

## Quiz for Lessons 1-1 Through 1-5

### 1-1 Variables and Expressions

Give two ways to write each algebraic expression in words.

- $4 + n$
- $m - 9$
- $\frac{g}{2}$
- $4z$
- Bob earns \$15 per hour. Write an expression for the amount of money he earns in  $h$  hours.
- A soccer practice is 90 minutes long. Write an expression for the number of minutes left after  $m$  minutes have elapsed.

Evaluate each expression for  $x = 3$ ,  $y = 6$ , and  $z = 2$ .

- $y \div z$
- $xy$
- $x + y$
- $x - z$

### 1-2 Adding and Subtracting Real Numbers

Add or subtract.

- $81 + (-15)$
- $27 - 32$
- $2 - \left(-1\frac{1}{4}\right)$
- $x + (-14)$  for  $x = -7$
- Brandon's bank statement shows a balance of  $-\$45.00$ . What will the balance be after Brandon deposits  $\$70.00$ ?

### 1-3 Multiplying and Dividing Real Numbers

Find the value of each expression if possible.

- $9(-9)$
- $6 \div \frac{3}{5}$
- $9.6 \div 0$
- $-\frac{1}{2}x$  for  $x = -\frac{1}{2}$
- Simon drove for  $2\frac{1}{2}$  hours to get from his house to the beach. Simon averaged 55 miles per hour on the trip. What is the distance from Simon's house to the beach?

### 1-4 Powers and Exponents

Simplify each expression.

- $(-3)^2$
- $-3^2$
- $\left(-\frac{2}{3}\right)^3$
- $\left(-\frac{1}{2}\right)^5$
- The number of bytes in a kilobyte is 2 to the 10th power. Express this number in two ways.

### 1-5 Square Roots and Real Numbers

Find each square root.

- $\sqrt{225}$
- $-\sqrt{49}$
- $\sqrt{144}$
- $\sqrt{\frac{16}{25}}$
- Mindy is building a patio that is in the shape of a square. The patio will cover 56 square yards. Find the length of a side of the patio to the nearest tenth of a yard.

Classify each real number. Write all classifications that apply.

- $\frac{1}{11}$
- $\sqrt{12}$
- $\sqrt{400}$
- $-6$