

Clarity for Learning**Standard KY.HS.A.5 (Algebra 1)** Add, subtract and multiply polynomials.**Concepts (Nouns)**

monomial
binomial
trinomial
polynomial

Skills (Verbs)

add
subtract
multiply
combine like terms
distribute

Learning Progressions*Prerequisites:*

- Factor expressions using GCF and distributive property
- Perform operations with expressions with exponents
- Multiply expressions with exponents

Grade level skills:

- Use algebra tiles as models for polynomials and polynomial operations.
- Understand, identify and classify polynomials.
- Add and subtract polynomials
- Multiply polynomials with area models and the distributive property.
- Find the square of a binomial.
- Find the product of the sum or difference of two squares.
- Solve real-world problems using polynomials.

Clarifications:

Students will use combining like terms and the distributive property to add, subtract, and multiply polynomials. When multiplying polynomials, students recognize, identify, and describe shortcuts after noticing that patterns and calculations repeat.

Learning Intentions (I am learning to...)	Success Criteria (I know I'm successful when...)
Add, subtract, and multiply polynomials.	<ul style="list-style-type: none">● I can identify the parts of a polynomial, such as coefficients, variables, and constants.● I can classify polynomials by the number of terms and by degree.● I can write a polynomial in standard form.● I can add or subtract two polynomials and recognize that polynomials are closed under addition and subtraction like the system of integers.● I can use the Distributive Property with polynomials, recognizing that the system of polynomials is closed under multiplication.● I can multiply polynomials using a table and an area model.● I can determine the square of a binomial.● I can find the product of a sum and difference of two squares.● I can solve real-world problems involving polynomials and the square of a binomial.