

NAME \_\_\_\_\_

Module 4 Fractions, Decimals, Percents, and Factors  
Lesson 5 Simplifying and Converting Fractions

### Lesson Objectives

- Use factors of numbers to simplify fractions to the lowest terms.
- Convert between mixed numbers and improper fractions.

### Subtopic 1 Rational Numbers and Equivalent Fractions

- A \_\_\_\_\_ is any number that can be represented by  $\frac{a}{b}$ , where  $a$  and  $b$  are \_\_\_\_\_ and  $b \neq 0$ .
- A rational number is a fraction in which the \_\_\_\_\_ and \_\_\_\_\_ are integers and in which the \_\_\_\_\_ can never be \_\_\_\_\_.
- \_\_\_\_\_ and \_\_\_\_\_ fractions are rational numbers.
- \_\_\_\_\_ are two or more fractions that represent the same quantity.

### Subtopic 2 Simplifying Fractions to Lowest Terms

- A fraction is in \_\_\_\_\_, or lowest terms, when the Greatest Common Factor, or GCF, of the numerator and the denominator is \_\_\_\_\_.
- Numbers are \_\_\_\_\_ when their only common factor is one.
- To find the simplest form of a fraction, \_\_\_\_\_ the numerator and denominator until they have no \_\_\_\_\_ other than the number one.

Write in simplest form.

★ 1  $\frac{14}{28}$

★ 2  $\frac{24}{36}$

★ 3  $\frac{12}{40}$

**Subtopic 3****Converting an Improper Fraction to a Mixed Number (Benchmark Fractions)**

\_\_\_\_\_ fractions:

- Show part of a \_\_\_\_\_.
- Have a numerator that is \_\_\_\_\_ than the denominator.

\_\_\_\_\_ fractions:

- Have numerators \_\_\_\_\_ than or \_\_\_\_\_ to the denominator.
- Show an amount greater than or equal to \_\_\_\_\_.

To change an improper fraction to a \_\_\_\_\_:

- \_\_\_\_\_ the numerator by the denominator.
- The \_\_\_\_\_ becomes the whole number of the mixed fraction.
- The \_\_\_\_\_ becomes the numerator of the fraction and the denominator becomes the divisor.

**Write as a mixed number.**

★  $\frac{10}{3}$

★  $\frac{19}{5}$

★  $\frac{65}{9}$

**Subtopic 4****Converting Mixed Numbers to Improper Fractions**

To write a mixed number as an \_\_\_\_\_:

- \_\_\_\_\_ the \_\_\_\_\_ by the whole number part.
- Add the \_\_\_\_\_ to the product.
- The sum is the \_\_\_\_\_ of the improper fraction.
- The \_\_\_\_\_ stays the same.

**Write as an improper fraction.**

★  $2\frac{1}{3}$

★  $4\frac{3}{5}$