



Lesson 1.2

Lesson 1-2: Fluently Add, Subtract, and Multiply Decimals

I can...divide whole numbers and decimals.



Solve & Discuss It!



ACTIVITY

Some friends went to lunch and split the bill equally. If each person paid \$6.75, how many people went to lunch? Use a diagram or equation to explain your thinking.

Reasoning How can you use reasoning to create a representation of the problem?

4 people



$$6.75 \overline{) 27}$$

Add = 27

Suppose \$7.00 was added to the bill for dessert that everyone shared. How much more does each person have to pay?



Example 1: Dividing Whole Numbers by Whole Numbers

A tortilla bakery makes 863 packages of tortillas to sell to restaurants. Each restaurant receives the same number of packages as a complete order. How many restaurants can receive a complete order?

There are 18 packages in a complete order.



Use Structure How can you use structure to divide 863 by 18?

$$\begin{array}{r}
 47 \\
 18 \overline{) 863} \\
 \underline{-72} \\
 143 \\
 \underline{-126} \\
 17
 \end{array}$$

47 rest.

Try it!

Workers at an electronics company pack 2,610 smart phones in boxes. Each box holds 9 smart phones. How many boxes do they fill?

$$\begin{array}{r}
 290 \\
 9 \overline{) 2610} \\
 \underline{-18} \\
 81 \\
 \underline{-81} \\
 00
 \end{array}$$

~~Convince Me!~~

~~Divide~~

~~$983 \div 48$~~

Example 2: Divide Whole Numbers by Whole Numbers with Decimal Quotients

Find $180 \div 8$

$$\begin{array}{r}
 22.5 \\
 8 \overline{) 180.0} \\
 \underline{-16} \\
 20 \\
 \underline{-16} \\
 40 \\
 \underline{-40} \\
 0
 \end{array}$$

Example 3: Divide Decimals

a.) Find $809.40 \div 12$

b.) Find $4.20 \div 1.40 = 3$

Example 3: Divide Decimals

a.) Find $809.40 \div 12$

$$\begin{array}{r}
 \textcircled{67.45} \\
 12 \overline{) 809.40} \\
 \underline{-72} \\
 89 \\
 \underline{-84} \\
 54 \\
 \underline{-48} \\
 60 \\
 \underline{-60} \\
 0
 \end{array}$$

b.) Find $4.20 \div 1.40 = \textcircled{3}$

$$\begin{array}{r}
 \textcircled{3} \\
 1.40 \overline{) 4.20} \\
 \underline{420} \\
 0
 \end{array}$$

Try it!

1.) $65 \div 8$

2.) $14.4 \div 8$

3.) $128.8 \div 1.4$

KEY CONCEPT



To divide by a decimal, rewrite the decimal so that you are dividing by a whole number. Multiply both the divisor and the dividend by the same power of 10. Then divide as you would with whole numbers.

$$35.2 \div 0.16$$

$$\begin{array}{r}
 100 \\
 \times 35.2 \\
 \hline
 200 \\
 5000 \\
 + 30000 \\
 \hline
 3,520.0
 \end{array}$$

$$\begin{array}{r}
 100 \\
 \times 0.16 \\
 \hline
 600 \\
 + 1000 \\
 \hline
 16.00
 \end{array}$$

$$\begin{array}{r}
 220 \\
 16 \overline{) 3,520} \\
 \underline{-32} \\
 32 \\
 \underline{-32} \\
 0
 \end{array}$$

Do you understand?

1.) How can you divide whole numbers and decimals?

Bot

Rate your understanding. 1-Do not understand...4-can teach someone else

Learning Target: Divide whole numbers and decimals				
I can divide whole numbers.	1	2	3	4
I can divide decimals.	1	2	3	4

