

Today's Plan:

Learning Target (standard): I will solve a linear system using the graphing method. I will describe the type of system and its solution.

Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, take notes over new material and complete practice problems over new concepts.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of new concepts and assign students assessment problems over new concepts.

Assessment: Board work, homework check and homework assignment

Differentiation: Students will work at the board, go over and correct homework at their seats, actively engage in lecture over new concepts, practice new concepts with the aid of other students and the teacher and complete homework assignment.

NAME _____ #56

BELL RINGER 0:04:00

1.) Solve the system $y = 2x + 1$
 $2x + 3y = -13$
 (use the graphing method)

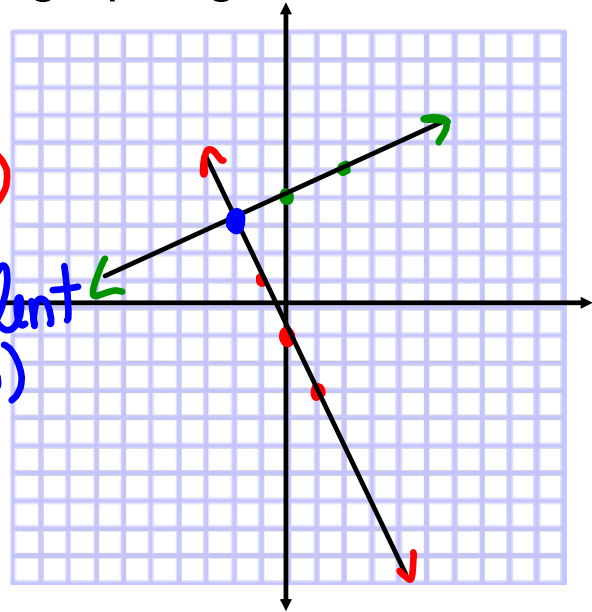
2.) Is 3 a solution to the inequality $5x + 3 < 19$?
 $5(3) + 3 < 19$
 $15 + 3 < 19$
 $18 < 19$ **YES**

3.) Evaluate $10 - 3^2 + 7$.
 $10 - 9 + 7$
 $1 + 7$ **8**

① $y = 2x + 1$ $m = 2$ $Iy: (0, 1)$
 ② $2x + 3y = -13$ $3y = -2x - 13$ $y = -\frac{2}{3}x - \frac{13}{3}$ $m = -\frac{2}{3}$ $Iy: (0, -\frac{13}{3})$
 independent $(-2, -3)$ $-4\frac{1}{3}$

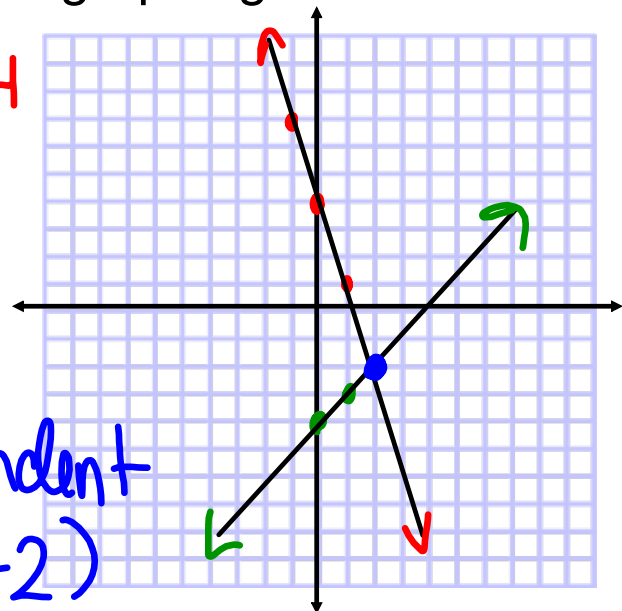
Solve the system using the graphing method.

$$\begin{aligned} \textcircled{1} 2x + y &= -1 && y = -2x - 1 \\ &&& m = -2 \\ &&& I_y: (0, -1) \\ \textcircled{2} x - 2y &= -8 && \\ -2y &= -x - 8 && \\ y &= \frac{1}{2}x + 4 && \\ m &= \frac{1}{2} && \\ I_y &: (0, 4) && \end{aligned}$$



