Algebra 2

7-03 Multiplying and Dividing Rational Expressions

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Simplified form

- Numerator and denominator can have no common _____

Steps to simplify

1. _____ numerator and denominator
2. _____ any common factors

Simplify

$\frac{x^2+11x+18}{x^3+8}$ $\frac{2x^2}{3x^2-4x}$

Multiplying Rational Expressions

1. _____ numerators and denominators
2. _____ across top and bottom
3. _____ factors

$\frac{x^2+3x-4}{x^2+4x+4} \cdot \frac{2x^2+4x}{x^2-4x+3}$ $\frac{x^2-3x}{x-2} \cdot \frac{x^2+x-6}{x}$

Dividing Rational Expressions

1. Take _____ of divisor
2. _____

$\frac{x^2-x-6}{x+4} \div (x^2-6x+9)$ $\frac{x^2-x-6}{2x^4-6x^3} \div \frac{x+2}{4x^3}$

Combined Operations

1. Do the first _____ operations
2. Use that _____ with the next operation

374 #1, 5, 7, 9, 11, 13, 15, 17, 19, 23, 25, 27, 29, 31, 33, 43, 45, 47, 49, 55 = 20