9 - 1
Introduction to Polynomials

monomial:

Examples: $3xy$

7

$5a^2 b$

$\cancel{3x+b}$

coefficient: number in front of the variables
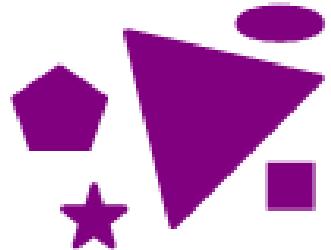
Examples: $3x^2y$

$1ab$

constant:

Examples: 7

−31

polynomial: sum or difference of 2 or more monomials

$$3x^2 + 2y - 5 + 2x$$

binomial:

Example: $3x^2 + 5y$

trinomial:

Example: $2x + 3y - 5z$

standard form: in order from greatest to least power

Write each polynomial in standard form.

Ex: $8n^2 + 5n^1 + 6n^3 + 9n^4$

$$9n^4 + 6n^3 + 8n^2 + 5n$$

Write each polynomial in standard form.

Ex: $7y + 11 - y^2$

$$-y^2 + 7y + 11$$

like terms: variables match <u>exactly</u>

like terms: $3x$ and $-2x$

$-4m^2n$ and $5m^2n$

unlike terms:

$5y$ and $5y^2$

$3xy$ and $4x^2y$

Simplify.

Ex: $7x^2 + 2 + 9x^2$

$$16x^2 + 2$$

Ex: $4d^2 - 6d - 3d^2 - 5d$

$$1d^2 - 11d$$

Ex: $-15m + 7m^2 + 9 - 3m$

$$7m^2 - 18m + 9$$

Homework:

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