

# Lesson 21T ~ Dividing Rational Numbers

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Find each quotient. Write in simplest form.

1.  $\frac{2}{5} \div \left(-\frac{1}{5}\right)$

Use the chart to determine the sign of the quotient.

+	÷	+	=	+
-	÷	-	=	+
+	÷	-	=	-
-	÷	+	=	-

2.  $-\frac{3}{4} \div \left(-\frac{5}{8}\right)$

3.  $5 \div \left(-\frac{2}{3}\right)$

4.  $2\frac{1}{2} \div \left(\frac{5}{6}\right)$

5.  $-3 \div \left(-1\frac{1}{5}\right)$

6.  $-\frac{3}{4} \div \left(4\frac{1}{2}\right)$

7. Cally feeds her cat the same amount of food every day. Over the past 3 days, her bag of cat food has decreased by  $1\frac{4}{5}$  cups.

a. Which value in this situation should be represented by a negative number? \_\_\_\_\_  
Why?

b. Write a division expression to find the number that represents the change in the amount of food in the bag each day.

$$\square \div \square = \square$$

c. Find the value of your expression from **part b**.

**Find each quotient.**

8.  $0.5 \overline{) -2.5}$

9.  $-1.1 \overline{) 4.4}$

10.  $3.2 \div (-0.8)$

11.  $11.2 \div 0.7$

12. Luann received a gift card for the local video store. The value on her card has decreased by \$23.20 after she had rented 8 movies.

a. Which value in this situation should be represented by a negative number? \_\_\_\_\_  
Why?

b. Write a division expression to determine the number that represents the total change in value on her card per movie rental.

$$\square \div \square =$$

c. Find the value of your expression from **part b**.