Simplifying Expressions by Combining Like Terms
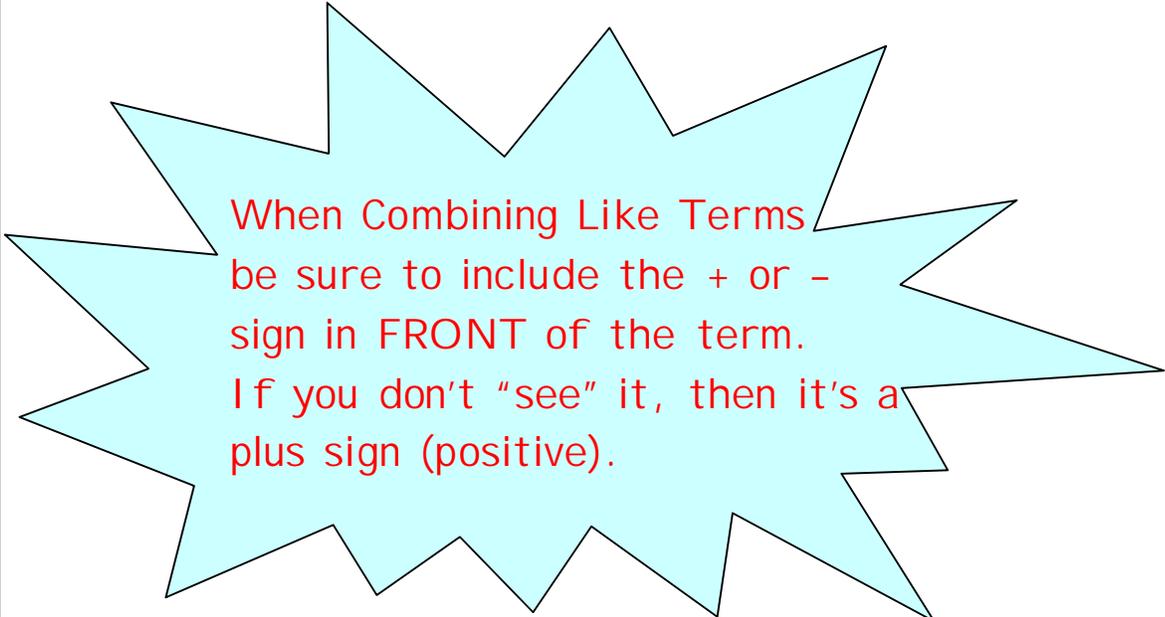
What is a **CONSTANT**?	• A constant is a **NUMBER** that does not change. o ie) 2, 4, 6, 17, 28, 40, 85…
What is a **VARIABLE**?	• A variable is a **LETTER** that stands for a value (or number) that may change/vary. o ie) a, b, c, m, n, x, y, z…
What is a **VARIABLE EXPRESSION**?	• A math sentence containing constants, variables, and operational symbols (+, –, •, ÷)

So…What's a **TERM**?	• In a variable expression, **TERMS** are separated by addition or subtraction signs.
	   o a + 2b + 5c – 6 has 4 TERMS
	
	• Therefore, a **TERM** can be one of three things:
	   o Constants (or Numbers)
	     ▪ 2, 3, 5, 9
	   o Variables (or Letters)
	     ▪ a, b, x, y
	   o The product (multiplication) of constants and variables
	     ▪ a, 2b, 7c, 12d, 5x, y
	
	     ❖ The number that multiplies the variable is called the COEFFICIENT.

What are ==LIKE TERMS==?	❖ All ==CONSTANTS== (or numbers) are "Like Terms"
	   o 18, 2, 17, 35
	❖ "Like Terms" have ==IDENTICAL VARIABLES==:
	   o 2a, 3a, 9a, a
	   o b, 8b, 13b, 2b
	   o 5c, 9c, 2c, c
	   o 6xy, 5xy, 12xy, xy
	   o $9x^2$, $4x^2$, $18x^2$

How to ==COMBINE LIKE TERMS==?	1. Assign a color/shape to a group of <u>LIKE TERMS</u>
	
	2. Circle the <u>LIKE TERMS</u>
	   o Include the SIGN in FRONT of the Term.
	
	When Combining Like Terms be sure to include the + or − sign in FRONT of the term.
	If you don't "see" it, then it's a plus sign (positive).
	
	   o The sign in FRONT of the term determines if addition or subtraction will be used to <u>COMBINE LIKE TERMS</u>.
	
	3. COMBINE LIKE TERMS