Solving Systems of Equations – Elimination (Addition & Subtraction)

A.REI.6 – Solving systems exactly and approximately

Agenda

Homework:
- Elimination (Add/Subtract) WS
- Summary for notes
- AM

Materials:
- Notebook
- Calculator (if needed)

DO NOW:
1. Write homework
   - **Shanyn(Pd 3); Kylie (Pd 6)**, please stamp planners
2. Set up Power Math Notes in Notebook

Topic: Solving System of Equations Algebraically – Elimination (Add/Subtract) Method

Set up Power Math Notes (see example below)

Name: **Date:** **Period:** **Topic:** Solving System of Equations Algebraically – Elimination (Add/Subtract) Method	

Toolbox: *(leave about 8 lines)*	**Summary/Reflection:**

Study Questions:	**Workspace:**

How do you solve a system of equations using the elimination method?

Step 1
- Add/Subtract the two equations so that one of the variable cancels out

Step 2
- Solve for the remaining variable

Step 3
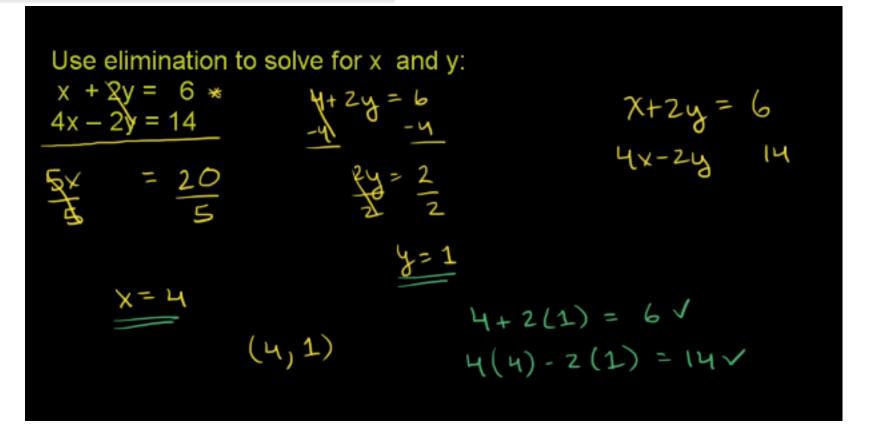- Plug answer into one of the equations to solve for the other variable

Step 4
- CHECK your solution

Example #1 – Elimination with Addition Method

$$x + 2y = 6$$
$$4x - 2y = 14$$

Use elimination to solve for x and y:

$$x + 2y = 6 \;*$$
$$4x - 2y = 14$$

$$\frac{5x}{5} = \frac{20}{5}$$

$$x = 4$$

$$4 + 2y = 6$$
$$-4 \qquad -4$$

$$\frac{2y}{2} = \frac{2}{2}$$

$$y = 1$$

$$(4, 1)$$

$$x + 2y = 6$$
$$4x - 2y \qquad 14$$

$$4 + 2(1) = 6 \checkmark$$
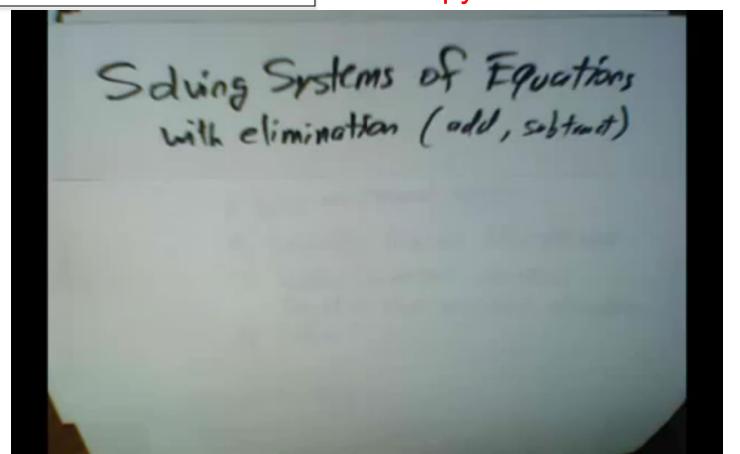$$4(4) - 2(1) = 14 \checkmark$$
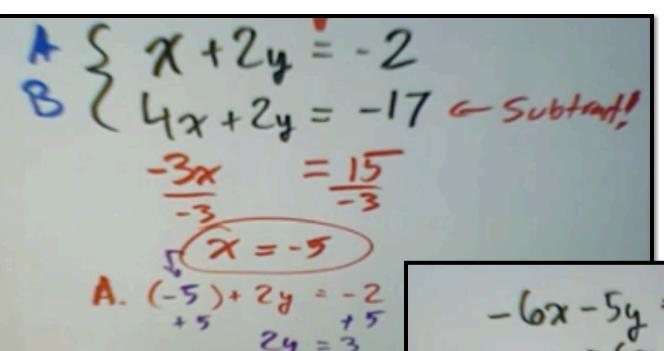
Example #2 – Elimination with Subtraction Method + Special Case

$$x + 2y = 8$$
$$4x + 2y = 32$$

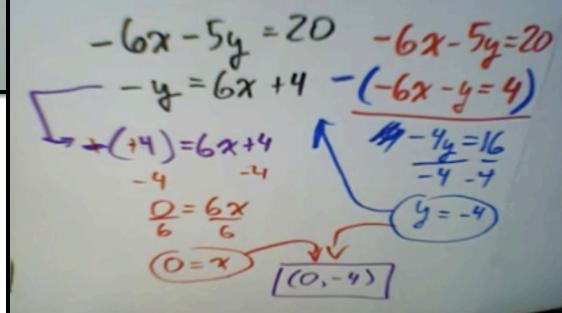Click on the picture below to watch the tutorial video. PAUSE the video when needed to copy notes

Solving Systems of Equations
with elimination (add, subtract)

Screenshots of video from last slide

Example 1

Example 2

Classwork

1. Each table group will receive 2 example problems (Yellow paper)

2. Work together in your table groups to complete the Practice Problems (White paper)
   – **SHOW WORK on FOLDER PAPER**

3. Staple group work together and give to substitute

4. At **1:50 Substitute will pass out HOMEWORK** and collect all remaining group work (*Christian, please help to keep track of time and let the sub know when it is 1:50*)

5. Work on homework for remainder of class