

LIKE TERMS

Like-terms contain the same pronumerals with the same powers:

Example: $3x$ and $7x$

$2ab$ and $-9ab$

(the pronumerals do not need to be in the same order, so $4xy$ and $8yx$ are also like-terms)

Counterexample:

$5x$ and $7x^2$ are NOT like terms

LIKE-TERMS CAN BE COMBINED

Like-terms can be combined when they are added or subtracted to simplify an expression:

example: $3xy + 5xy = 8xy$

(a subtraction sign stays in front of a term when it's moved

example:

$$\begin{aligned} 3x + 7y - 2x + 3y + x - 4y &= 3x - 2x + x + 7y - 4y \\ &= 2x + 3y \end{aligned} \quad)$$