## **Skills**

- Lesson 4-1 Find each unit rate.
  - **1.** 240 mi on 8 gal
- **2.** \$3.50 for 10 oz
- **3.** 450 mi in 9 h
- **4.** \$18 for 12 cans

Lesson 4-2 Convert each measure.

5. 
$$3.5 \text{ mi} = \blacksquare \text{ ft}$$

**6.** 
$$7.2 \text{ km} = \square \text{ m}$$

Lesson 4-3 Solve each proportion.

**9.** 
$$\frac{4}{7} = \frac{x}{21}$$

**10.** 
$$\frac{3}{x} = \frac{18}{9}$$

**11.** 
$$\frac{x}{10} = \frac{8}{15}$$

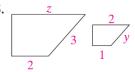
**12.** 
$$\frac{3}{5} = \frac{2}{x}$$

Lesson 4-4 Exercises 14–16 show pairs of similar polygons. Find the unknown lengths.

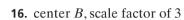




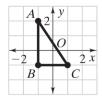




**Lesson 4-5** Find the image of  $\triangle ABC$  at the right after a dilation with the given center and scale factor.



**17.** center A, scale factor of  $\frac{1}{2}$ 



- Lesson 4-6 The scale of a map is 1 in. : 30 mi. How many actual miles does each measurement on the map represent?
  - **18.** 3 in.
- **19.**  $2\frac{2}{3}$  in. **20.**  $\frac{1}{4}$  in.
- **21.** 5 in. **22.**  $6\frac{1}{2}$  in.

## Lesson 4-7

23. A students is 5 ft tall and casts a shadow 12 ft long. A flagpole casts a shadow 25 ft long. Find the height of the flagpole to the nearest tenth.

## **Word Problems**

- Lesson 4-1
  - **24. Shampoo** A 12-oz bottle of shampoo costs \$3.99. A 25.4-oz bottle of the same shampoo costs \$7.49. Find the unit cost of each bottle. Which bottle of shampoo is the better buy?
  - 610 Chapter 4 Extra Practice