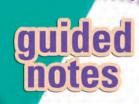
NAME

Module 15 Simplifying Rational Expressions
Lesson 3 Multiplying and Dividing Rational
Expressions

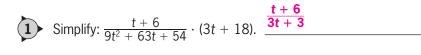


Lesson Objectives

- Multiply rational expressions.
- Divide rational expressions.
- Simplify complex fractions.

The product of $\frac{a}{b} \cdot \frac{c}{d} = \frac{\frac{ac}{bd}}{\frac{bd}{d}}$, where $b, d \neq 0$.

For this entire lesson no denominator of a rational expression has a value of zero.



To divide rational expressions, multiply the first expression by the reciprocal of the second expression.

A <u>complex fraction</u> is a fraction whose numerator or denominator includes another fraction.

Simplify:
$$\frac{4}{5s^2} \div \frac{7}{6s^2 + 9s}$$
. $\frac{24s + 36}{35s}$

To multiply rational expressions, multiply numerator by numerator and denominator by denominator.