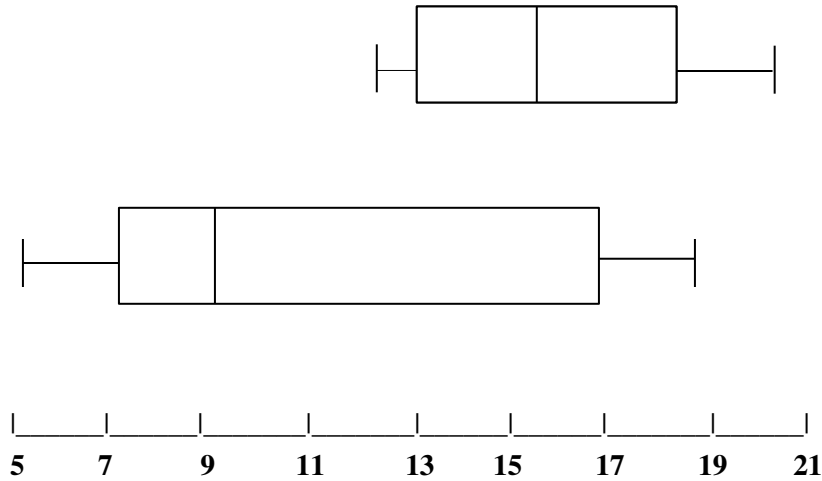


STP 226

Group work ch3

1 . Each of the box plots given below summarizes the weight loss in pounds for two types of diet programs : Program A (top plot) and Program B (bottom plot). Use the plots to answer the following questions:



a) Give rough values of 5 numbers summary for each data set:

Program A Data (top box):

Program B Data (bottom box):

b) Answer the following questions:

(i) Which of the two diet programs (if any) has less variable results? Explain your answer.

(ii) Which of the two diets (if any) appears to produce better results? Remember that the objective of each diet was to lose weight. Explain your answer.

2. Consider the stem-and-leaf diagram given below.

The quartiles of this distribution are:

$$Q1= 49 \quad Q2=55 \quad Q3=62.5.$$

Compute Interquartile Range IQR and use it to check if there are any potential outliers in these data. Show work, list outliers, if there are no outliers, state it.

10	
11	
21	stems: tens
21	
31	leaves: ones
318	
411 3	
417 8 8	
510 1 1 3 4	
515 5 6 7 8 9 9	
610 2 3 4 4	
615 6 7	
711	

3. Population of dogs of certain breed has population mean of 73 pounds and population standard deviation of 5 pounds. John's dog Pluto is of that breed and John calculated that the z-score of his weight is $z=1.24$. What is Pluto's weight?