

Lesson Summary

When dividing a fraction by a fraction with the same denominator, we can use the general rule $\frac{a}{c} \div \frac{b}{c} = \frac{a}{b}$.

Problem Set

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

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

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

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

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

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

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

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

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

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

8. 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?

9. 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?

10. 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?

11. 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?

12.

A factory that makes granola bars uses $\frac{1}{6}$ of a barrel of raisins in each batch. Yesterday, the factory used $\frac{5}{6}$ of a barrel of raisins. How many batches did the factory make yesterday?

13.

How many $\frac{1}{8}$ inch pieces of ribbon can you cut from a $\frac{7}{8}$ inch piece of ribbon?

14.

A cookie factory uses $\frac{2}{5}$ of a bag of flour in each batch of cookies. Yesterday, the factory used $\frac{4}{5}$ of a bag of flour. How many batches did the factory make yesterday?

15.

Gregorio made $\frac{2}{5}$ quart of hot chocolate. Each mug holds $\frac{1}{10}$ quart. How many mugs are used for the hot chocolate?

Write a division story problem to represent each expression shown. Then, find a solution to each story problem.

16. $\frac{8}{9} \div \frac{1}{9}$

17. $\frac{5}{7} \div \frac{2}{7}$