

Lesson 1.1 Polynomials / Algebra 1 Review

Algebra 2

Terms to know:

Term	Definition
Variable	A quantity that is unknown, unspecified, or can change within the context of a problem. Most often variables are represented by a letter or symbol. "x"
Terms	A single number or a combination of numbers and variables using exclusively multiplication or division. xy or $2x$
Like Term	Same Variable and Same Exponents $2x^2$ and bx^2 bx^2 and $2x$
Polynomial	One term or the sum of two or more terms Monomial: 1 term (Ex. $3ab$) Binomial: 2 terms (Ex. $2a^4 + 3a^2$) Trinomial: 3 terms (Ex. $x^2 + 2x + 4$)
Standard Form	Alphabetical order, exponents in descending order $3x^3 + 4x^2 - 2x + 1x^0$ $4a^3b - 5a^2b^2 + 5ab^3$ highest exponent 1st

Adding Polynomials:

* drop (), add like terms, simplify

* $(6x^2 - 7x + 8) + (-4x^2 + 9x - 5)$

$$\underline{6x^2} - 7x + 8 - \underline{4x^2} + 9x - 5$$

$$6x^2 - 4x^2 - 7x + 9x + 8 - 5$$

$$\boxed{2x^2 + 2x + 3}$$

Subtracting Polynomials:

- * have to distribute (-)
- * $(4x^2 - 5x + 6) - (2x^2 + 3x - 1)$

$$\underline{4x^2 - 5x + 6} - \underline{2x^2 + 3x - 1}$$

$$4x^2 - 2x^2 - 5x - 3x + 6 + 1$$

$$\boxed{2x^2 - 8x + 7}$$

Multiplying Polynomials: Use di

- * $3x(2x^2 - 4x + 6)$

- * $(x + 2)(x - 3)$

- * $(n^2 + 4n - 6)(n + 2)$