

Name _____

Fraction Multiplication



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

Find the product. Write the product in simplest form.

$$1. \frac{4}{5} \times \frac{7}{8} = \frac{4 \times 7}{5 \times 8}$$

$$= \frac{28}{40}$$

$$= \frac{7}{10}$$

$$2. 3 \times \frac{1}{6}$$

$$3. \frac{5}{9} \times \frac{3}{4}$$

$$4. \frac{4}{7} \times \frac{1}{2}$$

$$5. \frac{1}{8} \times 20$$

6. Karen raked $\frac{3}{5}$ of the yard. Minni raked $\frac{1}{3}$ of the amount Karen raked. How much of the yard did Minni rake?

7. In the pet show, $\frac{3}{8}$ of the pets are dogs. Of the dogs, $\frac{2}{3}$ have long hair. What fraction of the pets are dogs with long hair?

Algebra Evaluate for the given value of the variable.

$$8. \frac{7}{8} \times c \text{ for } c = 8$$

$$9. t \times \frac{3}{4} \text{ for } t = \frac{8}{9}$$

$$10. \frac{1}{2} \times s \text{ for } s = \frac{3}{10}$$

$$11. y \times 6 \text{ for } y = \frac{2}{3}$$

Problem Solving



12. Jason ran $\frac{5}{7}$ of the distance around the school track. Sara ran $\frac{4}{5}$ of Jason's distance. What fraction of the total distance around the track did Sara run?

13. A group of students attend a math club. Half of the students are boys and $\frac{4}{9}$ of the boys have brown eyes. What fraction of the group are boys with brown eyes?

14. **WRITE** *Math* Explain how multiplying fractions is similar to multiplying whole numbers and how it is different.

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

1. Fritz attended band practice for $\frac{5}{6}$ hour. Then he went home and practiced for $\frac{2}{5}$ as long as band practice. How many minutes did he practice at home?
2. Darlene read $\frac{5}{8}$ of a 56-page book. How many pages did Darlene read?

Spiral Review (5.NBT.A.2, 5.NF.A.1, 5.NF.B.3, 5.NF.B.4a)

3. What is the quotient of $\frac{18}{1,000}$?
4. A machine produces 1,000 bowling pins per hour, each valued at \$8.37. What is the total value of the pins produced in 1 hour?
5. Keith had $8\frac{1}{2}$ cups of flour. He used $5\frac{2}{3}$ cups to make bread. How many cups of flour does Keith have left?
6. The Blue Lake Trail is $11\frac{3}{8}$ miles long. Gemma has hiked $2\frac{1}{2}$ miles each hour for 3 hours. How far is she from the end of the trail?
