

Learning Objective: Students will be able to use a model and a formal rule to divide with mixed numbers.

Warm Up

1. $\frac{5}{6} \times \frac{1}{2}$

5. $\frac{7}{9} \times \frac{1}{2}$

9. $\frac{1}{2} \times \frac{1}{3}$

2. $\frac{4}{9} \times \frac{2}{3}$

6. $\frac{5}{11} \times \frac{1}{3}$

10. $\frac{1}{8} \times \frac{1}{4}$

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Warm Up Answers

$$1. \frac{5}{6} \times \frac{1}{2} \\ = \frac{5}{12}$$

$$5. \frac{7}{9} \times \frac{1}{2} \\ = \frac{7}{18}$$

$$9. \frac{1}{2} \times \frac{1}{3} \\ = \frac{1}{6}$$

$$2. \frac{4}{9} \times \frac{2}{3} \\ = \frac{8}{27}$$

$$6. \frac{5}{11} \times \frac{1}{3} \\ = \frac{5}{33}$$

$$10. \frac{1}{8} \times \frac{1}{4} \\ = \frac{1}{32}$$

$$\frac{4}{9} \cdot \frac{2}{3}$$

$$9.3$$

9

$$\begin{array}{r} 4.2 \\ \hline 9.3 \end{array}$$

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Lesson 2.3

November 3, 2014

Essential Question:

How can you model division by a mixed number?

Lesson Objective:

Students will be able to:

use a model and a formal rule to divide with mixed numbers.

Self-Evaluation Scale

Score	Description
4	I can teach other students how to use a model and a formal rule to divide with mixed numbers.
3	I can use a model and a formal rule to divide with mixed numbers.
2	I recognize, but still need help to use a model and a formal rule to divide with mixed numbers.
1	I do not know how to use a model and a formal rule to divide with mixed numbers.

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Activity 1 & 2

With a partner, work on Activity 1 & 2 on pages 39 & 40 of your Big Ideas Record and Practice Journal.

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2 ACTIVITY: Dividing Mixed Numbers

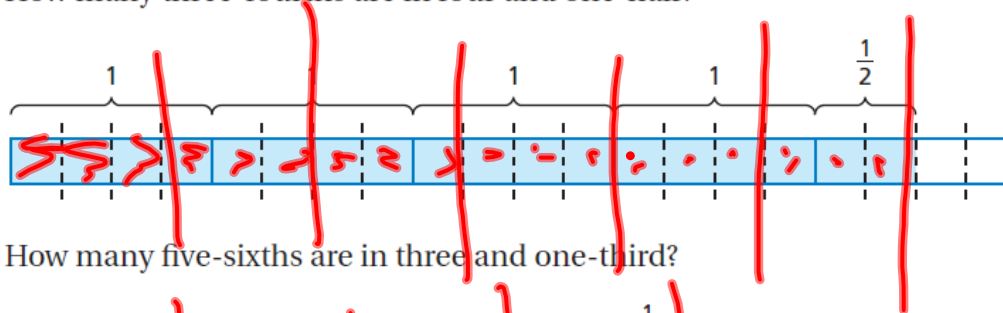
Work with a partner. Write the division problem and solve it using a model.

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

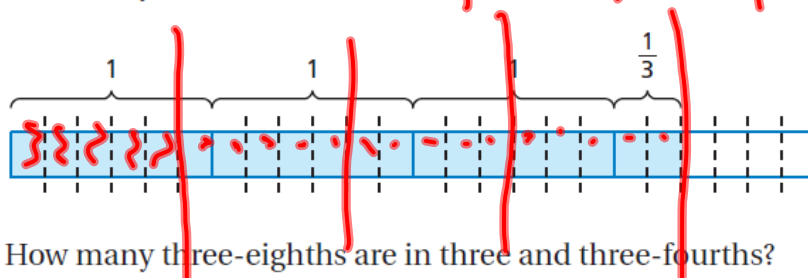
$3\frac{1}{3} \div \frac{5}{6} = 4$

$3\frac{3}{4} \div \frac{3}{8} = 10$

a. How many three-fourths are in four and one-half?

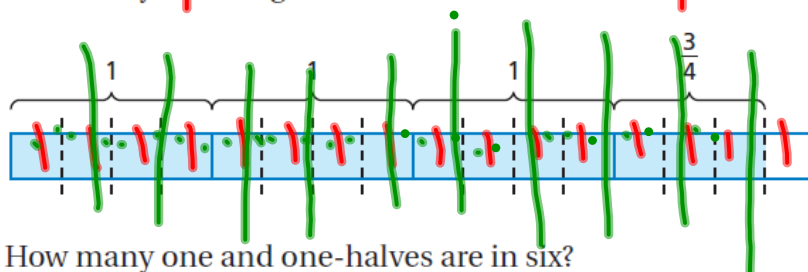


b. How many five-sixths are in three and one-third?



$6\frac{1}{2} = \frac{1}{6} \times 5$

c. How many three-eighths are in three and three-fourths?



$9\frac{1}{2} = \frac{1}{2} \times 3$

d. How many one and one-halves are in six?

e. How many one and one-fifths are in five?

f. How many one and one-fourths are in four and one-half?

g. How many two and one-thirds are in five and five-sixths?

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

$$\frac{9}{2} \div \frac{3}{4}$$

$$\frac{3 \cancel{9}}{\cancel{2}} \div \frac{3}{\cancel{4}^2} = \frac{3}{1} = 3$$

$$3\frac{1}{3} \div \frac{5}{6} = 4$$

$$\frac{10}{3} \div \frac{5}{6}$$

$$\frac{\overset{2}{\cancel{10}}}{\cancel{3}} \cdot \frac{\overset{2}{\cancel{6}}}{\cancel{5}} = \frac{4}{1} = 4$$

$$3\frac{3}{4} \div \frac{3}{8} = 10$$

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

5

$$\frac{15}{4} \cdot \frac{8}{3} = \frac{10}{1} = 10$$

$$4 \div \frac{2}{1} = 2$$

$$\frac{4}{1} \cdot \frac{1}{2} = \frac{4}{2} = 2$$