

3.1 Expanding Polynomials

Terminology

You can classify a polynomial by degree or number of terms.

Example	Number of Terms	Classification	Degree	Classification
5	1	monomial	0	constant
3x	1	monomial	1	linear
4x+2	2	binomial	1	linear
$x^2 + 4x + 1$	3	trinomial	2	quadratic
$3x^3 + x^2 - x - 7$	4	polynomial	3	trinomial

Ex Simplify

- $(x^2 + 4x - 2) + (2x^2 - 6x + 9)$
- $(6m^2 - mn + 4) - (7m^2 + 4mn - 2)$
- $(-4a^2b)(3ab^3)$
- $\frac{20x^3y^4}{-5x^2y^2}$
- $3x(x - 2) - 2x(2x + 5)$