COMBINING LIKE TERMS

Recall: expressions like $3x$ and $5x$ are known as **LIKE TERMS** since the variable parts are the same.

When evaluating algebraic expressions (an expression with both variables and numbers), we can only combine **LIKE TERMS**.

↳ EXAMPLE 1: SIMPLIFY

a) $2x + 7x =$

b) $4x - 3x =$

c) $7a + 3a - 4a =$

↳ EXAMPLE 2:

$$9x - 6x - 7 - 3$$

Remember, the Order of Operations requires that we work **LEFT** to **RIGHT**.

$$9x - 6x - 7 - 3$$

$$= \_\_\_\_ - 7 - 3$$

But now what? We cannot combine $3x$ and 7 because they're NOT like terms.

But, recall that if EVERYTHING is being added, we can add in any order.

So, $3x-7-3 = 3x+(\quad)+(\quad)$

$= 3x+$ _____

↳ example 3: simplify

a) $8a-4a-6-2$

b) $3x-5-x+7$

c) $5x-8-3x+1$

d) $-5x+3-4-2x+7+x$

e) $9-5x+7-2x$

f) $4x-3-5x+3x$

COMBINING LIKE TERMS Practice Problems

SIMPLIFY:

1. $9x - 5x$

2. $7b + 9b - 12b$

3. $7x + 9 - 2x - 3$

4. $-2a - 6 - 3a - 7$

5. $-a - b - 3a - 4b + 5$