

LESSON
10.2**Practice A**

For use with the lesson "Use Measures of Central Tendency and Dispersion"

Evaluate the expression.

1. $\frac{4 + 14 + 8 + 3 + 6}{5}$

2. $\frac{|6 - 4| + |5 - 4| + |9 - 4| + |2 - 4|}{4}$

Complete the statement.

3. The ? of a numerical set of data is the difference of the greatest value and the least value.
4. The ? of a numerical set of data is the middle number when the numbers are written in numerical order.
5. The ? of a numerical set of data is the value that occurs most frequently.

Find the mean, median, and mode(s) of the data.

6. 5, 3, 2, 6, 5, 2, 5
7. 24, 12, 10, 15, 10, 22, 12
8. 14, 9, 20, 5, 17, 13
9. 21, 15, 16, 25, 13, 18
10. 20, 17, 10, 31, 25, 18, 12
11. 48, 40, 53, 43, 52, 46

Find the range and mean absolute deviation of the data. Round to the nearest hundredth, if necessary.

12. 9, 15, 28, 10, 8
13. 32, 33, 22, 85, 58
14. 24, 35, 18, 20, 17, 30
15. 116, 130, 120, 125, 140, 125
16. 105, 98, 95, 100, 95, 107
17. 36, 39, 58, 42, 106, 39, 48, 45

18. **Tomato Plants** The heights (in inches) of eight tomato plants are 36, 45, 52, 40, 38, 41, 50, and 48.

- a. What is the range of the tomato plant heights?
- b. Find the mean, median, and mode(s) of the tomato plant heights.
- c. Which measure of central tendency best represents the data? *Explain.*

19. **World Population** The populations (in millions) in 2000 on each of the six inhabited continents were 803, 487, 348, 3686, 730, and 31.

- a. What is the range of the populations?
- b. Find the mean, median, and mode(s) of the populations. Round your answers to the nearest tenth.
- c. Which measure of central tendency best represents the data? *Explain.*

20. **Quiz Scores** You and your friend have a friendly competition going on about the scores on your math quizzes. Both of your scores for the first five quizzes are given below. *Compare* the spreads of the data sets by using (a) the range and (b) the mean absolute deviation.

Your quiz scores: 18, 16, 19, 15, 17

Friend's quiz scores: 20, 20, 13, 12, 17