Solve the system using the graphing method.

$$\begin{aligned} \textcircled{1} 3x + y &= 4 && y = -3x + 4 \\ \textcircled{2} x - y &= 4 && m = -3 \\ &&& I_y: (0, 4) \\ -y &= -x + 4 && \\ y &= x - 4 && \\ m &= 1 && \\ I_y &: (0, -4) && \end{aligned}$$



Solve the system using the graphing method.

$$\textcircled{1} 7x + 2y = -6$$

$$\textcircled{2} 7x + 2y = 2 \quad 2y = -7x - 6$$

$$2y = -7x + 2 \quad y = -\frac{7}{2}x - 3$$

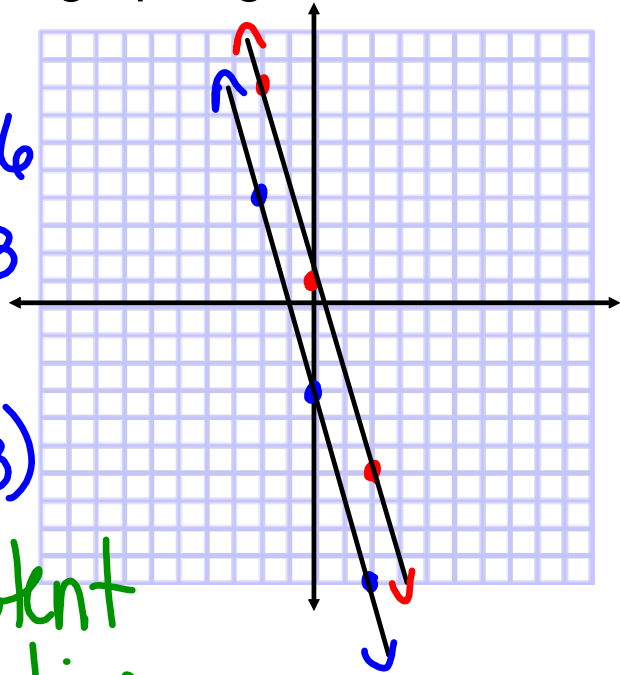
$$y = -\frac{7}{2}x + 1 \quad m = -\frac{7}{2}$$

$$m = -\frac{7}{2}$$

$$I_y: (0, 1)$$

$$I_y: (0, -3)$$

inconsistent
no solution



Solve the system using the graphing method.

$$\textcircled{1} 2x + 3y = -3$$

$$\textcircled{2} 2x + y = 3 \quad 3y = -2x - 3$$

$$y = -2x + 3 \quad y = -\frac{2}{3}x - 1$$

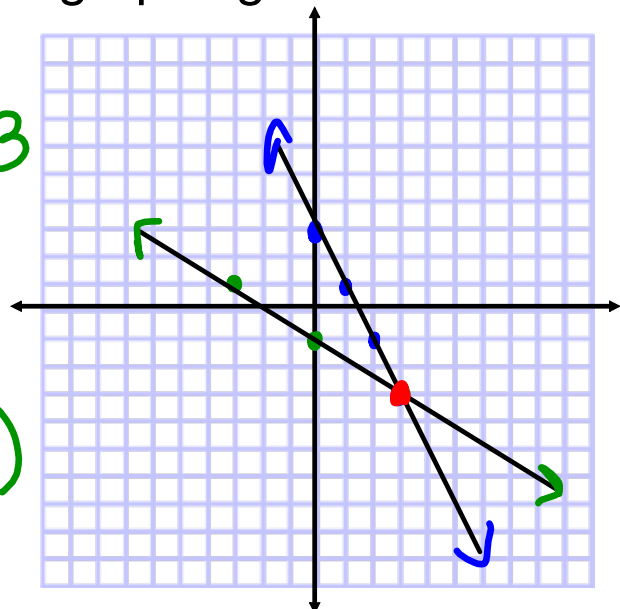
$$m = -2$$

$$m = -\frac{2}{3}$$

$$I_y: (0, 3)$$

$$I_y: (0, -1)$$

independent
(3, -3)



