# The Basketball Star Task Is Bob or Alan a Basketball Star? 

Name: $\qquad$ Date: $\qquad$

## 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.


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 <br> (Q1) | Median <br> (Q2) | Quartile 3 <br> (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?
