Module 11 Simplifying Algebraic Expressions with Polynomials
Lesson 3 Adding and Subtracting Polynomials

## Lesson Objectives

- Add polynomials.
- Subtract polynomials.

A polynomial is a monomial $\qquad$ or sum of monomials

A monomial is an expression containing one term
A binomial contains two terms.

A trinomial contains three terms.

To add polynomials, combine like terms
Like terms are terms with exactly the same $\qquad$ .
same exponent(s)
(1) Add: $(5 r-6)+(-5 r+6)$

0
(2) Add: $\left(3 x^{2}+2 x y-y^{2}\right)+\left(x^{2}-x y+2 y^{2}\right)$
$4 x^{2}+x y+y^{2}$

To subtract a polynomial, add its opposite
(3) Subtract: $\left(y^{2}+2 y+8\right)-\left(y^{2}-2 y+4\right)$
$4 y+4$

