

Objective: To simplify expressions
by combining like terms.

1/31/19

terms :

- a number ex: 5
- a variable ex: x
- a product of a number and a variable ex: $5x$
- a quotient of a number and a variable ex: $\frac{5}{x}$ or $\frac{x}{5}$
- a power ex: $5x^2$

coefficient: a number that is multiplied to a variable

coefficient ← $(5)x$

constant: is a number with no variable: 5

Like terms: a term that has the same variable(s)
raised to the same power.

example: $(7a) + 4b + (12a) - 3b - (15a)$

7 apples + 4 berries + 12 apples - 3 berries - 15 apples

$(1a) + 4b - 3b - (15a)$

$4a + 4b - 3b$

$1b = b$

$4a + b$

example 2 :

$$\textcircled{-3x^2} + \textcircled{4xy} - \textcircled{2x^2} - \textcircled{3xy}$$

$$-3x^2 - 2x^2 + 4xy - 3xy$$

$$\boxed{-5x^2 + xy}$$

example 3 :

$$-2(x-3) + 4x - 5$$

$$\textcircled{-2x} + \textcircled{6} + \textcircled{4x} - \textcircled{5}$$

$$-2x + 4x + 6 - 5$$

$$\boxed{2x + 1}$$

★ Distributive Property

$$\overbrace{-2(x-3)}$$

$$-2x + 6$$