



NAME _____

Module 15 Simplifying Rational Expressions
Lesson 2 Simplifying Rational Expressions

Lesson Objectives

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

A rational expression is in **simplest form** _____ 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, **factor** _____ the numerator and denominator.

Then, **cancel** _____ the common factors.

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

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.

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

3 Simplify: $\frac{15m^3 - 5m^2 - 10m}{45m^3 - 20m}$.
 $\frac{m - 1}{3m - 2}$ _____

