## Key Concept and Vocabulary

Operation	Words	Algebra
Addition	the <i>sum</i> of	a + b
Subtraction	the <i>difference</i> of	a-b
Multiplication	the <i>product</i> of	$a \times b$ $a \cdot b$
Division	the <i>quotient</i> of	$a \div b  \frac{a}{b}  b \overline{a}$

The four basic operations are addition, subtraction, multiplication, and division.



## **Application Examples**

- 1. A restaurant orders six gallons of orange juice each week. Each gallon contains four quarts. Write an expression to find the total number of quarts of orange juice the restaurant orders each week.
  - You want to find the total number of quarts in six groups of four quarts. The phrase *six groups of four* indicates you need to find the product.
  - $\bullet$  An expression is  $6 \times 4$ .
- **2.** A 20-fluid-ounce sports drink contain 240 calories. Write an expression to find the number of calories in each fluid ounce.

You want to find the number of calories per fluid ounce. The phrase *calories per fluid ounce* indicates you need to find the quotient.

• An expression is  $240 \div 20$ .



## PRACTICE MAKES PURR-FECT™

Check your answers at BigIdeasMath.com.

- **3. TEST** The score from your first math test is 82. The score from your second math test is 95. Write an expression to find the increase from the first test to the second test. 95 82
- **4. LAWN** Each weekend you earn \$40 doing lawn work for your neighbor. Write an expression to find how much you will earn in 6 weeks.  $40 \times 6$
- **5. FOOD DRIVE** You donate 12 cans of food and 4 boxes of macaroni to a food drive. Write an expression to find the number of items you donate. 12 + 4
- **6. BOWLING** You are taking reservations for a bowling party with 35 guest. Each bowling lane can hold 5 bowlers. Write an expressions to find the number of lanes the party will need.  $35 \div 5$
- **7. SHOPPING** You plan to buy a shirt for \$24 and a hat for \$18. You have \$57. Write an expression to find how much you will have left over.  $\underline{57 24 18}$