

# Fractions in Simplest Form

R 9-7

A fraction is in simplest form if the only common factor of the numerator and denominator is 1.  $\frac{5}{20}$  in simplest form is  $\frac{1}{4}$  because the numerator and denominator have no common factors other than 1.

Write  $\frac{20}{30}$  in simplest form.

**Step 1:** Divide the numerator and denominator of the fraction by one of their common factors.

A common factor of 20 and 30 is 2.

$$20 \div 2 = 10$$

$$30 \div 2 = 15$$

**Step 2:** Check to see if  $\frac{10}{15}$  is in simplest form.

No, 10 and 15 have a common factor of 5.

Repeat division.

**Step 3:** Divide the numerator and denominator by the common factor.

$$10 \div 5 = 2$$

$$15 \div 5 = 3$$

**Step 4:** Check to see if  $\frac{2}{3}$  is in simplest form.

Yes, the only common factor of 2 and 3 is 1.

So,  $\frac{20}{30}$  in simplest form is  $\frac{2}{3}$ .

Write each fraction in simplest form. If it is in simplest form, write *simplest form*.

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

2.  $\frac{9}{10}$  \_\_\_\_\_

3.  $\frac{10}{12}$  \_\_\_\_\_

4.  $\frac{7}{8}$  \_\_\_\_\_

5.  $\frac{25}{50}$  \_\_\_\_\_

6.  $\frac{3}{15}$  \_\_\_\_\_

7.  $\frac{15}{22}$  \_\_\_\_\_

8.  $\frac{16}{20}$  \_\_\_\_\_

9. **Writing in Math** Kevin said that  $\frac{300}{500}$  is in simplest form because 3 and 5 have only 1 as a common factor. Is he correct? Explain why or why not.

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