



## Polynomial Operations

### Today's Standard

HSA.APR.A1 - 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.

Cues	Notes
What are polynomials?	Polynomials are algebraic expressions consisting of variables and coefficients, involving operations of addition, subtraction, and multiplication.
What does it mean for polynomials to be closed under operations?	Closure under operations means that performing an operation (addition, subtraction, multiplication) on polynomials results in another polynomial.
How do you add polynomials?	To add polynomials, combine like terms (terms with the same variable and exponent).
How do you subtract polynomials?	To subtract polynomials, distribute the negative sign and combine like terms.
How do you multiply polynomials?	To multiply polynomials, use the distributive property or the FOIL method for binomials.

### Summary

Polynomials are closed under addition, subtraction, and multiplication, meaning these operations on polynomials result in another polynomial. Understanding and performing these operations are essential skills in algebra.