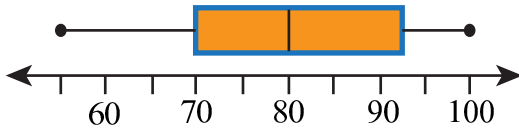


Box, Stem-Leaf, Histogram Worksheet Answer Key

Graph It! Graph It Good.

1. The following box-and-whisker plot represents the scores earned on a statistic test. Find the median score.



The median score is the second quartile, which is 80 points.

2. Which of the following options is closest to the median found in Problem 1.
 (i) Lowest score (ii) First quartile (iii) Third quartile

The lowest score is 55 points.
 The first quartile is 70 points.
 The third quartile is about 93 points.
 Therefore the median (80 points) is closest to the first quartile (70 points).

3. Can you find the average score from the above box-whisker plot.
 (i) Yes (ii) No (iii) Maybe

You cannot find the average score because the individual scores are not given by the box plot.

4. Use the data below to complete the frequency table.

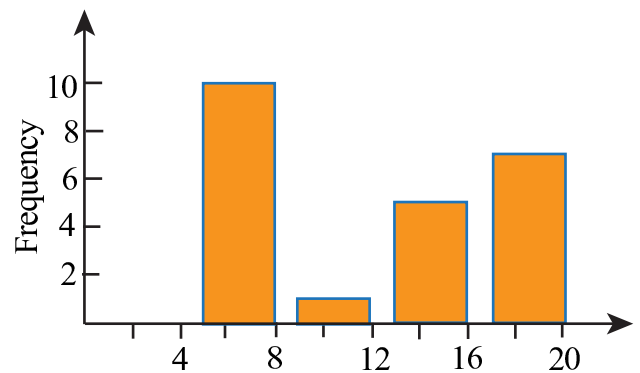
15, 16, 5, 7, 20, 19, 8, 13, 6, 17, 6, 9, 19, 6, 14, 8, 20, 5, 18, 8, 13, 7, 18.

Interval	Frequency
5 - 8	10
9 - 12	1
13 - 16	5
17 - 20	7

5. Find the mode of the data from Problem 4 .

In the above data, 6 and 8 both occur 3 times, so 6 and 8 are the modes of the data (bimodal distribution).

6. Use the frequency table to draw a histogram of the data given in Problem 4.



7. The following table of values gives the miles Anne cycled per day in a given

Day	Miles
S	12
M	11
T	21
W	24
Th	33
F	13
S	33

Find the median, mode, and range for the above list of values.

Arrange the data in an ascending order:

11, 12, 13, 21, 24, 33, 33.

Median is the middle value: 21.

Mode is the data that occurs most frequently: 33.

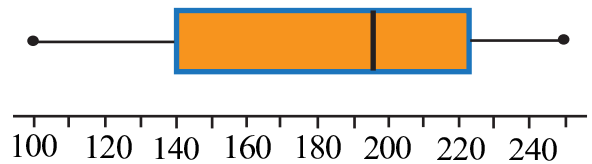
Range of the list is $33 - 11 = 22$.

8. Use the table in Problem 7 to construct a stem-and-leaf plot.

Stem	Leaf
1	1 2 3
2	1 4
3	3 3

9. Use the following data to make a box-and-whisker plot for shares of Yehaw! traded in the years 1996 to 2000.

Years	Shares (Millions)
1996	100
1997	140
1998	222
1999	196
2000	250



10. Draw a histogram with the following data: 19, 18, 17, 14, 22, 23, 14, 22, 23, 19, 17, 19.

