# Classifying Polynomials

Polynomial is a function with many terms and all exponents must be whole numbers.

## Classify by terms

ex) $y = \frac{1}{2}x - 4$ (2)

$y = 2x^2 - 3x + 5$ (3)

$y = 15x + 7x^4 - 5$ (3)

$y = 2$ (1)

$y = x$

# Classify by terms

Term

1 = monomial

2 = binomial

3 = trinomial

4+ = polynomial

# Classify by degree

$3x^{2} - 5x^{1} + 5x^{0}$

Degree = 2

Degree is your highest exponent

$7x + 3x^{5} - 2x^{2}$

Degree = 5

$y = 3$

$y = -\frac{1}{2}$

$y = \pi$

## Classify by degree

Degree

0 = Constant

1 = Linear

2 = Quadratic

3 = Cubic

4+ = $4^{th}$ degree or $5^{th}$ ....