## **Practice 4-1**

**Ratio and Proportion** 

Find each unit rate.

2. 
$$\frac{\$3}{4 \text{ lb}}$$

3. 
$$\frac{861 \text{ bagels}}{3 \text{ d}}$$

4. 
$$\frac{850 \text{ ca}}{1.25 \text{ h}}$$

- 5. An 8-ounce bottle of lotion costs \$4.50. What is the cost per ounce?
- 6. A pound of coffee costs \$14.99. What is the cost per ounce?

Which pairs of ratios could form a proportion? Justify your answer.

7. 
$$\frac{10}{24}, \frac{7}{18}$$

**8.** 
$$\frac{6}{9}, \frac{10}{15}$$

9. 
$$\frac{3}{4}, \frac{18}{24}$$

**10.** 
$$\frac{16}{2}, \frac{8}{1}$$

**10.** 
$$\frac{16}{2}, \frac{8}{1}$$
 **11.**  $-\frac{4.8}{4}, -\frac{6.4}{5}$ 

Solve each proportion.

**12.** 
$$\frac{g}{5} = \frac{6}{10}$$

**13.** 
$$\frac{z}{4} = \frac{7}{8}$$

**14.** 
$$\frac{13.2}{6} = \frac{m}{12}$$

**15.** 
$$-\frac{m}{5} = -\frac{2}{5}$$

**16.** 
$$\frac{5.5}{11} = \frac{x}{5}$$

17. 
$$-\frac{2}{3} = -\frac{10}{t}$$

**18.** 
$$\frac{4}{6} = \frac{x}{24}$$

**19.** 
$$\frac{s}{3} = \frac{7}{10}$$

**20.** 
$$\frac{4}{9} = \frac{10}{r}$$

**21.** 
$$\frac{x}{4.8} = \frac{6}{3.2}$$

**22.** 
$$\frac{5}{4} = \frac{c}{12}$$

**23.** 
$$-\frac{32}{h} = -\frac{1}{3}$$

**24.** 
$$\frac{2}{6} = \frac{p}{9}$$

**25.** 
$$\frac{f}{6} = \frac{3}{4}$$

**26.** 
$$\frac{15}{a} = \frac{3}{8}$$

**27.** 
$$\frac{3}{4} = \frac{k}{24}$$

**28.** 
$$\frac{a}{6} = \frac{3}{9}$$

**29.** 
$$\frac{4}{5} = \frac{k}{9}$$

**30.** 
$$\frac{3}{y} = \frac{5}{8}$$

**31.** 
$$\frac{t}{7} = \frac{9}{21}$$

**32.** 
$$\frac{2}{9} = \frac{10}{x}$$

**33.** 
$$\frac{x}{15} = \frac{3}{4}$$

**34.** 
$$\frac{18}{11} = \frac{49.5}{x}$$

**35.** 
$$\frac{2}{1.2} = \frac{5}{x}$$

**36.** 
$$-\frac{x-1}{4} = \frac{2}{3}$$

**37.** 
$$\frac{3}{6} = \frac{x-3}{8}$$

**38.** 
$$\frac{2x-2}{14} = \frac{2x-4}{6}$$

$$39. \ \frac{x+2}{x-2} = \frac{4}{8}$$

**40.** 
$$\frac{x+2}{6} = \frac{x-1}{12}$$

**41.** 
$$-\frac{x+8}{10} = -\frac{x-3}{2}$$

- 42. You are riding your bicycle. It takes you 28 min to go 8 mi. If you continue traveling at the same rate, how long will it take you to go 15 mi?
- 43. Suppose you traveled 84 mi in 1.5 h. Moving at the same speed, how many mi would you cover in  $3\frac{1}{4}$  h?
- 44. A canary's heart beats 130 times in 12 s. Use a proportion to find how many times its heart beats in 50 s.
- 45. Your car averages 18 mi per gal on the highway. If gas costs \$1.85 per gal, how much does it cost in dollars per mi to drive your car on the highway?