Solve the system using the graphing method.

$$\textcircled{1} 7x + 2y = -8$$

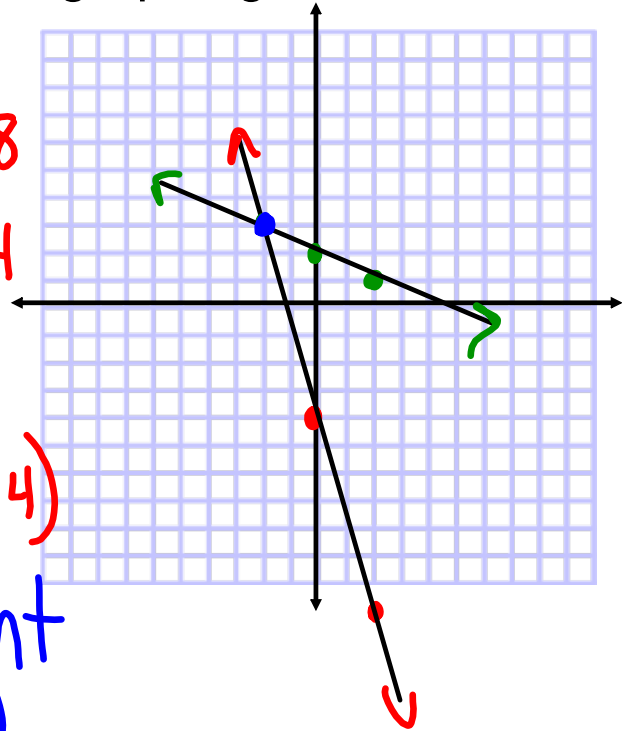
$$\textcircled{2} x + 2y = 4 \quad 2y = -7x - 8$$

$$2y = -x + 4 \quad y = -\frac{7}{2}x - 4$$

$$y = -\frac{1}{2}x + 2 \quad m = -\frac{7}{2}$$

$$m = -\frac{1}{2} \quad I_y: (0, -4)$$

$$I_y: (0, 2) \quad \text{independent} \\ (-2, 3)$$



Solve the system using the graphing method.

$$\textcircled{1} 3x - 9y = 0 \quad -9y = -3x$$

$$\textcircled{2} -x + 3y = -3 \quad y = \frac{1}{3}x$$

$$3y = x - 3$$

$$y = \frac{1}{3}x - 1$$

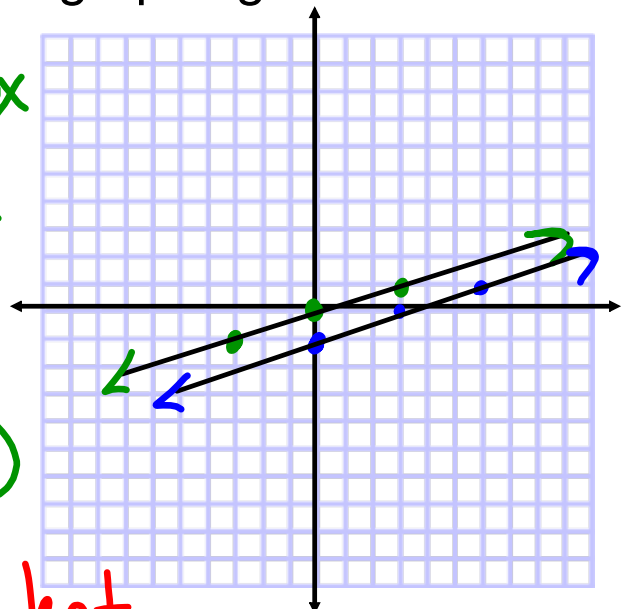
$$m = \frac{1}{3}$$

$$I_y: (0, -1)$$

$$m = \frac{1}{3}$$

$$I_y: (0, 0)$$

inconsistent
no solution



Assignment:

Graphing Method 2

#1-6

- Find slope and I_y of each
- Determine type of system
- Graph each line
- Label solution