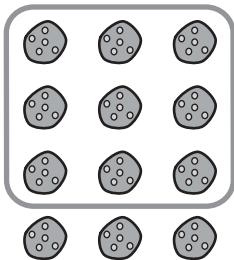


Name \_\_\_\_\_

**Find Part of a Group****COMMON CORE STANDARD—5.NF.4a**  
*Apply and extend previous understandings of multiplication and division to multiply and divide fractions.***Use a model to solve.**

1.  $\frac{3}{4} \times 12 = \underline{9}$



2.  $\frac{7}{8} \times 16 = \underline{\hspace{2cm}}$

3.  $\frac{6}{10} \times 10 = \underline{\hspace{2cm}}$

4.  $\frac{2}{3} \times 9 = \underline{\hspace{2cm}}$

5.  $\frac{1}{6} \times 18 = \underline{\hspace{2cm}}$

6.  $\frac{4}{5} \times 10 = \underline{\hspace{2cm}}$

**Problem Solving**

7. Marco drew 20 pictures. He drew  $\frac{3}{4}$  of them in art class. How many pictures did Marco draw in art class?

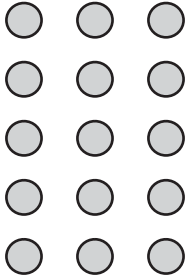
\_\_\_\_\_

8. Caroline has 10 marbles. One half of them are blue. How many of Caroline's marbles are blue?

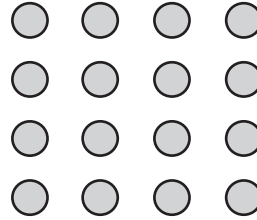
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## Lesson Check (5.NF.4a)

1. Use the model to find  $\frac{1}{3} \times 15$ .



2. Use the model to find  $\frac{2}{4} \times 16$ .



## Spiral Review (5.NBT.1, 5.NBT.6, 5.NF.1, 5.NF.2)

3. What is the value of the underlined digit?

6,560

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4. Nigel has 138 fluid ounces of lemonade. How many 6-fluid-ounce servings of lemonade can he make?

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5. Rafi had a board that was  $15\frac{1}{2}$  feet long. He cut three pieces off the board that are each  $3\frac{7}{8}$  feet long. How much of the board is left?

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6. Susie spent  $4\frac{1}{4}$  hours on Monday and  $3\frac{5}{8}$  hours on Tuesday working on a history project. About how long did she spend working on the project?

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Name \_\_\_\_\_

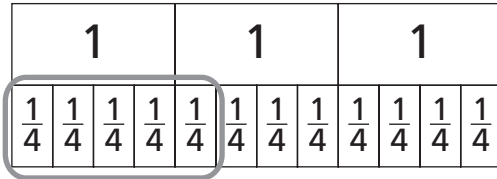
## Multiply Fractions and Whole Numbers



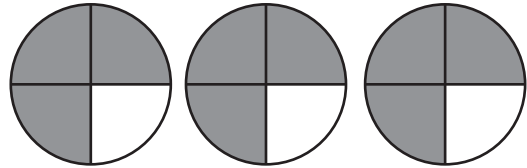
**COMMON CORE STANDARD—5.NF.4a**  
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Use the model to find the product.

1.  $\frac{5}{12} \times 3 = \frac{5}{4}$ , or  $1\frac{1}{4}$



2.  $3 \times \frac{3}{4} =$  \_\_\_\_\_



Find the product.

3.  $\frac{2}{5} \times 5 =$  \_\_\_\_\_

4.  $7 \times \frac{2}{3} =$  \_\_\_\_\_

5.  $\frac{3}{8} \times 4 =$  \_\_\_\_\_

6.  $7 \times \frac{5}{6} =$  \_\_\_\_\_

7.  $\frac{5}{12} \times 6 =$  \_\_\_\_\_

8.  $9 \times \frac{2}{3} =$  \_\_\_\_\_

### Problem Solving



9. Jody has a 5-pound bag of potatoes. She uses  $\frac{4}{5}$  of the bag to make potato salad. How many pounds of potatoes does Jody use for the potato salad?

\_\_\_\_\_

10. Lucas lives  $\frac{5}{8}$  mile from school. Kenny lives twice as far as Lucas from school. How many miles does Kenny live from school?

\_\_\_\_\_

## Lesson Check (5.NF.4a)

1. In gym class, Ted runs  $\frac{4}{5}$  mile. His teacher runs 6 times that distance each day. How many miles does Ted's teacher run each day?
2. Jon is decorating a banner for a parade. Jon uses a piece of red ribbon, which is  $\frac{3}{4}$  yard long. Jon also needs blue ribbon that is 5 times as long as the red ribbon. How much blue ribbon does Jon need?

