

# Lesson 6 Reteach

## Multiply Fractions

To multiply fractions, multiply the numerators and multiply the denominators.

$$\frac{5}{6} \times \frac{3}{5} = \frac{5 \times 3}{6 \times 5} = \frac{15}{30} = \frac{1}{2}$$

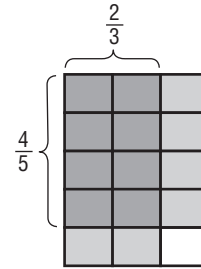
To multiply mixed numbers, rename each mixed number as an improper fraction. Then multiply the fractions.

$$2\frac{2}{3} \times 1\frac{1}{4} = \frac{8}{3} \times \frac{5}{4} = \frac{40}{12} = 3\frac{1}{3}$$

### Example 1

Find  $\frac{2}{3} \times \frac{4}{5}$ . Write in simplest form.

$$\begin{aligned} \frac{2}{3} \times \frac{4}{5} &= \frac{2 \times 4}{3 \times 5} && \leftarrow \text{Multiply the numerators.} \\ &= \frac{8}{15} && \leftarrow \text{Multiply the denominators.} \\ &= \frac{8}{15} && \text{Simplify.} \end{aligned}$$



### Example 2

Find  $\frac{1}{3} \times 2\frac{1}{2}$ . Write in simplest form.

$$\begin{aligned} \frac{1}{3} \times 2\frac{1}{2} &= \frac{1}{3} \times \frac{5}{2} && \text{Rename } 2\frac{1}{2} \text{ as an improper fraction, } \frac{5}{2}. \\ &= \frac{1 \times 5}{3 \times 2} && \text{Multiply.} \\ &= \frac{5}{6} && \text{Simplify.} \end{aligned}$$

### Exercises

Multiply. Write in simplest form.

1.  $\frac{2}{3} \times \frac{2}{3}$      $\frac{4}{9}$

2.  $\frac{1}{2} \times \frac{7}{8}$      $\frac{7}{16}$

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

4.  $\frac{5}{9} \times 4$      $2\frac{2}{9}$

5.  $1\frac{2}{3} \times \left(-\frac{3}{5}\right)$      $-1$

6.  $3\frac{3}{4} \times 1\frac{1}{6}$      $4\frac{3}{8}$

7.  $\frac{3}{4} \times 1\frac{2}{3}$      $1\frac{1}{4}$

8.  $-3\frac{1}{3} \times \left(-2\frac{1}{2}\right)$      $8\frac{1}{3}$

9.  $4\frac{1}{5} \times \frac{1}{7}$      $\frac{3}{5}$

10.  $\frac{7}{5} \times 8$      $11\frac{1}{5}$

11.  $-2\frac{1}{3} \times \frac{4}{6}$      $-1\frac{5}{9}$

12.  $\frac{1}{8} \times 2\frac{3}{4}$      $\frac{11}{32}$