

# Rational Expressions

## Curriculum Expectations

By the end of this course, students will:

- simplify polynomial expressions by adding, subtracting, and multiplying
- simplify rational expressions by adding, subtracting, multiplying, and dividing, and state the restrictions on the variable values
- determine if two given algebraic expressions are equivalent

## Schedule of Topics

Day	Topic	Homework	Questions?
1	Operations with Polynomials	Worksheet	
2	Factoring: Common, Simple Trinomials	Worksheet	
3	Factoring: Complex, Special Cases	Worksheet	
4	Simplifying Rational Expressions	Worksheet	
5	Multiplying/Dividing Rational Expressions	Worksheet	
6,7	Adding/Subtracting Rational Expressions	Worksheet	
8	Review: Rational Expressions	Worksheet	

## Assessment and Evaluation

Quiz/Test/Task	Date	K	A	T	C

# Skills Checklist

At the end of this strand, I am able to:

- |   |                                 |                                |                                 |
|---|---------------------------------|--------------------------------|---------------------------------|
| • Simplify expressions by collecting like terms                   | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Expand and simplify expressions using the distributive property | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Common factor polynomial expressions                            | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Factor simple trinomials  | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Factor complex trinomials                                       | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Factor perfect square trinomials                                | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Factor differences of squares                                   | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Factor polynomial expressions using multiple techniques         | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Simplify rational expressions by cancelling common factors      | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Multiply/divide rational expressions with like denominators     | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Multiply/divide rational expressions with unlike denominators   | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Add/subtract rational expressions with like denominators        | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Add/subtract rational expressions with unlike denominators      | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |
| • Determine restrictions on the domain of a rational expression   | <input type="checkbox"/> Always | <input type="checkbox"/> Often | <input type="checkbox"/> Seldom |

Student Comments

Parent/Guardian Comments

Teacher Comments