

REVIEW: Multiplying Whole Numbers and Fractions

Name _____

Key Concept and Vocabulary

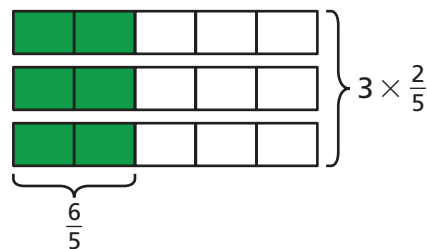
Multiply whole number and numerator.

$$3 \times \frac{2}{5} = \frac{3 \times 2}{5} = \frac{6}{5}$$

Multiply whole numbers and fractions.



Visual Model



Skill Examples

- $4 \times \frac{2}{3} = \frac{4 \times 2}{3} = \frac{8}{3}$
- $5 \times \frac{1}{6} = \frac{5 \times 1}{6} = \frac{5}{6}$
- $2 \times \frac{3}{4} = \frac{2 \times 3}{4} = \frac{6}{4} = \frac{3}{2}$
- $8 \times \frac{5}{10} = \frac{8 \times 5}{10} = \frac{40}{10} = 4$

Application Example

- One lap around a track is equal to $\frac{4}{5}$ mile. You walk 3 laps around the track. How many miles do you walk?

$$3 \times \frac{4}{5} = \frac{3 \times 4}{5} = \frac{12}{5}$$

• You walk $\frac{12}{5}$ miles.



PRACTICE MAKES PURR-FECT®

Check your answers at BigIdeasMath.com.

Find the product.

- $3 \times \frac{1}{4} = \frac{3}{4}$
- $1 \times \frac{5}{8} = \frac{5}{8}$
- $5 \times \frac{2}{3} = \frac{10}{3}$
- $2 \times \frac{2}{5} = \frac{4}{5}$
- $4 \times \frac{7}{10} = \frac{28}{10}, \text{ or } \frac{14}{5}$
- $8 \times \frac{3}{4} = \frac{24}{4}, \text{ or } 6$
- $3 \times \frac{4}{3} = \frac{12}{3}, \text{ or } 4$
- $6 \times \frac{7}{12} = \frac{42}{12}, \text{ or } \frac{7}{2}$
- $\frac{3}{2} \times 5 = \frac{15}{2}$
- $\frac{9}{10} \times 9 = \frac{81}{10}$
- $3 \times 2 \times \frac{4}{5} = \frac{24}{5}$
- $4 \times \frac{5}{12} \times 6 = \frac{120}{12}, \text{ or } 10$

Compare.

- $4 \times \frac{7}{8} \boxed{>} 6 \times \frac{3}{8}$
- $\frac{4}{5} \times 3 \boxed{<} \frac{3}{10} \times 9$
- $\frac{4}{3} \times 9 \boxed{=} 8 \times \frac{3}{2}$

- CINNAMON** A recipe calls for $\frac{3}{4}$ teaspoon of cinnamon. You make 3 batches of the recipe.

How many teaspoons of cinnamon do you use? $\frac{9}{4}$ teaspoons

- PIANO PRACTICE** You spend $\frac{5}{2}$ hours practicing the piano each day for 3 days. Your friend spends $\frac{4}{3}$ hours practicing the piano each day for 4 days. Who spends more time practicing the piano? you