

Grade 9 - Unit 5 Polynomials

PR05 Students will be expected to demonstrate an understanding of polynomials (limited to polynomials of degree less than or equal to 2).

Performance Indicators

PR05.01 Create a concrete model and/or a pictorial representation for a given polynomial expression.

PR05.02 Write the expression for a given model of a polynomial.

PR05.03 Identify the variables, degree, and number of terms and coefficients, including the constant term, of a given simplified polynomial expression.

PR05.04 Describe a situation for a given first-degree polynomial expression.

PR05.05 Match equivalent polynomial expressions given in simplified form.

Limited	Developing	Competent	In-Depth
<p>Student can model a number using algebra tiles in a number of different ways (i.e. use the zero principle).</p> <p>Student can add and subtract integers using algebra tiles and/or pictures.</p> <p>Student can describe a situation for numerical expressions involving integers.</p>	<p>Student can match a given polynomial expression (monomials, binomials, and trinomials) to a given model or picture (algebra tiles)</p> <p>Student can identify like and unlike terms using symbols and models (degree less than or equal to 2)</p> <p>Student can match simplified polynomial expressions with an expanded form (e.g. $x + x + x + 3 + 5 = 3x + 8$).</p> <p>Student can identify the number of terms and the variables of a given simplified polynomial expression.</p> <p>Student can match a situation to a given first-degree polynomial expression.</p>	<p>Student can model a given polynomial expression (monomials, binomials, and trinomials) using algebra tiles and pictures.</p> <p>Student can write the expression for a given model of a polynomial (concrete and/or pictorial)</p> <p>Student can match equivalent polynomial expressions given in simplified form (e.g. $4x - 3x^2 + 2$ is equivalent to $-3x^2 + 4x + 2$).</p> <p>Student can identify the variables, degree, number of terms, coefficients, and constant term, of a given simplified polynomial expression</p> <p>Student can describe a situation for a given first-degree polynomial expression.</p>	<p>Student can create a first-degree polynomial expression and describe a situation that this expression models that is meaningful and relevant to their own life.</p>