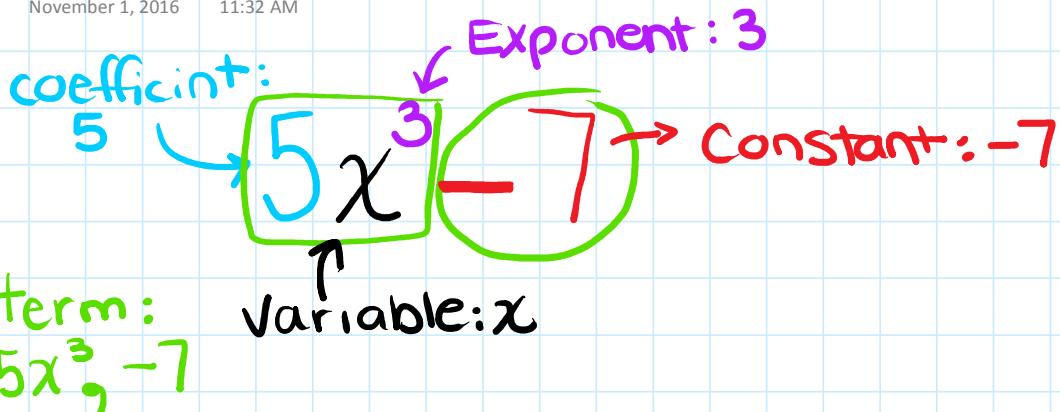


Expressions Notes #1

November 1, 2016 11:32 AM



Term: parts of an expression or equation separated by + or -

# of Term	Type of Polynomial	Examples
1	Monomial	$x, 9, -2y, 3a^2b^3$
2	Binomial	$2x-4, -x^3+3z^2$
3	Trinomial	a^2+4a-8
4 or more	Polynomial	$5mn+m^2+2n-6$

Degree of a Term:

Steps to find degree

- ① Ignore coefficients and constants.
- ② Look at variable's exponents.
- ③ Do not combine terms.
- ④ Pick highest degree or term

Ex:

$$1) \underbrace{8x^2y^3}_{d=5} + \underbrace{x^3y^1}_{d=4} + \underbrace{xy^1}_{d=2} + \underbrace{6}_{d=0} = \text{degree of } 5$$

$$2) -\underbrace{a^2b^3c^2}_{d=7} + \underbrace{8a^2bc^2}_{d=5} + \underbrace{a^2b^1}_{d=3} + \underbrace{bc^1}_{d=2} + \underbrace{c}_{d=1} = \text{degree of } 7$$

Combining Like terms

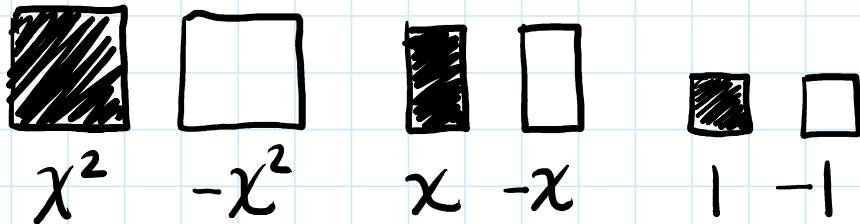
- Coefficients are added or subtracted together for the same variables
- Constants are added or subtracted

Ex: $\underline{\underline{4x^2}} - 8x + 2 + \underline{\underline{x^2}} + 3x - 5$

$$4x^2 + x^2 - 8x + 3x + 2 - 5$$

$$5x^2 - 5x - 3$$

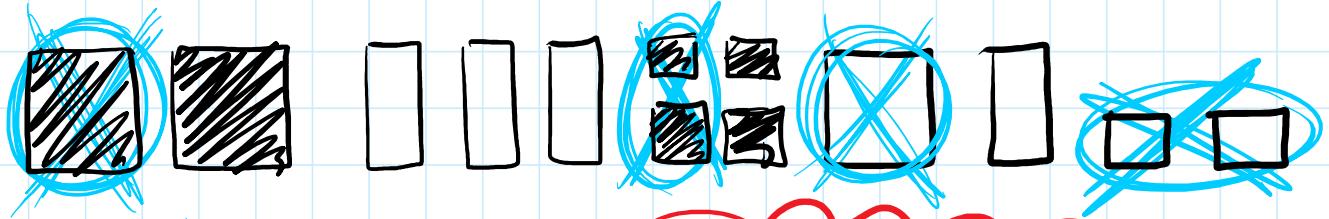
Algebra Tiles:



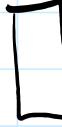
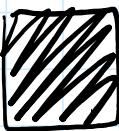
Solve using tiles:

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

$$2x^2 - 3x + 4 - x - x - 2$$



Cancel opposite
Color Same Shape



$$x^2 - 4x + 2$$