# LESSON 5-9

#### **Practice B**

### **Dividing Fractions and Mixed Numbers**

Find the reciprocal.

1.  $\frac{5}{7}$ 

2.  $\frac{9}{8}$ 

3.  $\frac{3}{5}$ 

4.  $\frac{1}{10}$ 

5.  $\frac{4}{9}$ 

6.  $\frac{13}{14}$ 

7.  $1\frac{1}{3}$ 

8.  $2\frac{4}{5}$ 

9.  $3\frac{2}{6}$ 

Divide. Write each answer in simplest form.

10. 
$$\frac{5}{6} \div 5$$

11. 
$$2\frac{3}{4} \div 1\frac{4}{7}$$

12. 
$$\frac{7}{8} \div \frac{2}{3}$$

13. 
$$3\frac{1}{4} \div 2\frac{3}{4}$$

14. 
$$\frac{9}{10} \div 3$$

15. 
$$\frac{3}{4} \div 9$$

16. 
$$2\frac{6}{9} \div \frac{6}{7}$$

17. 
$$\frac{5}{6} \div 2\frac{3}{10}$$

18. 
$$2\frac{1}{8} \div 3\frac{1}{4}$$

- 19. The rope in the school gymnasium is  $10\frac{1}{2}$  feet long. To make it easier to climb, the gym teacher tied a knot in the rope every  $\frac{3}{4}$  foot. How many knots are in the rope?
- 20. Mr. Fulton bought  $12\frac{1}{2}$  pounds of ground beef for the cookout. He plans on using  $\frac{1}{4}$  pound of beef for each hamburger. How many hamburgers can he make?
- 21. Mrs. Marks has  $9\frac{1}{4}$  ounces of fertilizer for her plants. She plans on using  $\frac{3}{4}$  ounce of fertilizer for each plant. How many plants can she fertilize?

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## LESSON

## **Problem Solving**

### **Dividing Fractions and Mixed Numbers**

#### Write the correct answer in simplest form.

- Horses are measured in units called hands. One inch equals <sup>1</sup>/<sub>4</sub> hand. The average Clydesdale horse is 17<sup>1</sup>/<sub>5</sub> hands high. What is the horse's height in inches? in feet?
- 2. Cloth manufacturers use a unit of measurement called a *finger*. One finger is equal to 4½ inches. If 25 inches are cut off a bolt of cloth, how many fingers of cloth were cut?
- 3. People in England measure weights in units called *stones*. One pound equals  $\frac{1}{14}$  of a stone. If a cat weighs  $\frac{3}{4}$  stone, how many pounds does it weigh?
- 4. The hiking trail is  $\frac{9}{10}$  mile long. There are 6 markers evenly posted along the trail to direct hikers. How far apart are the markers placed?

#### Choose the letter for the best answer.

- 5. A cake recipe calls for  $1\frac{1}{2}$  cups of butter. One tablespoon equals  $\frac{1}{16}$  cup. How many tablespoons of butter do you need to make the cake?
  - A 24 tablespoons
  - B 8 tablespoons
  - C  $\frac{3}{32}$  tablespoon
  - D 9 tablespoons
- 7. Phyllis bought 14 yards of material to make chair cushions. She cut the material into pieces 1<sup>3</sup>/<sub>4</sub> yards long to make each cushion. How many cushions did Phyllis make?
  - A 4 cushions
- C 8 cushions
- B 6 cushions
- D  $24\frac{1}{2}$  cushions

- 6. Printed letters are measured in units called *points*. One point equals  $\frac{1}{72}$  inch. If you want the title of a paper you are typing on a computer to be  $\frac{1}{2}$  inch tall, what type point size should you use?
  - F 144 point
- H  $\frac{1}{36}$  point
- G 36 point
- $J = \frac{1}{144}$  point
- 8. Dry goods are sold in units called pecks and bushels. One peck equals 1/4 bushel. If Peter picks 51/2 bushels of peppers, how many pecks of peppers did Peter pick?
  - F  $1\frac{3}{8}$  pecks
- H 20 pecks
- G 11 pecks
- J 22 pecks