

Dividing Decimals

Lesson 3-6

DATE

TIME



Math Message

Dividing decimals is like dividing whole numbers, but you have to place the decimal point in the correct location.

For each problem, estimate to place the decimal point in the correct position.

1 $30.42 \div 6 = 5 \text{ } 0 \text{ } 7$

2 $30.42 \div 0.6 = 5 \text{ } 0 \text{ } 7$

3 $30.42 \div 0.06 = 5 \text{ } 0 \text{ } 7$

For each problem, do the following:

Step 1 Estimate the quotient.

Write a number sentence to show how you estimated.

Step 2 Rewrite the decimal-division problem with whole numbers using long-division notation.

Step 3 Calculate the quotient for the whole-number problem.

Step 4 Use your estimate to place the decimal point in the quotient.

Step 5 Check your answer using multiplication.

4 $3.72 \div 1.2$

Estimate: _____

Whole-number problem: _____ Whole-number quotient: _____

Decimal quotient: _____

Check: _____

5 $13.5 \div 0.45$

Estimate: _____

Whole-number problem: _____ Whole-number quotient: _____

Decimal quotient: _____

Check: _____

Dividing Decimals with the U.S. Traditional Algorithm

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For Problems 1–2, complete each step to calculate the quotient.

1 $0.6 \overline{)14.34}$

Estimate: _____

Problem as a fraction: _____

Multiply to get a whole-number divisor:

Quotient: _____

Check: _____

2 $0.24 \overline{)0.984}$

Estimate: _____

Problem as a fraction: _____

Multiply to get a whole-number divisor:

Quotient: _____

Check: _____

Divide.

3 $0.4 \overline{)3.68}$

4 $4.6 \overline{)1.61}$

5 $78 \overline{)2.886}$

6 $0.6 \overline{)5.1}$

- 7 Aracelli ran 15.5 miles in 2.5 hours. What is her average speed in miles per hour?

Number sentence: _____ Solution: _____

- 8 Maurice has 4 pounds of clay. Each bowl he makes requires 0.8 pound of clay. How many bowls can he make?

Number sentence: _____ Solution: _____



- 1 The total points scored in the last five middle school basketball games are as follows:

55, 25, 28, 42, 25

Mean: _____

Median: _____



- 2 Hannah has $3\frac{3}{4}$ cups of spinach. Each salad requires $1\frac{1}{2}$ cups of spinach. How many whole salads can she make?

Number sentence:

Solution: _____



- 3 Plot and label the following points on the number line:

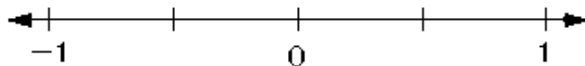
A: $\frac{1}{4}$

B: $-\frac{1}{4}$

C: $\frac{1}{8}$

D: $-\frac{3}{8}$

E: $-\frac{3}{4}$



- 4 Express each rate as an equivalent unit rate.

a. 108 words in 4 minutes

b. 300 miles in 15 hours

c. \$102.50 for 10 hours



- 5 Tell if each statement is true or false. Hint: The value of the warmer temperature is the greater value.

a. $-5^{\circ}\text{F} > -10^{\circ}\text{F}$ _____

b. $6^{\circ}\text{C} < -14^{\circ}\text{C}$ _____

c. $25^{\circ}\text{F} > -35^{\circ}\text{F}$ _____

