

## System of Equations

A **system of equations** is a group of **equations** with the **same variables**.

$$x + y = 5$$

$$x - 5y = -7$$

$$(3, 2)$$

$$3 + 2 = 5$$

$$3 - 5(2) = -7$$



The **solution** to a **system** of equations is the ordered pair  $(x, y)$  that satisfies **both equations**

Solving a **System of Equations** by Elimination

$$2x + 3y = 34$$

$$4x - 3y = -4$$

$$2x + 6y = -8$$

$$5x - 3y = 88$$

Solving a **System of Equations** by Elimination

$$2x + 4y = -10$$

$$3x + 3y = -3$$