

## Lesson 3: Interpreting and Computing Division of a Fraction by a Fraction—More Models

### Classwork

#### Exercises 1–6

Write an expression to represent each problem. Then, draw a model to solve.

1. How many fourths are in 3 fourths?

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

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

Find each quotient.

1.  $\frac{6}{2} \div \frac{3}{4}$

2.  $\frac{2}{3} \div \frac{2}{5}$

3.  $\frac{7}{8} \div \frac{1}{2}$

4.  $\frac{3}{5} \div \frac{1}{4}$

5.  $\frac{5}{4} \div \frac{1}{3}$

**Problem Set**

For the following exercises, rewrite the division expression in unit form. Then, find the quotient. Draw a model to support your answer.

6.  $\frac{4}{5} \div \frac{1}{5}$

7.  $\frac{8}{9} \div \frac{4}{9}$

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

9.  $\frac{13}{5} \div \frac{4}{5}$

Rewrite the expression in unit form, and find the quotient.

10.  $\frac{10}{3} \div \frac{2}{3}$

11.  $\frac{8}{5} \div \frac{3}{5}$

12.  $\frac{12}{7} \div \frac{12}{7}$

Represent the division expression using unit form. Find the quotient. Show all necessary work.

13. A runner is  $\frac{7}{8}$  mile from the finish line. If she can travel  $\frac{3}{8}$  mile per minute, how long will it take her to finish the race?

14. An electrician has 4.1 meters of wire.

- How many strips  $\frac{7}{10}$  m long can he cut?
- How much wire will he have left over?

15. Saeed bought  $21\frac{1}{2}$  lb. of ground beef. He used  $\frac{1}{4}$  of the beef to make tacos and  $\frac{2}{3}$  of the remainder to make quarter-pound burgers. How many burgers did he make?

16. A baker bought some flour. He used  $\frac{2}{5}$  of the flour to make bread and used the rest to make batches of muffins. If he used 16 lb. of flour making bread and  $\frac{2}{3}$  lb. for each batch of muffins, how many batches of muffins did he make?