Statistics Chapter 1 Practice   Name_____

Show all your work. You will need your calculator

49ers	Raiders
Points	Points
27	42
28	34
31	37
24	38
28	45
23	24
17	21
20	9
20	20
17	20
20	13
21	10
29	3
24	7
24	28
28	35

1) The table at right shows the number of points scored per game over a 16 game NFL season by the 49ers and Raiders.
   a) Below, construct a stem and leaf plot for each teams data.

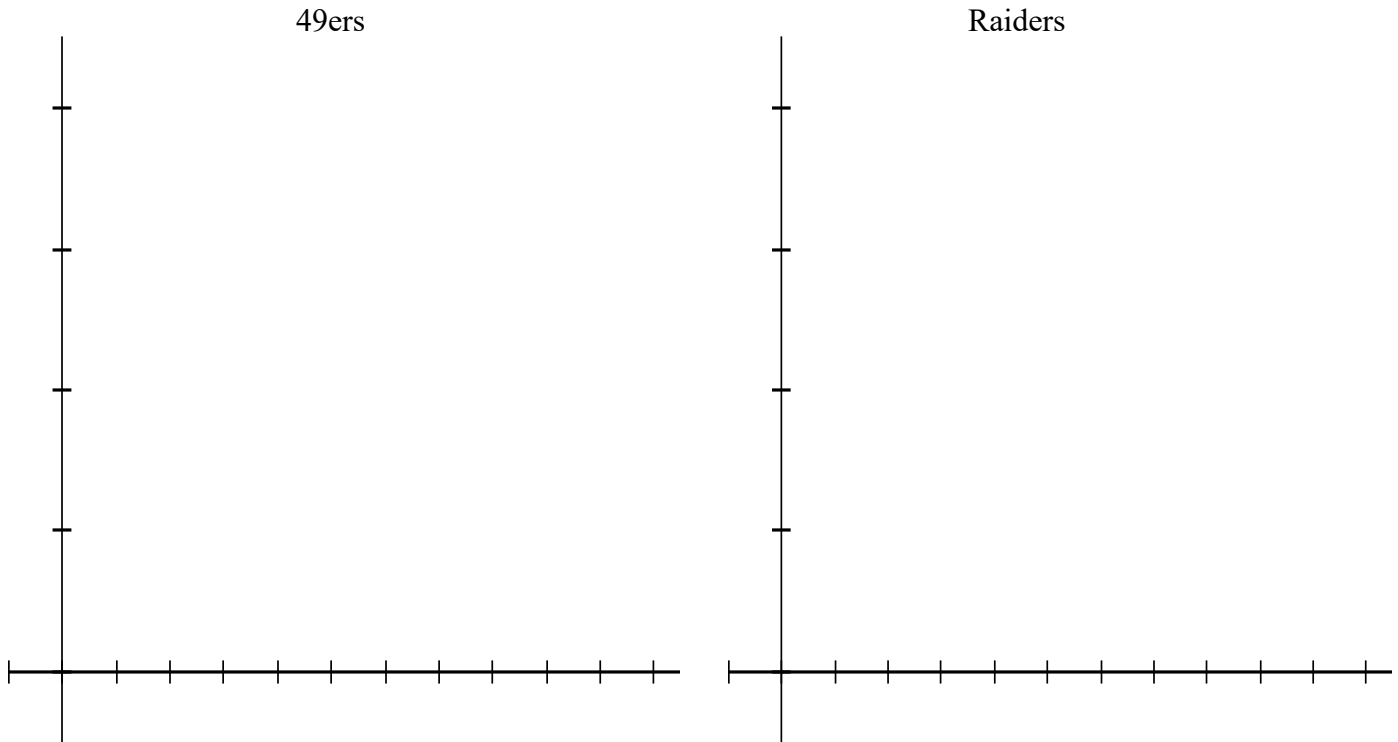   49ers   Raiders
   stem | leaf   stem | leaf

   b) <u>Without comparing individual scores from the table</u>, state which team has a wider spread of scores and what each spread is? What value did you use to find the spread of each teams scores?

   c) State the mean and median of each team. Explain why the Raiders have a higher mean but a lower median.

2) Construct a histogram for each team's game by game number of points using a class interval size of 5 (0-4, 5-9, 10-14, 15-19, etc). Label each axes completely.

