

Advanced Algebra & Trigonometry

Chapter A Objectives

After successful completion of Chapter A you should be able to:

- ✓ Recognize special products (factoring patterns)
- ✓ Factor polynomials
- ✓ Simplify rational expressions
- ✓ Use the LCM to add and subtract rational expressions
- ✓ Divide polynomials using long division
- ✓ Divide polynomials using synthetic division
- ✓ Solve linear, rational, quadratic, radical, and absolute value equations
- ✓ Add, subtract, multiply, and divide complex numbers
- ✓ Solve quadratics with a negative discriminant
- ✓ Use interval notation
- ✓ Solve inequatlities (linear, combined, and absolute value)
- ✓ Complete the square to solve an equation
- ✓ Graph solution sets on the real number line
- ✓ Determine value(s) that must be excluded from the domain of a function
- ✓ Expand (distribute) polynomials
- ✓ Express polynomials in standard form