Learning Objective: Students will be able to use a formal rule to divide decimals.

Warm Up

1. $\dfrac{2}{5} - \dfrac{1}{20}$

5. $\dfrac{13}{16} - \dfrac{13}{16}$

9. $\dfrac{11}{20} - \dfrac{1}{2}$

2. $\dfrac{17}{19} - \dfrac{14}{19}$

6. $\dfrac{9}{11} - \dfrac{2}{11}$

10. $\dfrac{5}{12} - \dfrac{1}{3}$

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Warm Up Answers

1. $\dfrac{2}{5} - \dfrac{1}{20}$

   $= \dfrac{7}{20}$

2. $\dfrac{17}{19} - \dfrac{14}{19}$

   $= \dfrac{3}{19}$

5. $\dfrac{13}{16} - \dfrac{13}{16}$

   $= 0$

6. $\dfrac{9}{11} - \dfrac{2}{11}$

   $= \dfrac{7}{11}$

9. $\dfrac{11}{20} - \dfrac{1}{2}$

   $= \dfrac{1}{20}$

10. $\dfrac{5}{12} - \dfrac{1}{3}$

    $= \dfrac{1}{12}$

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Homework Answers

2.5 Record and Practice Journal

Multiply. Use estimation to check your answer.

1. $\begin{array}{r} 0.5 \\ \times\ 4 \\ \hline \end{array}$
   2

2. $\begin{array}{r} 3.8 \\ \times\ 6 \\ \hline \end{array}$
   22.8

3. $\begin{array}{r} 2.1 \\ \times\ 11 \\ \hline \end{array}$
   23.1

4. $\begin{array}{r} 0.8 \\ \times 0.6 \\ \hline \end{array}$
   0.48

5. $\begin{array}{r} 0.003 \\ \times\ 0.09 \\ \hline \end{array}$
   0.00027

6. $\begin{array}{r} 8.91 \\ \times 1.26 \\ \hline \end{array}$
   11.2266

7. You earn $7.80 an hour working as a dog sitter. You work 12.5 hours during the weekend. How much money do you make?

   $97.50

8. You use a microscope to look at bacteria that is 0.0034 millimeter long. The microscope magnifies the bacteria 430 times. How long does the bacteria appear to be when you look at it through the microscope?

   1.462 millimeters

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Lesson 2.6   November 10, 2015

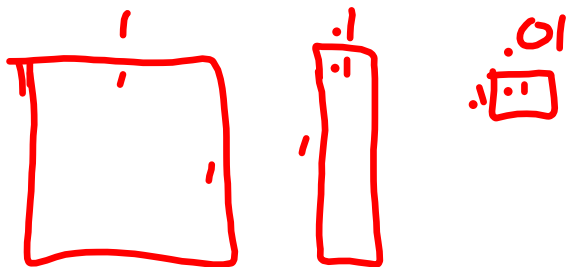# Essential Question:

How can you divide decimals?

Lesson 2.6

November 10, 2015

Lesson Objective:

Students will be able to:

use a formal rule to divide decimals.

Self-Evaluation Scale

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

Activity 1 & 2

With a partner(s), work on Activity 1 & 2 on pages 51 & 52 of your Big Ideas Record and Practice Journal.
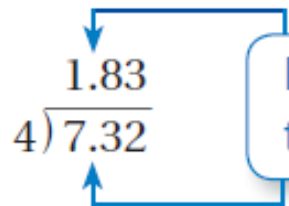
Learning Objective: Students will be able to use a formal rule to divide decimals.

Key Idea

Dividing Decimals by Whole Numbers

Words Place the decimal point in the quotient above the decimal point in the dividend. Then divide as you would with whole numbers. Continue until there is no remainder.

Numbers

$$\begin{array}{r} 1.83 \\ 4\overline{)7.32} \end{array}$$

Place the decimal point in the quotient above the decimal point in the dividend.

Learning Objective: Students will be able to use a formal rule to divide decimals.

1 — Dividing Decimals by Whole Numbers

a. Find $7.6 \div 4$. **Estimate** $8 \div 4 = 2$

$$
\begin{array}{r}
1.9 \\
4\overline{)7.6} \\
-\,4 \\
\hline
3\,6 \\
-\,3\,6 \\
\hline
0
\end{array}
$$

Place the decimal point in the quotient above the decimal point in the dividend.

So, $7.6 \div 4 = 1.9$. **Reasonable?** $1.9 \approx 2$ ✓

b. Find $4.38 \div 12$.

$$
\begin{array}{r}
0.365 \\
12\overline{)4.380} \\
-\,3\,6 \\
\hline
78 \\
-\,72 \\
\hline
60 \\
-\,60 \\
\hline
0
\end{array}
$$

Place the decimal point in the quotient above the decimal point in the dividend.

Insert a zero and continue to divide.

