CRCT GPS Practice ▪ Chapter 7

LESSON 7-1

The table shows the number of points a player scored during the last ten games of the season.

1. Make a cumulative frequency table of the data.

2. Make a stem-and-leaf plot of the data.

3. Make a line plot of the data.

Game Date	Points	Game Date	Points
Feb 7	36	Feb 25	18
Feb 14	34	Feb 27	31
Feb 18	27	Mar 1	43
Feb 20	46	Mar 3	42
Feb 23	32	Mar 4	28

LESSON 7-2

Find the mean, median, mode, and range of each data set.

4. 13, 8, 40, 19, 5, 8

5. 21, 19, 23, 26, 15, 25, 25

Identify the outlier in each data set. Then determine how the outlier affects the mean, median, and mode of the data. Then tell which measure of central tendency best describes the data with and without the outlier.

6. 23, 27, 31, 19, 56, 22, 25, 21

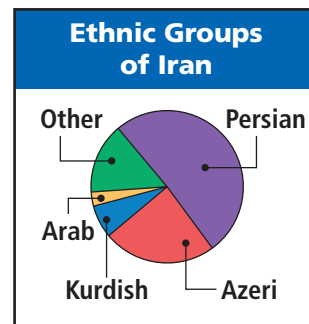7. 66, 78, 57, 87, 66, 59, 239, 84

LESSON 7-3

8. The table shows the populations of four countries. Make a double-bar graph of the data.

9. The list below shows the scores on a history quiz. Make a histogram of the data.

87, 92, 75, 79, 64, 88, 96, 99, 69, 77, 78, 78, 88, 83, 93, 76

Country	1998 Population (millions)	2001 Population (millions)
Tunisia	9.3	9.7
Syria	15.3	16.7
Turkey	64.5	66.5
Algeria	30.1	31.7

LESSON 7-4

The circle graph shows the results of a survey of 100 people from Iran who were asked about their ethnic backgrounds. Use the graph for Exercises 10–12.

10. Which ethnic group is the second largest?

11. Approximately what percent of the people are Persian?

12. According to the survey, 3% of the people are Arab. How many of the people surveyed are Arab?

Ethnic Groups of Iran

Decide whether a bar graph or a circle graph would best display the information. Explain your answer.

13. the number of guitars sold compared with the number of drum sets sold for the year 2002

14. the average temperature for each day of one week

LESSON 7-5

15. Use the data to make a box-and-whisker plot. 22, 41, 39, 27, 29, 30, 40, 61, 25, 28, 32

LESSON 7-6

The table shows the number of students Karen tutored during certain months. Use the table for Exercises 16 and 17.

Month	Students
Jan	5
Mar	8
May	9
Jul	12
Sep	14
Nov	18

16. Make a line graph of the data. Use the graph to determine during which months the number of students increased the most.

17. Use the graph to estimate the number of students Karen tutored during the month of October.

LESSON 7-7

Choose the type of graph that would best represent each type of data.

18. the number of participants in a hole-in-one contest for the last 10 years

19. the prices of the five top-selling MP3 players

LESSON 7-8

Determine whether each sample may be biased. Explain.

20. A bank asks the first 10 customers that enter in the morning if they are satisfied with the bank's customer service.

21. Members of a polling organization survey 1,000 residents by randomly choosing names from a list of all residents.
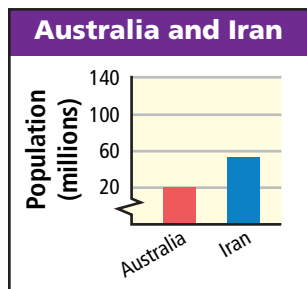
LESSON 7-9

22. The table shows the average number of points per game that Michael Jordan scored during each season with the Chicago Bulls. Use the data to make a scatter plot. Describe the relationship between the data sets.

Year	Points	Year	Points
1990	33.6	1994	26.9
1991	31.5	1995	30.4
1992	30.1	1996	29.6
1993	32.6	1997	28.7

LESSON 7-10

Explain why each graph could be misleading.

23.

Australia and Iran

24.

Hungary and Ireland