



**Math Virtual Learning**

# **Algebra 1 S-1**

**May 22, 2020**



Algebra I S1  
Lesson: May 22, 2020

**Objective/Learning Target:**  
**Student will review Unit C concepts.**

## 3 Methods to Solving Systems:

### Graphing

BOTH equations  
must be written  
as  $y = mx + b!$

Graph both  
lines and see  
where they meet!

### Substitution

Single out  $x$  or  $y$   
and create  
a blob:

$x =$   or

$y =$  

### Elimination

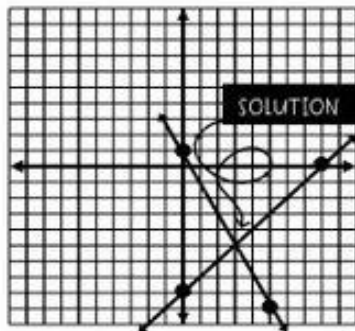
LINE 'EM UP!

Look for matching  
coefficients.

add/subtract to  
eliminate!

# WAYS TO SOLVE systems of equations

**GRAPHING**  
 Use when both equations are in slope intercept form.



**(3, -5)**

$$y = x - 8$$

$$y = -2x + 1$$

**SUBSTITUTION**  
 Use when one equation has been solved for a variable.

$$y = x - 8$$

$$y = -2x + 1$$

REPLACE 'y' WITH  $x - 8$ .

$$x - 8 = -2x + 1$$

$$+2x \quad +2x$$

$$3x - 8 = 1$$

$$+8 \quad +8$$

$$3x = 9$$

$$\frac{3x}{3} = \frac{9}{3}$$

$$x = 3$$

PLUG VALUE INTO ORIGINAL EQUATION

$$y = 3 - 8$$

$$y = -5$$

**(3, -5)**

**ELIMINATION**

Use when coefficients of variable are opposite or can easily be made into opposites by multiplying.

$$2(y = x - 8)$$

$$y = -2x + 1$$

MULTIPLY BY # TO CANCEL OUT A VARIABLE

$$2y = 2x - 16$$

$$+ y = -2x + 1$$

$$3y = -15$$

$$\frac{3y}{3} = \frac{-15}{3}$$

$$y = -5$$

PLUG VALUE INTO ORIGINAL EQUATION & SOLVE

$$y = x - 8$$

$$-5 = x - 8$$

$$+8 \quad +8$$

$$x = 3$$

**(3, -5)**



# Solving Systems of Equations Practice

Review and Answer Key