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## Spiral Review (5.OA.1, 5.NBT.3b, 5.NF.2, 5.NF.3)

3. Mirror Lake Elementary School has 168 students and chaperones going on the fifth grade class trip. Each bus can hold 54 people. What is the least number of buses needed for the trip?
4. From an 8-foot board, a carpenter sawed off one piece that was  $2\frac{3}{4}$  feet long and another piece that was  $3\frac{1}{2}$  feet long. How much of the board was left?

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5. What is the value of the expression?

$$30 - 5 \times 4 + 2$$

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6. Which of the following decimals has the least value? 0.3; 0.029; 0.003; 0.01

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Name \_\_\_\_\_

**Fraction and Whole Number Multiplication****COMMON CORE STANDARD—5.NF.4a**  
*Apply and extend previous understandings of multiplication and division to multiply and divide fractions.*

Find the product. Write the product in simplest form.

1.  $4 \times \frac{5}{8} = \underline{2\frac{1}{2}}$

2.  $\frac{2}{9} \times 3 = \underline{\hspace{2cm}}$

3.  $\frac{4}{5} \times 10 = \underline{\hspace{2cm}}$

4.  $4 \times \frac{5}{8} = \frac{20}{8}$

$\frac{20}{8} = 2\frac{4}{8}, \text{ or } 2\frac{1}{2}$

4.  $\frac{3}{4} \times 9 = \underline{\hspace{2cm}}$

5.  $8 \times \frac{5}{6} = \underline{\hspace{2cm}}$

6.  $7 \times \frac{1}{2} = \underline{\hspace{2cm}}$

7.  $\frac{2}{5} \times 6 = \underline{\hspace{2cm}}$

8.  $9 \times \frac{2}{3} = \underline{\hspace{2cm}}$

9.  $\frac{3}{10} \times 9 = \underline{\hspace{2cm}}$

10.  $4 \times \frac{3}{8} = \underline{\hspace{2cm}}$

11.  $\frac{3}{5} \times 7 = \underline{\hspace{2cm}}$

12.  $\frac{1}{8} \times 6 = \underline{\hspace{2cm}}$

**Problem Solving**

13. Leah makes aprons to sell at a craft fair. She needs  $\frac{3}{4}$  yard of material to make each apron. How much material does Leah need to make 6 aprons?
- \_\_\_\_\_

14. The gas tank of Mr. Tanaka's car holds 15 gallons of gas. He used  $\frac{2}{3}$  of a tank of gas last week. How many gallons of gas did Mr. Tanaka use?
- \_\_\_\_\_

## Lesson Check (5.NF.4a)

1. At the movies, Liz eats  $\frac{1}{4}$  of a box of popcorn. Her friend Kyra eats two times as much popcorn as Liz eats. How much of a box of popcorn does Kyra eat?  

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2. It takes Ed 45 minutes to complete his science homework. It takes him  $\frac{2}{3}$  as long to complete his math homework. How long does it take Ed to complete his math homework?  

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## Spiral Review (5.NBT.2, 5.NBT.7, 5.NF.1, 5.NF.2)

3. What is the best estimate for the quotient?  
 $591.3 \div 29$   

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4. Sandy bought  $\frac{3}{4}$  yard of red ribbon and  $\frac{2}{3}$  yard of white ribbon to make some hair bows. Altogether, how many yards of ribbon did she buy?  

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5. Eric jogged  $3\frac{1}{4}$  miles on Monday,  $5\frac{5}{8}$  miles on Tuesday, and 8 miles on Wednesday. Suppose he continues the pattern for the remainder of the week. How far will Eric jog on Friday?  

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6. Sharon bought 25 pounds of ground beef and made 100 hamburger patties of equal weight. What is the weight of each hamburger patty?  

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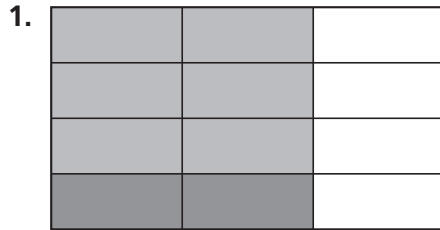
Name \_\_\_\_\_

## Multiply Fractions

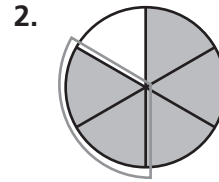


**COMMON CORE STANDARD—5.NF.4b**  
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Find the product.



$$\frac{1}{4} \times \frac{2}{3} = \underline{\frac{2}{12}} \text{, or } \underline{\frac{1}{6}}$$



$$\frac{2}{5} \times \frac{5}{6} = \underline{\hspace{2cm}}$$

Find the product. Draw a model.

