

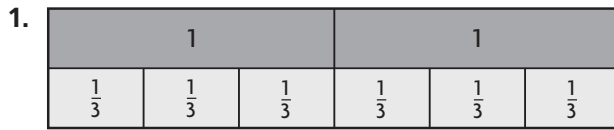
Name _____

Divide Fractions and Whole Numbers

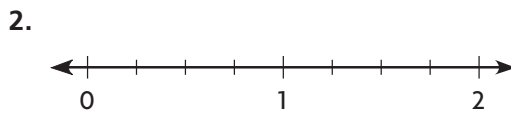


COMMON CORE STANDARDS—5.NF.7a, 5.NF.7b Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

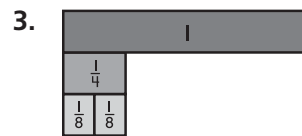
Divide and check the quotient.



$2 \div \frac{1}{3} = \underline{6}$ because $\underline{6} \times \frac{1}{3} = 2$.



$2 \div \frac{1}{4} = \underline{8}$ because $\underline{8} \times \frac{1}{4} = 2$.



$\frac{1}{4} \div 2 = \underline{\frac{1}{8}}$ because $\underline{\frac{1}{8}} \times 2 = \frac{1}{4}$.

Divide. Draw a number line or use fraction strips.

4. $1 \div \frac{1}{5} = \underline{5}$

5. $\frac{1}{6} \div 3 = \underline{\frac{1}{18}}$

6. $4 \div \frac{1}{6} = \underline{24}$

7. $3 \div \frac{1}{3} = \underline{9}$

8. $\frac{1}{4} \div 6 = \underline{\frac{1}{24}}$

9. $5 \div \frac{1}{4} = \underline{20}$

Problem Solving

10. Amy can run $\frac{1}{10}$ mile per minute. How many minutes will it take Amy to run 3 miles?

30 minutes

11. Jeremy has 3 yards of ribbon to use for wrapping gifts. He cuts the ribbon into pieces that are $\frac{1}{4}$ yard long. How many pieces of ribbon does Jeremy have?

12 pieces

Lesson Check (5.NF.7a, 5.NF.7b)

1. Kaley cuts half of a loaf of bread into 4 equal parts. What fraction of the whole loaf does each of the 4 parts represent?
2. When you divide a fraction less than 1 by a whole number greater than 1, is the quotient less than, greater than, or equal to the dividend?

$$\frac{1}{8}$$

The quotient is less than the dividend.

Spiral Review (5.NF.1, 5.NF.4a, 5.NF.6)

3. A recipe for chicken and rice calls for $3\frac{1}{2}$ pounds of chicken. Lisa wants to adjust the recipe so that it yields $1\frac{1}{2}$ times as much chicken and rice. How much chicken will she need?
4. Tim and Sue share a small pizza. Tim eats $\frac{2}{3}$ of the pizza. Sue eats half as much of the pizza as Tim does. What fraction of the pizza does Sue eat?

$$5\frac{1}{4} \text{ pounds}$$

$$\frac{1}{3}$$

5. In gym class, you run $\frac{3}{5}$ mile. Your coach runs 10 times that distance each day. How far does your coach run each day?
6. Sterling plants a tree that is $4\frac{3}{4}$ feet tall. One year later, the tree is $5\frac{2}{5}$ feet tall. How many feet did the tree grow?

$$6 \text{ miles}$$

$$1\frac{13}{20} \text{ foot}$$