Key Concept and Vocabulary

Multiply numerators.

$$\frac{1}{3} \cdot \frac{2}{5} = \frac{1 \cdot 2}{3 \cdot 5} = \frac{2}{15}$$

Multiply denominators.
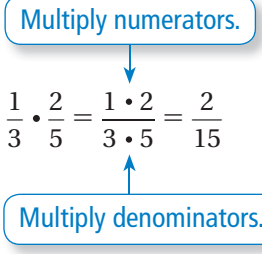
Multiply fractions.

Visual Model

$\frac{2}{5}$

$\frac{1}{3}$ of $\frac{2}{5}$ is $\frac{2}{15}$
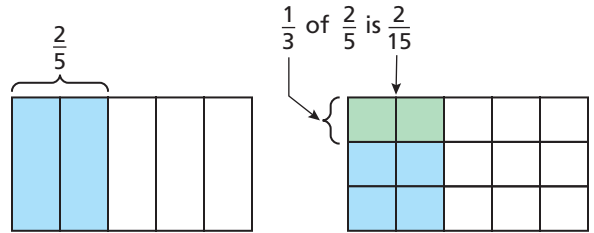
Skill Examples

1. $\dfrac{2}{3} \cdot \dfrac{1}{4} = \dfrac{2 \cdot 1}{3 \cdot 4} = \dfrac{2}{12} = \dfrac{1}{6}$

2. $\dfrac{3}{8} \times \dfrac{2}{9} = \dfrac{3 \cdot 2}{8 \cdot 9} = \dfrac{6}{72} = \dfrac{1}{12}$

3. $\left(\dfrac{2}{5}\right)\left(\dfrac{1}{4}\right) = \dfrac{2 \cdot 1}{5 \cdot 4} = \dfrac{2}{20} = \dfrac{1}{10}$

4. $\dfrac{1}{7} \cdot \dfrac{3}{5} = \dfrac{1 \cdot 3}{7 \cdot 5} = \dfrac{3}{35}$

Application Example

5. A recipe calls for three-fourths cup of flour. You want to make one-half of the recipe. How much flour should you use?

$$\frac{1}{2} \cdot \frac{3}{4} = \frac{1 \cdot 3}{2 \cdot 4} = \frac{3}{8}$$

⋮ You should use $\dfrac{3}{8}$ cup flour.

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Check your answers at BigIdeasMath.com.

Find the product. Write your answer in simplified form.

6. $\dfrac{1}{3} \cdot \dfrac{2}{7} =$ _____

7. $\dfrac{1}{2} \times \dfrac{1}{4} =$ _____

8. $\dfrac{1}{10} \cdot \dfrac{3}{10} =$ _____

9. $\dfrac{3}{2} \times \dfrac{2}{5} =$ _____

10. $\dfrac{3}{8} \times \dfrac{1}{2} =$ _____

11. $\left(\dfrac{1}{5}\right)\left(\dfrac{2}{5}\right) =$ _____

12. $\left(\dfrac{2}{3}\right)^2 =$ _____

13. $\dfrac{3}{2} \cdot \dfrac{2}{3} =$ _____

14. $\left(\dfrac{3}{1}\right)\left(\dfrac{1}{3}\right) =$ _____

15. $2 \cdot \dfrac{1}{4} =$ _____

16. $3 \times \dfrac{3}{4} =$ _____

17. $\dfrac{1}{3} \cdot \dfrac{3}{4} \cdot \dfrac{4}{5} =$ _____

Find the area of the rectangle or parallelogram.

18.
$\frac{1}{2}$ ft
$\frac{1}{2}$ ft

Area = _____

19.
$\frac{3}{10}$ cm
$\frac{1}{2}$ cm

Area = _____

20.
$\frac{3}{8}$ in.
$\frac{5}{8}$ in.

Area = _____

21.
$\frac{2}{5}$ m
$\frac{3}{5}$ m

Area = _____

22. OPEN-ENDED Find three different pairs of fractions that have the same product.

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