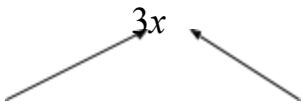


**VARIABLE:****TERM:****LIKE TERM:**

Examples:

- $x$  and  $2x$  -
- $x$  and  $x^2$  -
- $ab$  and  $2ab$  -
- $a^2b$  and  $ab^2$  -

In the term



When simplifying algebraic expressions:

- add or subtract **like terms only**
- apply integer rules to the **coefficients** of like terms

Example: Collect the like terms and simplify:

a)  $5x - 3x$

b)  $-3mn + 5mn - 8mn$

c)  $2k - (9k-2)$

d)  $3x^2 + 5x - 9x + 7$

$$e) 3a^3 + b^3 - 6a^2b - a^3 + 6ab^2 + a^2b$$

$$f) 8(2x+3) - 7x$$

Try these!

$$1. 5x + 2 + 3x + 4$$

$$2. 3a^2 - 2ab - 2b^2 - 2a^2 - ab + b^2$$

$$3. 4y - (2y + 1)$$

$$4. -(6t - 2v) - 8t - v$$

$$5. 4(3a + 1) - (5a - 8)$$

$$6. 3x - 2(x + 7) + 5(-x - 1)$$

Homework: Textbook:

Page 152 #3, #4

Page 439 #1, #2