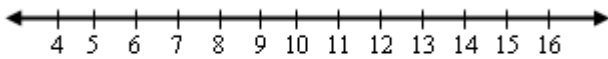# The Basketball Star Task
Is Bob or Alan a Basketball Star?
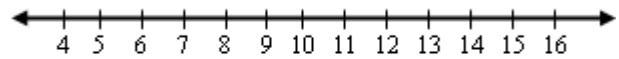
Name: _____ Date: _____

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.
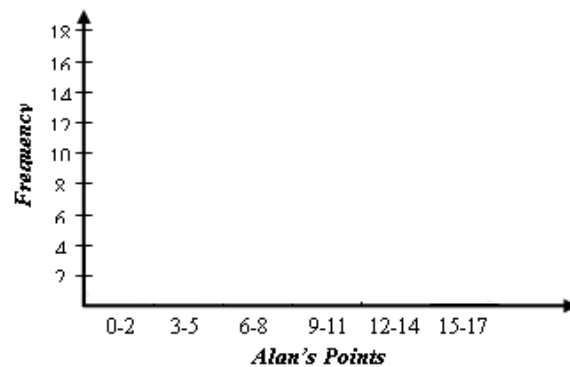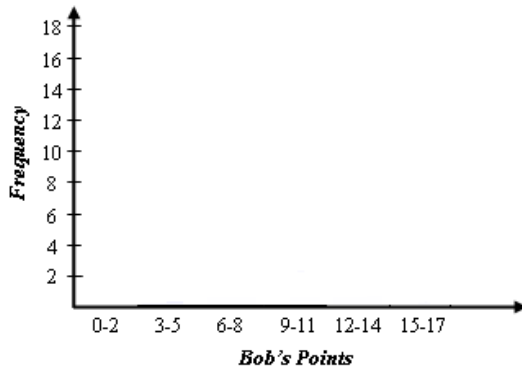

Bob's Points

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

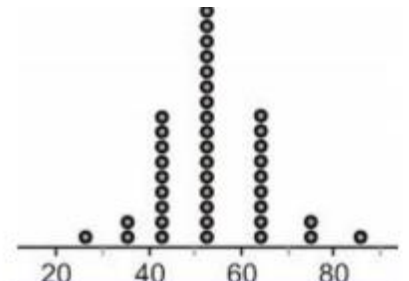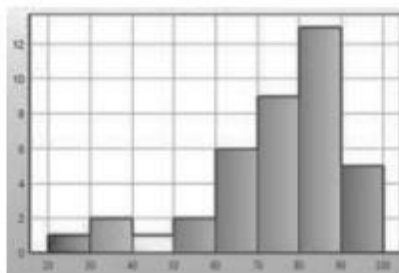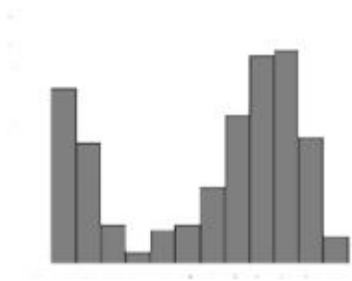| 1, 3, 0, 2, 4, 5, 7, 7, 8, 10, 4, 4, 3, 2, 5, 6, 6, 6, 8, 8, 10, 11, 11, 10, 12, 12, 5, 6, 8, 9, 10, 15, 10, 12, 11, 11, 6, 7, 7, 8 |

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

7. Based on the summary statistics, from #5, is either friend a basketball star? If so who and why are they a star?

8) Describe the shape.

9) Describe the shape

10) Describe the shape.