49ers

Raiders

3) Construct a frequency table listing frequency, relative frequency, and relative cumulative frequency for each team. You may use fractions. If you use decimals, you may round to three places.
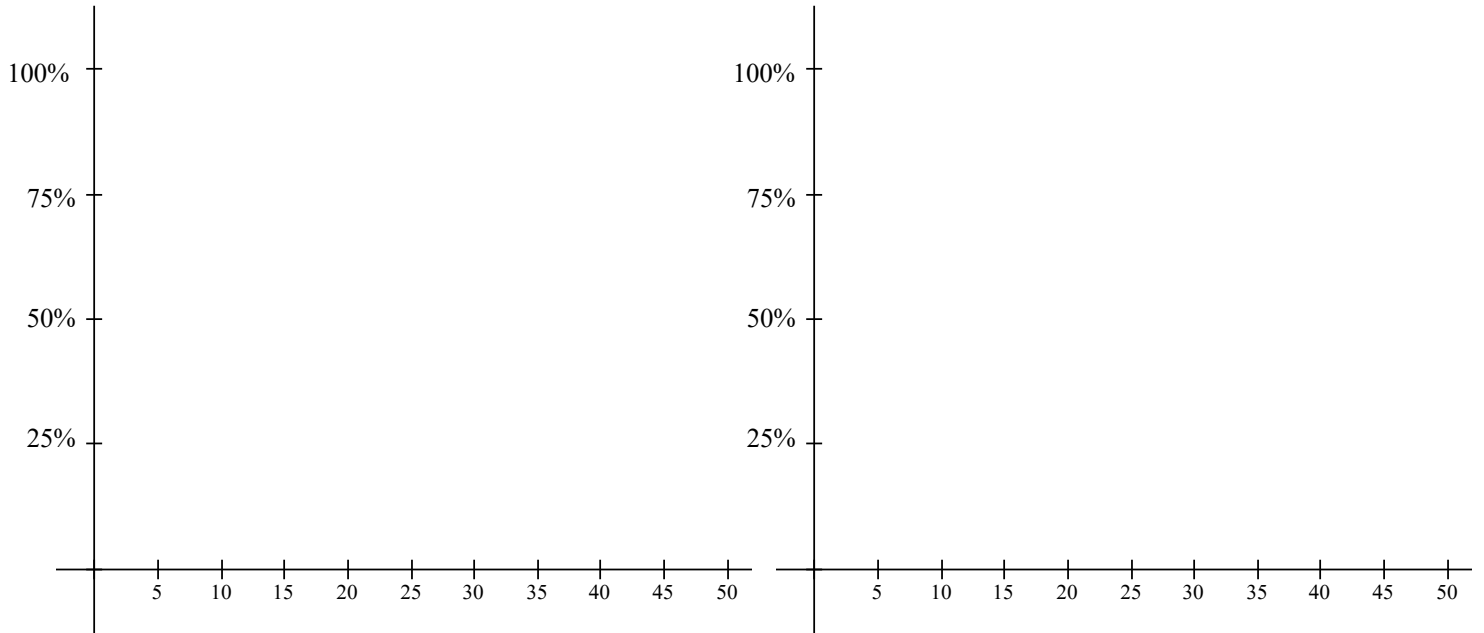
49ers

# points scored in one game	Frequency	Relative Frequency	Relative Cumulative Frequency
0-4			
5-9			
10-14			
15-19			
20-24			
25-29			
30-34			
35-39			
40-44			
45-49			

Totals:

Raiders

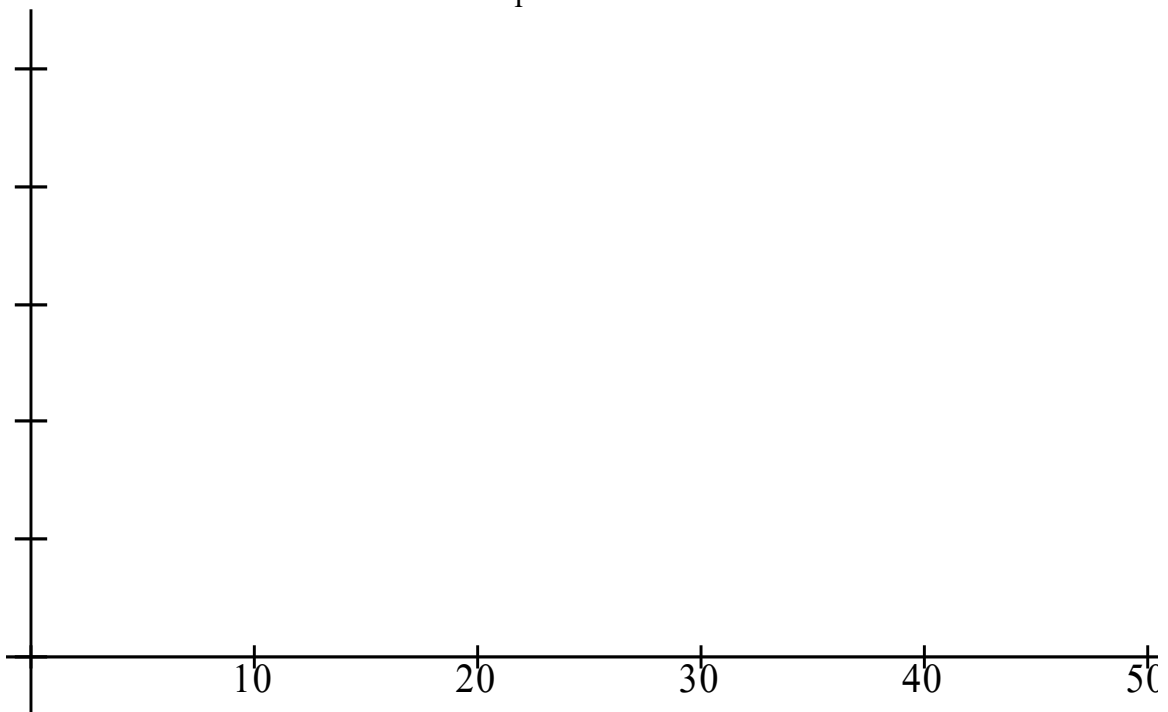| # points scored in one game	Frequency	Relative Frequency	Relative Cumulative Frequency
0-4			
5-9			
10-14			
15-19			
20-24			
25-29			
30-34			
35-39			
40-44			
45-49			

Totals:

4) Construct a <u>relative cumulative frequency</u> graph for each team below from the tables on page 2.

49ers

100%										
75%										
50%										
25%										
	5	10	15	20	25	30	35	40	45	50

Raiders

100%										
75%										
50%										
25%										
	5	10	15	20	25	30	35	40	45	50

5) Below, use your calculator to construct a separate box plot for each team. Accurately label the five numbers for each box plot.

10	20	30	40	50

6) Use the results from #6 to give a five number summary for each team.

   49ers   Raiders

7) Based on the graphs above, is a five number summary or the mean and standard deviation more applicable to the (a) the 49ers. (b) the Raiders. Justify your answer.