# -Key Concept and Vocabulary -

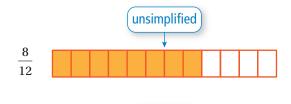
Divide the numerator and the denominator by a common factor.

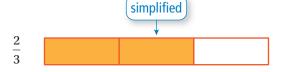
$$\frac{8}{12} = \frac{8 \div 4}{12 \div 4} = \frac{2}{3}$$

Simplest form: The numerator and denominator have no common factors other than 1.



#### **Visual Model**





## **Skill Examples**

$$1. \ \frac{2}{4} = \frac{2 \div 2}{4 \div 2} = \frac{1}{2}$$

**2.** 
$$\frac{3}{6} = \frac{3 \div 3}{6 \div 3} = \frac{1}{2}$$

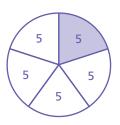
3. 
$$\frac{15}{20} = \frac{15 \div 5}{20 \div 5} = \frac{3}{4}$$

**4.** 
$$\frac{80}{100} = \frac{80 \div 20}{100 \div 20} = \frac{4}{5}$$

#### **Application Example**

5. Five of the 25 students in your class have a social media account. Write this fraction in simplest form.

$$\frac{5}{25} = \frac{5 \div 5}{25 \div 5} = \frac{1}{5}$$



One-fifth of the students in your class have a social media account.

Check your answers at BigIdeasMath.com. ———

## PRACTICE MAKES PURR-FECT®

Write the fraction in simplest form.

**6.** 
$$\frac{16}{19} =$$
 **7.**  $\frac{10}{12} =$ 

7. 
$$\frac{10}{12} =$$
\_\_\_\_\_

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

9. 
$$\frac{15}{45} =$$
\_\_\_\_\_

**10.** 
$$\frac{12}{40} =$$

**10.** 
$$\frac{12}{40} =$$
 \_\_\_\_\_ **11.**  $\frac{14}{21} =$  \_\_\_\_\_

**12.** 
$$\frac{6}{2} =$$
\_\_\_\_\_

**12.** 
$$\frac{6}{2} =$$
 \_\_\_\_\_ **13.**  $\frac{20}{50} =$  \_\_\_\_\_

**14.** 
$$\frac{24}{16} =$$
\_\_\_\_\_

**50** 

**14.** 
$$\frac{24}{16} =$$
 \_\_\_\_\_ **15.**  $\frac{20}{15} =$  \_\_\_\_\_

**16.** 
$$\frac{55}{60} =$$

**16.** 
$$\frac{55}{60} =$$
 \_\_\_\_\_ **17.**  $\frac{21}{35} =$  \_\_\_\_\_

Shade the model so that the fraction is simplified.

18.





**21. SIMPLIFYING** Write five different fractions that each simplify to  $\frac{2}{r}$ .