

Fraction Multiplication

To multiply fractions, you can multiply the numerators, then multiply the denominators. Write the product in simplest form:

Multiply. $\frac{3}{10} \times \frac{4}{5}$

Step 1 Multiply the numerators. Multiply the denominators.

$$\begin{aligned} \frac{3}{10} \times \frac{4}{5} &= \frac{3 \times 4}{10 \times 5} \\ &= \frac{12}{50} \end{aligned}$$

Step 2 Write the product in simplest form.

$$\begin{aligned} \frac{12}{50} &= \frac{12 \div 2}{50 \div 2} \\ &= \frac{6}{25} \end{aligned}$$

So, $\frac{3}{10} \times \frac{4}{5}$ is $\frac{6}{25}$.

Find the product. Write the product in simplest form.

1. $\frac{3}{4} \times \frac{1}{5}$

2. $\frac{4}{7} \times \frac{5}{12}$

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

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

5. $\frac{1}{3} \times 4$

6. $\frac{3}{4} \times 8$

7. $\frac{5}{8} \times \frac{2}{3}$

8. $\frac{5}{6} \times \frac{3}{8}$

Name _____

Fraction Multiplication

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

7. $\frac{6}{7} \times \frac{7}{9}$

8. $8 \times \frac{1}{9}$

9. $\frac{1}{14} \times 28$

10. $\frac{3}{4} \times \frac{1}{3}$

11. 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?

12. 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.

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

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

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

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

Problem Solving



17. 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?

18. 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?