Practice B For use with pages 14–20

Translate the verbal phrase into an expression.

- **1.** The difference of 9 and a number n
- **3.** The sum of 57 and a number b
- **5.** 18 less than a number c
- **7.** The quotient of 8 and twice a number z
- **2.** The quotient of a number y and 22
- **4.** $\frac{2}{3}$ of a number x
- **6.** 25 more than twice a number m
- **8.** The sum of 2 and the square of a number r

Write an expression for the situation.

- **9.** The amount of money you spent if you started with \$40 and now have d dollars
- **10.** The total height of a 1-foot tall birdbath if it is placed on a base that is b feet tall
- **11.** Each person's share of baseball cards if 4 people share c cards equally
- **12.** Number of minutes in h hours

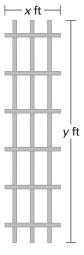
Find the unit rate.

$$13. \quad \frac{\$75}{\text{5 video games}}$$

14.
$$\frac{600 \text{ students}}{8 \text{ classes}}$$

$$15. \quad \frac{32 \text{ pencils}}{4 \text{ boxes}}$$

- **16. Candle Making** You are making candles for your friends. A mold for the candles costs \$22.50 and wax to make one candle costs \$5. Write an algebraic expression for the total cost of making *x* candles. You make 8 candles. Find the total cost.
- **17. Baseball** Last season, a baseball player scored 14 runs in 18 games. This season, the baseball player scored 12 runs in 15 games. Find the number of runs scored per game in each season. Round your answers to the nearest hundredth. Then identify the season in which the player scored more runs per game.
- **18.** Car Trip You are getting ready to make a 640-mile car trip. In general, your car can drive 160 miles on 5 gallons of gasoline. How many gallons of gasoline will you use for the trip? You started out with 4 gallons of gasoline in your car and gasoline is \$2.29 per gallon. How much money will you spend on gasoline on the trip?
- **19. Plant Trellis** You are building the wood trellis shown in the figure so that you can grow a vine up the side of your home. Write an expression for the total number of feet of wood needed to build the trellis. *Hint:* Write separate expressions for the number of feet of vertical pieces needed and the number of feet of horizontal pieces needed. Then find the total number of feet of wood needed if the trellis is 8 feet tall and 2 feet wide.



ESSON 1.3