3.  $\frac{4}{5} \times \frac{1}{2} = \underline{\hspace{2cm}}$

4.  $\frac{3}{4} \times \frac{1}{3} = \underline{\hspace{2cm}}$

5.  $\frac{3}{8} \times \frac{2}{3} = \underline{\hspace{2cm}}$

6.  $\frac{3}{5} \times \frac{3}{5} = \underline{\hspace{2cm}}$

## Problem Solving



7. Nora has a piece of ribbon that is  $\frac{3}{4}$  yard long. She will use  $\frac{1}{2}$  of it to make a bow. What length of the ribbon will she use for the bow?

\_\_\_\_\_

8. Marlon bought  $\frac{7}{8}$  pound of turkey at the deli. He used  $\frac{2}{3}$  of it to make sandwiches for lunch. How much of the turkey did Marlon use for sandwiches?

\_\_\_\_\_

## Lesson Check (5.NF.4b)

1. Tina has  $\frac{3}{5}$  pound of rice. She will use  $\frac{2}{3}$  of it to make fried rice for her family. How much rice will Tina use to make fried rice?
2. The Waterfall Trail is  $\frac{3}{4}$  mile long. At  $\frac{1}{6}$  of the distance from the trailhead, there is a lookout. In miles, how far is the lookout from the trailhead?

## Spiral Review (5.OA.1, 5.NF.1, 5.NF.2, 5.NF.4a)

3. Hayden bought 48 new trading cards. Three-fourths of the new cards are baseball cards. How many baseball cards did Hayden buy?
4. Yesterday, Annie walked  $\frac{9}{10}$  mile to her friend's house. Together, they walked  $\frac{1}{3}$  mile to the library. Which is the best estimate for how far Annie walked yesterday?

5. Erin is going to sew a jacket and a skirt. She needs  $2\frac{3}{4}$  yards of material for the jacket and  $1\frac{1}{2}$  yards of material for the skirt. Altogether, how many yards of material does Erin need?
6. Simplify the following expression.  
$$[(3 \times 6) + (5 \times 2)] \div 7$$



Name \_\_\_\_\_

**Compare Fraction Factors and Products****COMMON CORE STANDARDS—5.NF.5a, 5.NF.5b** Apply and extend previous understandings of multiplication and division to multiply and divide fractions.Complete the statement with *equal to*, *greater than*, or *less than*.

1.  $\frac{3}{5} \times \frac{4}{7}$  will be **less than**  $\frac{4}{7}$ .

2.  $5 \times \frac{7}{8}$  will be \_\_\_\_\_  $\frac{7}{8}$ .

Think:  $\frac{4}{7}$  is multiplied by a number less than 1;  
so,  $\frac{3}{5} \times \frac{4}{7}$  will be less than  $\frac{4}{7}$ .

3.  $6 \times \frac{2}{5}$  will be \_\_\_\_\_  $\frac{2}{5}$ .

4.  $\frac{1}{9} \times 1$  will be \_\_\_\_\_  $\frac{1}{9}$ .

5.  $\frac{7}{8} \times \frac{3}{5}$  will be \_\_\_\_\_  $\frac{3}{5}$ .

6.  $\frac{4}{5} \times \frac{7}{7}$  will be \_\_\_\_\_  $\frac{4}{5}$ .

**Problem Solving**

7. Starla is making hot cocoa. She plans to multiply the recipe by 4 to make enough hot cocoa for the whole class. If the recipe calls for  $\frac{1}{2}$  teaspoon vanilla extract, will she need more than  $\frac{1}{2}$  teaspoon or less than  $\frac{1}{2}$  teaspoon of vanilla extract to make all the hot cocoa?
- \_\_\_\_\_

8. Miles is planning to spend  $\frac{2}{3}$  as many hours bicycling this week as he did last week. Is Miles going to spend more hours or fewer hours bicycling this week than last week?
- \_\_\_\_\_

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

1. Trevor saves  $\frac{2}{3}$  of the money he earns at his after-school job. Suppose Trevor starts saving  $\frac{1}{4}$  as much as he is saving now. Will he be saving less, more, or the same amount?
2. Suppose you multiply a whole number greater than 1 by the fraction  $\frac{3}{5}$ . Will the product be greater than, less than, or equal to  $\frac{3}{5}$ ?

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## Spiral Review (5.NBT.6, 5.NBT.7, 5.NF.1)

3. In the next 10 months, Colin wants to save \$900 for his vacation. He plans to save \$75 each of the first 8 months. How much must he save each of the last 2 months in order to meet his goal if he saves the same amount each month?
4. What is the total cost of 0.5 pound of peaches selling for \$0.80 per pound and 0.7 pound of oranges selling for \$0.90 per pound?

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5. Megan hiked 15.12 miles in 6.3 hours. If Megan hiked the same number of miles each hour, how many miles did she hike each hour?
6. It is  $42\frac{1}{2}$  miles from Eaton to Baxter, and  $37\frac{4}{5}$  miles from Baxter to Wellington. How far is it from Eaton to Wellington, if you go by way of Baxter?

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