

POLYNOMIALS

POLYNOMIAL:

more than ONE term.

MUST STILL MEET THESE CONDITIONS!

1. No Neg. EXP.
2. No Fraction EXP.

Degree of a Polynomial

= to the highest degree of the monomial terms

Ex: $6x^5y^1 + 4x^3y^2 - 12xy^3$

6 5 4

Degree: 6

Simplifying Polynomials

1. Distribute

2. Apply Exp Rules

3. Combine Like Terms

EX # 1: SIMPLIFY

$$(3x^2 + 6xy - 7y^2) - (-x^2 + 5xy - 2y^2)$$

$$3x^2 + 6xy - 7y^2 + x^2 - 5xy + 2y^2$$

$$4x^2 + 1xy - 5y^2$$

DEGREE: 2

trinomial

EX #2: SIMPLIFY

$$(\underline{x} + \underline{4})(\underline{x} + \underline{4})$$

$$x^2 + 4x + 4x + 16$$

DEGREE: 2

$$x^2 + 8x + 16$$

trinomial

EX # 3: SIMPLIFY

$$(x - 4)(3x - y + 3)$$

$$3x^2 - xy + 3x - 12x + 4y - 12$$

$$3x^2 - xy - 9x + 4y - 12$$

DEGREE: 2

Polynomial