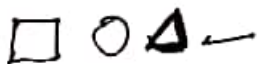


# COMBINE LIKE TERMS NOTES

Vocabulary	Definition	Example
Term	Parts of an expression separated by + or -	$\frac{5x}{\downarrow} + \frac{2y}{\downarrow} (-7)$
Variable	The letter or symbol that represents an unknown quantity	X      Y $x^0$
Coefficient	The number multiplied by the variable	$\downarrow$ $\downarrow$ $\downarrow$ 5      2      -7
Constant	Terms with the exact same variable to the same power.	$3x^2 + \boxed{5y} - 4x + \boxed{2y} - 3$
Like Terms	A term without a variable	-7. / -3
Unlike Terms		

TO COMBINE LIKE TERMS:

Step 1: Use shapes to group like terms.



Step 2:

Step 3: Group like terms in their shape.

Step 4:

Add/subtract like terms

EXAMPLE:

$$\boxed{4x^2} + \boxed{2x^2} - \textcircled{4x} + \textcircled{3x} - 5$$

Steps 1 and 2:

Step 3:

$$\begin{array}{|c|} \hline 4x^2 \\ 2x^2 \\ \hline \end{array} + \begin{array}{|c|} \hline -4x \\ 3x \\ \hline \end{array} + \underline{-5}$$

Step 4:  $6x^2 + -1x - 5$

$6x^2 - x - 5$

# COMBINE LIKE TERMS NOTES

## With the Distributive Property

### INSTRUCTIONS:

Step 1: Distributive Property  
 We multiply the outside term to each term inside the Parenthesis

Step 2:  
 Use shapes to group all like terms.

Step 3:  $\square \bigcirc \triangle$

Step 4: group our like terms in the same shape.

Step 5:  
 Add/subtract each like term.

### EXAMPLE:

Step 1A and 1B:

$$-2(x + 1) + -1(x - 4)$$

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

Step 2 and 3:

$$\boxed{-2x} \bigcirc -2 \boxed{-x} + \bigcirc 4$$

Step 4:

$$\begin{array}{|c} -2x \\ -x \end{array} + \begin{array}{|c} -2 \\ 4 \end{array}$$

Step 5:

$$\boxed{-3x + 2}$$