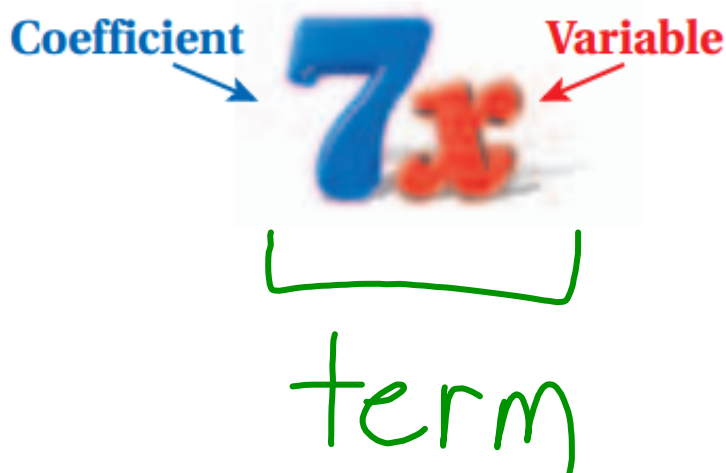


1.9 Simplifying Algebraic Expressions

p.42

10-9-17

Sep 24-9:04 AM



Sep 24-9:05 AM

In the expression $7x + 9y + 15$, $7x$, $9y$, and 15 are *terms*. A **term** can be a number, a variable, or a product of numbers and variables. Terms in an expression are separated by plus or minus signs.

Sep 24-9:06 AM

In the term $7x$, 7 is called the *coefficient*. A **coefficient** is a number that is multiplied by a variable in an algebraic expression.

Sep 24-9:06 AM

Like Terms	$3x$ and $2x$	w and $\frac{w}{7}$	5 and 1.8
Unlike Terms	$5x^2$ and $2x$ <i>The exponents are different.</i>	$6a$ and $6b$ <i>The variables are different.</i>	3.2 and n <i>Only one term contains a variable.</i>

Sep 24-9:10 AM

Combining like terms is like grouping similar objects.

$$4x + 5x = 9x$$

To combine like terms that have variables, add or subtract the coefficients.

Sep 25-8:18 AM

Simplify. $6t - 4t$

like
terms

$$2t$$

Sep 25-8:18 AM

Simplify. $5y + 3y$

like
terms

$$8y$$

Sep 25-8:19 AM

$$3a^2 + 5b + 11b^2 - 4b + 2a^2 - 6$$

$$3a^2 + 2a^2 = 5a^2$$

$$5b - 4b = b$$

$$5a^2 + b + 11b^2 - 6$$

Sep 25-8:19 AM

$$c. 4x^2 + 4y + 3x^2 - 4y + 2x^2 + 5$$

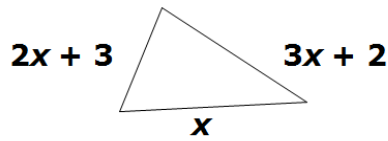
$$4x^2 + 3x^2 + 2x^2 = 9x^2$$

$$4y - 4y = 0$$

$$9x^2 + 5$$

Sep 25-8:20 AM

Write an expression for the perimeter of the triangle. Then simplify the expression.



$$(2x + 3) + x + (3x + 2)$$

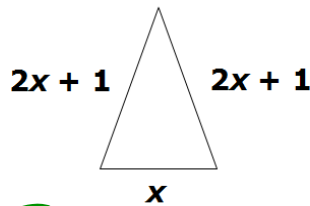
$$2x + x + 3x = 6x$$

$$3 + 2 = 5$$

$$(6x + 5)$$

Sep 25-8:20 AM

Write an expression for the perimeter of the triangle. Then simplify the expression.



$$(2x + 1) + (2x + 1) + x$$

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

$$1 + 1 = 2$$

$$(5x + 2)$$

Sep 25-8:21 AM