

# Lesson 2 Reteach

## Complex Fractions and Unit Rates

Fractions like  $\frac{\frac{2}{3}}{\frac{4}{4}}$  are called complex fractions. **Complex fractions** are fractions with a numerator, denominator, or both that are also fractions.

### Example 1

Simplify  $\frac{\frac{2}{3}}{\frac{4}{4}}$ .

A fraction can also be written as a division problem.

$$\frac{\frac{2}{3}}{\frac{4}{4}} = 2 \div \frac{3}{4}$$

Write the complex fraction as a division problem.

$$= \frac{2}{1} \times \frac{4}{3}$$

Multiply by the reciprocal of  $\frac{3}{4}$  which is  $\frac{4}{3}$ .

$$= \frac{8}{3} \text{ or } 2\frac{2}{3}$$

Simplify.

So,  $\frac{\frac{2}{3}}{\frac{4}{4}}$  is equal to  $2\frac{2}{3}$ .

### Exercises

Simplify.

1.  $\frac{\frac{3}{1}}{\frac{3}{3}}$

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

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

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

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

6.  $\frac{\frac{10}{7}}{\frac{8}{8}}$

7.  $\frac{\frac{\frac{3}{5}}{3}}{\frac{7}{7}}$

8.  $\frac{\frac{\frac{1}{6}}{5}}{\frac{6}{6}}$

9.  $\frac{\frac{\frac{4}{5}}{9}}{\frac{10}{10}}$

10.  $\frac{\frac{\frac{3}{5}}{3}}{\frac{10}{10}}$