Algebra 1B Unit 06: Polynomials and Factoring

Content Area: **Math**
Course(s): **Algebra I B**
Time Period: **Semester 2**
Length: **6 cycles**
Status: **Published**

Unit Introduction

Standards

MA.A-SSE.A.1a	Interpret parts of an expression, such as terms, factors, and coefficients.
MA.A-APR.A.1	Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

Essential Questions

- Can two algebraic expressions that appear to be different be equivalent?
- How are properties of real numbers related to polynomials?

Content

- Addition and Subtraction of Polynomials
- Factoring ax^2 +bx + c
- Factoring Special Cases
- Factoring x^2 + bx + c
- Multiplying and Factoring
- Multiplying Binomials
- Multiplying Special Cases
- Supplemental Factoring Completely (2 Days)

Skills

- Adding and Subtracting Monomials
- Adding and Subtracting Polynomials
- Classifying Polynomials
- Factoring a Difference of Two-Squares
- Factoring a Polynomial Completely

- Factoring by Grouping
- Factoring out the GCF
- Factoring Perfect-Square Trinomials
- Factoring Trinomials when a=1
- Factoring Trinomials when a>1
- Finding the Degree of a Monomial
- Finding the Greatest Common Factor
- Multiplying a Monomial and a Trinomial
- Multiplying a Trinomial and a Binomial
- Multiplying Two Binomials
- Squaring a Binomial
- Use graphing calculators and technology where appropriate
- Use relevant vocabulary, notations, and symbols when appropriate