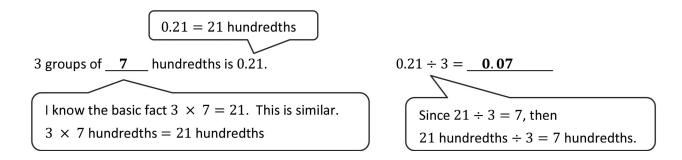
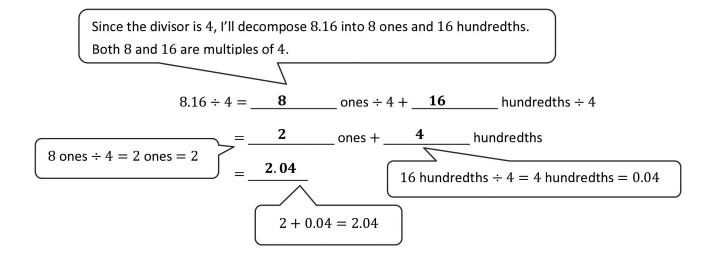
Note: The use of unit language (e.g., 21 hundredths rather than 0.21) allows students to use knowledge of basic facts to compute easily with decimals.

1. Complete the sentence with the correct number of units, and then complete the equation.



2. Complete the number sentence. Express the quotient in units and then in standard form.



- 3. Find the quotients. Then, use words, numbers, or pictures to describe any relationships you notice between the pair of problems and their quotients.
 - a. $35 \div 5 =$ 7 I know this basic fact!
- b. $3.5 \div 5 = 0.7$

I can use that basic fact to help me solve this one.

 $35 \text{ tenths} \div 5 = 7 \text{ tenths} = 0.7$

Both problems are dividing by 5, but the quotient for part (a) is 10 times larger than the quotient for (b). That makes sense because the number we started with in part (a) is also 10 times larger than the number we started with in part (b).

56 hundredths \div 7 = 8 hundredths

- 4. Is the quotient below reasonable? Explain your answer.
 - a. $0.56 \div 7 = 8$ 0.56 = 56 hundredths

No, the quotient is not reasonable.

 $56 \div 7 = 8$, so 56 hundredths $\div 7$ must be 8 hundredths.

5. A toy airplane weighs 3.69 kg. It weighs 3 times as much as a toy car. What is the weight of the toy car?

I draw 1 strip diagram to show the weight of the airplane. 3.69 kgThe airplane airplane weighs 3 times as much as the car car, so I partition the strip diagram, into 3 equal The car is equal units. to the weight of 1 unit.

I can use unit language and basic facts to solve.

- $3 \text{ ones} \div 3 = 1 \text{ one}$
- $6 \text{ tenths} \div 3 = 2 \text{ tenths} = 0.2$
- 9 hundredths \div 3 = 3 hundredths = 0.03

3 units = 3.69

1 unit = $3.69 \div 3$

1 unit = 1.23

The toy car weighs 1.23 kg.

54

Lesson 12:

Divide decimals by single-digit whole numbers involving easily identifiable multiples using place value understanding and relate to a written method.



Name ______ Date _____

1. Complete the sentences with the correct number of units, and then complete the equation. The first one is done for you.

a. 3 groups of 5 tenths is 1.5.

1.5 ÷ 3 = 0.5

b. 6 groups of _____ hundredths is 0.24.

0.24 ÷ 6 = _____

Extension:

c. 5 groups of _____ thousandths is 0.045.

0.045 ÷ 5 = _____

2. Complete the number sentence. Express the quotient in units and then in standard form.

a. $9.36 \div 3 =$ _____ ones $\div 3 +$ _____ hundredths $\div 3$

= _____ones + _____ hundredths

=____

b. 36.12 ÷ 3 = _____ones ÷ 3 + _____hundredths ÷ 3

= _____ ones + ____ hundredths

=

c. $3.55 \div 5 =$ _____ tenths $\div 5 +$ _____ hundredths $\div 5$

=

=

Extension:

d. 3.545 ÷ 5 = ____

=

=____



3. Find the quotients. Then, use words, numbers, or pictures to describe any relationships you notice between each pair of problems and quotients.

4. Are the quotients below reasonable? Explain your answers.

a.
$$0.54 \div 6 = 9$$

b.
$$5.4 \div 6 = 0.9$$

c.
$$54 \div 6 = 0.09$$

5. A toy airplane costs \$4.84. It costs 4 times as much as a toy car. What is the cost of the toy car?

6. Julian bought 3.9 liters of cranberry juice, and Jay bought 8.74 liters of apple juice. They mixed the two juices together and then poured them equally into 2 bottles. How many liters of juice are in each bottle?



Lesson 12:

Divide decimals by single-digit whole numbers involving easily identifiable multiples using place value understanding and relate to a written method.