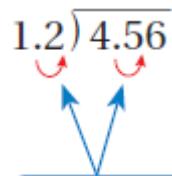So, $4.38 \div 12 = 0.365$. **Check** $0.365 \times 12 = 4.38$ ✓

November 10, 2015 Math 6 Lesson 2.6

Learning Objective: Students will be able to use a formal rule to divide decimals.

Key Idea

Dividing Decimals by Decimals

Words Multiply the divisor *and* the dividend by a power of 10 to make the divisor a whole number. Then place the decimal point in the quotient and divide as you would with whole numbers. Continue until there is no remainder.
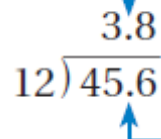
Numbers $1.2\overline{)4.56}$ $\longrightarrow$ $12\overline{)45.6}^{\,3.8}$

Multiply each number by 10.

Place the decimal point above the decimal point in the dividend 45.6.

Learning Objective: Students will be able to use a formal rule to divide decimals.

2 Dividing Decimals

a. **Find $18.2 \div 1.4$.**

$$1.4\overline{)18.2}$$

Multiply each number by 10.

$$\begin{array}{r} 13. \\ 14\overline{)182.} \\ -14 \\ \hline 42 \\ -42 \\ \hline 0 \end{array}$$

Place the decimal point above the decimal point in the dividend 182.

So, $18.2 \div 1.4 = 13$.

Check $13 \times 1.4 = 18.2$ ✓

b. **Find $0.273 \div 0.39$.**

$$0.39\overline{)0.273}$$

Multiply each number by 100.

$$\begin{array}{r} 0.7 \\ 39\overline{)27.3} \\ -27.3 \\ \hline 0 \end{array}$$
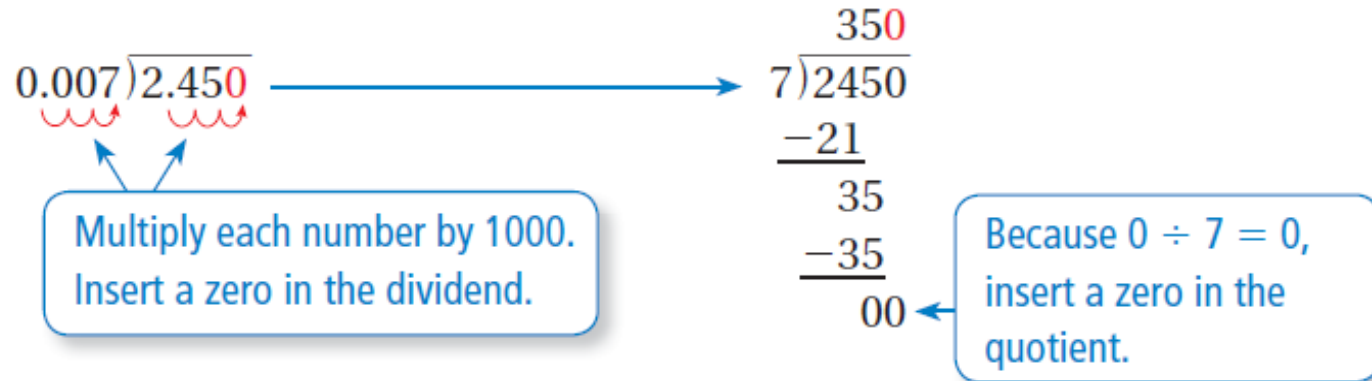
So, $0.273 \div 0.39 = 0.7$.

Check $0.7 \times 0.39 = 0.273$ ✓

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3 **Inserting Zeros in the Dividend and the Quotient**

Divide $2.45 \div 0.007$.

$$0.007\overline{)2.450}$$

Multiply each number by 1000.
Insert a zero in the dividend.

$$\begin{array}{r} 350 \\ 7\overline{)2450} \\ -21 \\ \hline 35 \\ -35 \\ \hline 00 \end{array}$$

Because $0 \div 7 = 0$, insert a zero in the quotient.

So, $2.45 \div 0.007 = 350$.

Learning Objective: Students will be able to use a formal rule to divide decimals.

OYO!

Divide. Check your answer.

11. $3.8 \div 0.16$

12. $15.6 \div 0.78$

13. $7.2 \div 0.048$

14. $0.18 \div 0.003$

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Assignment

Complete problems:

14, 16, 26, 27, 32, 36, 42, 44, 48, 56, 59, & 60

on pages 97 - 99 in your Big Ideas Text Book.

Learning Objective: Students will be able to use a formal rule to divide decimals.

Lesson 2.6   October 20, 2014

Essential Question:

How can you divide decimals?

Lesson 2.6

October 20, 2014

Lesson Objective:

Students will be able to:

use a formal rule to divide decimals.

Self-Evaluation Scale

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Homework

In your Big Ideas Record and Practice Journal page 54.