

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

Name: _____

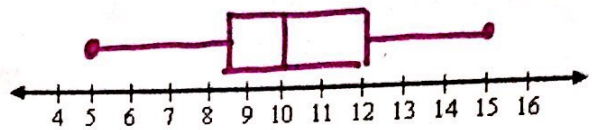
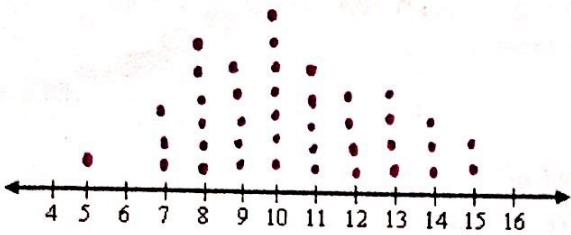
Date: _____

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.

min: 5 med: 10 max: 15
Q1: 8.5 Q3: 12



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

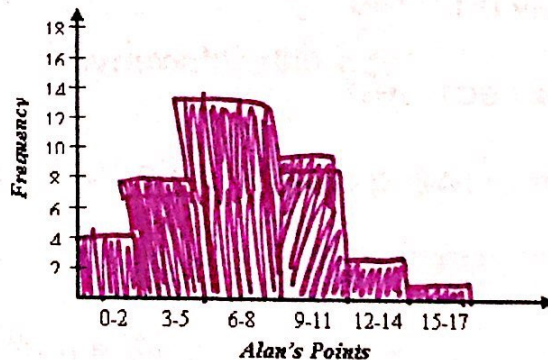
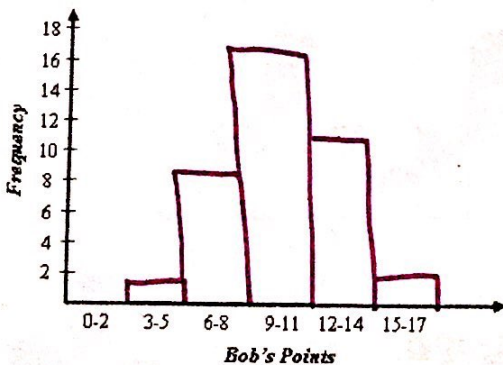
The center of Bob's data is around 10 w/ the mean being 10.4 & median 10.
The spread of Bob's data has a range of 10 & IQR of 3.5
Bob's data is about symmetrical.

Bob's friend Alan has the following points:

Alan's Points per Game

~~1, 2, 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.



be the shape of the two histograms from problem #3.

Both histograms are pretty symmetrical if I had to be more skewed, Alan's would be skewed right.

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	5	8.5	10	12	15	10.4	10	3.5
Alan	0	5	7	10	15	7.25	15	5

Comparison of the boy's statistics:

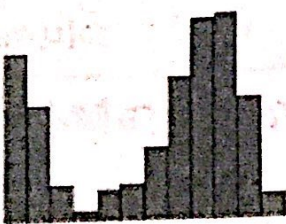
Alan's data is more spread out than Bob's data. Bob's median & mean are higher than Alan's.

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

I think histograms show frequencies best but box plot would better compare Bob v. Alan.

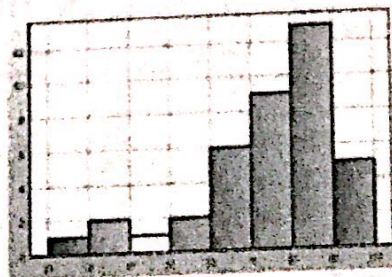
7. Based on the summary statistics, from #5, is either friend a basketball star? If so who and why are they a star?

Bob would be a better basketball star than Alan. [more consistent - lower range
better player - higher mean/med]



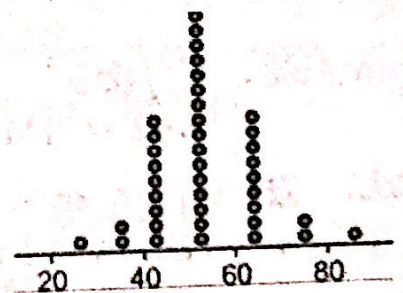
8) Describe the shape.

Bi modal



9) Describe the shape

Skewed left.



10) Describe the shape.

Symmetric.