Classwork

Opening Exercise

Draw a model to represent $12÷3$.

Create a question or word problem that matches your model.

Example 1

$$\frac{8}{9}÷\frac{2}{9}$$

Write the expression in unit form, and then draw a model to solve.

Example 2

$$\frac{9}{12}÷\frac{3}{12}$$

Write the expression in unit form, and then draw a model to solve.

Example 3

$$\frac{7}{9}÷\frac{3}{9}$$

Write the expression in unit form, and then draw a model to solve.

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. $\frac{4}{5}÷\frac{2}{5}$
3. $\frac{9}{4}÷\frac{3}{4}$
4. $\frac{7}{8}÷\frac{2}{8}$
5. $\frac{13}{10}÷\frac{2}{10}$
6. $\frac{11}{9}÷\frac{3}{9}$

Problem Set

Lesson Summary

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

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

|  |  |  |
| --- | --- | --- |
| 1. $\frac{4}{5}÷\frac{1}{5}$
 | 1. $\frac{8}{9}÷\frac{4}{9}$
 | 1. $\frac{15}{4}÷\frac{3}{4}$
 |
| 1. $\frac{13}{5}÷\frac{4}{5}$
 |  |  |

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

|  |  |  |
| --- | --- | --- |
| 1. $\frac{10}{3}÷\frac{2}{3}$
 | 1. $\frac{8}{5}÷\frac{3}{5}$
 | 1. $\frac{12}{7}÷\frac{12}{7}$
 |

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

1. 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?
2. An electrician has $4.1$ meters of wire.
	1. How many strips $\frac{7}{10}m$ long can he cut?
	2. How much wire will he have left over?
3. 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?
4. 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?