NAME

DATE

Module 15 Simplifying Rational Expressions
Lesson 2 Simplifying Rational Expressions

guided notes

## **Lesson Objectives**

- Simplify rational expressions to simplest form.
- Identify rational expressions that are already in simplest form.

A rational expression is in \_\_\_\_\_\_ if the numerator

and denominator have no common factors except one.

Simplifying rational expressions containing more than one term in the numerator or denominator usually requires two steps.

First, \_\_\_\_\_ the numerator and denominator.

Then, \_\_\_\_\_\_ the common factors.

Simplify:  $\frac{7f^2 - 21f}{f - 3}$ .

If a numerator or denominator containing more than one term cannot be factored, add parentheses around it as a visual reminder to cancel the entire quantity.

Simplify:  $\frac{6-2x}{x-3}$ .

3 Simplify:  $\frac{15m^3 - 5m^2 - 10m}{45m^3 - 20m}$ .