

## COMBINING LIKE TERMS

def

LIKE TERMS - TERMS THAT HAVE THE SAME VARIABLE TO THE SAME POWER (EXPONENT)

$2x$        $3x$       LIKE TERMS  
SAME VAR. (x)      SAME EXP (1)

$$2x + 3x = 5x$$

$5y^2$        $4y^2$       LIKE TERMS  
SAME VAR (y)      SAME EXP (2)

$$5y^2 + 4y^2 = 9y^2 \quad 5y^2 - 4y^2 = 1y^2$$

$y^2$

$8m$        $3m^2$       NOT LIKE TERMS  
SAME VAR. (m)      NOT THE SAME EXP

$$8m + 3m^2 = 3m^2 + 8m$$

\* LIST TERMS ALPHABETICALLY AND IN DESCENDING ORDER ON THE VARIABLE (COMMUTATIVE PROPERTY)

## STRATEGIES FOR COMBINING LIKE TERMS

1) SHAPE

$$6m + 2p + 3 + 4p - 2m + 4$$

$$6m - 2m + 2p + 4p + 3 + 4$$
$$4m + 6p + 7$$

2) HIGHLIGHTER (COLOR)

$$6m + 2p + 3 + 4p - 2m + 4$$

↑ TAKE THE SIGN WITH THE TERM

$$6m - 2m + 2p + 4p + 3 + 4$$
$$4m + 6p + 7$$

YOU TRY:

1)  $6x + 5x + 2y$   
 $11x + 2y$

2)  $3a^2 + 4a^2 - a^2$   
 $6a^2$

3)  $6y^3 + 2y^2 + 4y^3 + 2y^2$   
 $10y^3 + 4y^2$

4)  $a + a + a + 7$   
 $3a + 7$