NAME _____ DATE _____ PERIOD _____

2-7 Study Guide and Intervention

Median, Mode, and Range

The **median** is the middle number of the data put in order, or the mean of the middle two numbers. The **mode** is the number or numbers that occur most often.

EXAMPLE 1 **The table shows the costs of seven different books. Find the mean, median, and mode of the data.**

Book Costs ($)			
22	13	11	16
14	13	16	

mean: $\frac{22 + 13 + 11 + 16 + 14 + 13 + 16}{7} = \frac{105}{7}$ or 15

To find the median, write the data in order from least to greatest.
median: 11, 13, 13, (14,) 16, 16, 22

To find the mode, find the number or numbers that occur most often.
mode: 11, (13, 13,) 14, (16, 16,) 22

The mean is \$15. The median is \$14. There are two modes, \$13 and \$16.

Whereas the measures of central tendency describe the average of a set of data, the **range** of a set of data describes how the data vary.

EXAMPLE 2 **Find the range of the data in the table. Then write a sentence describing how the data vary.**

Temperature (°F)		
40	32	55
60	63	50

The greatest value is 63. The least value is 32. So, the range is 63° − 32° or 31°. The range is large. It tells us that the data vary greatly in value.

EXERCISES

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

1. 14, 13, 14, 16, 8

2. 29, 31, 14, 21, 31, 22, 20

3.

Quiz Scores		
72	60	80
68	72	86

4.

Snowfall (in.)			
2	6	5	4
3	0	1	

Lesson 2–7