



$$A = \frac{bh}{2} \quad c^2 = a^2 + b^2$$

$$S_{\text{cylinder}} = 2\pi r^2 + 2\pi r h$$

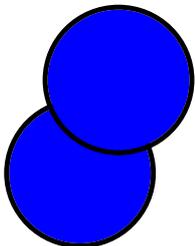
# Chapter 5

# Polynomials

December 5, 2019

**Term** -- Part of an expression or series <sup>[no equal sign]</sup> separated by a + or - sign, or parts of a sequence separated by commas.

$-2q + p$



Expression	Terms
$5a^3 - 2xy + 3$	$5a^3, -2xy,$ and $3$
$\frac{p - 2q}{a^2 + b}$	$ p, -2q , a^2,$ and $ b$

$5a^3 + -2xy + 3$

$p + -2q$

# *Polynomials*

*A polynomial is one term or the sum of terms whose variables have whole number exponents*

Expression	Polynomial?	# of terms	List the terms
1. $2a + 3$	yes	2	2a, 3
2. $4a \boxed{-6}$ <small>-6 + 4a</small>	yes	2	4a, -6
3. $4a$	yes	1	4a

- constants [like 3, -20, or 1/2]
- Variables [like x , y etc]
- exponents [like the 2 in  $y^2$ ] but only whole number exponents

exponent  
 $2x^2 + y + 4$   
constant [never changes]  
Variables [a letter that represents a number]

**Polynomials are combined using:**

- addition [+], subtraction[-]

**Term**-a constant [number], variable **or** the product of a number and variable.

**Examples** 2, y, 2xy,  $2x^2$ , -3x, -2  
of a Term

constant

Variable

product of a number and a variable