

Section Review

Analyzing Your Data

VOCABULARY

1. Write an original definition for *slope*.

UNDERSTANDING CONCEPTS

2. **Applying** A scientific study is repeated by four different groups. Only two groups get the same results. Are the data reproducible? Explain.

3. **Analyzing** What does the phrase “rise over run” refer to when defining slope?

4. **Summarizing** Why is mathematics an important tool for scientists?

CRITICAL THINKING

5. **Applying Concepts** Describe a situation in which the median of a data set would be more useful than the mean.

Section Review *continued*

6. Analyzing Methods A scientist is measuring the height of water hyacinths on 30 ponds. How important is the degree of accuracy of the measurements he gathers? Explain your answer.

MATH SKILLS

7. Analyzing Data Rachel has gathered information about the guppy population in her fish tank. She has counted the number of living guppies once per month for five months. Her data are as follows: 5, 15, 35, 35, and 55. Calculate the mean, median, and mode. Show your work below.

CHALLENGE

8. Identifying Relationships You are gathering data about factor y and factor x . A graph of your data results in a straight line. What does this tell you about the relationship between y and x ? What would the slope of this line represent? Explain your answers in terms of y and x .
