

Today's Plan:

Learning Target (standard): I will solve linear systems using the graphing method, substitution & the elimination method.

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 and complete practice problems over new concepts.

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

Assessment: Board work, homework check and homework assignment

Differentiation: Students will work at the board, go over and correct homework at their seats and actively engage in reviewing methods for solving linear systems.

Elimination Method (3x3):

1) *independent* $(1, 0, -3)$

2) *independent* $(-5, 2, -1)$

3) *independent* $(1, -1, -5)$

4) *independent* $(1, -1, 4)$

Solve using the elimination method.

$$\begin{array}{r} 2(6a - 3b + 3c = 6) \\ 3(-5a + 2b + 2c = 10) \\ 2(-2a + 4b + 3c = 1) \end{array} \quad \begin{array}{r} 12a - 6b + 6c = 12 \\ 15a - 6b - 6c = -30 \\ -4a + 8b + 6c = 2 \end{array} \begin{array}{l} > + \\ > + \\ > + \end{array}$$

$$\begin{array}{r} 27a - 12b = -18 \\ 6(11a + 2b = -28) \end{array} \quad \begin{array}{r} 27a - 12b = -18 \\ \underline{66a + 12b = -168} \\ 93a = -186 \\ a = -2 \end{array}$$

independent
 $(-2, -3, 3)$

$$\begin{array}{r} -22 + 2b = -28 \\ 2b = -6 \\ b = -3 \end{array}$$

$$\begin{array}{r} 4 - 12 + 3c = 1 \\ -8 + 3c = 1 \\ 3c = 9 \\ c = 3 \end{array}$$

Solve using the graphing method.

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

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

$$y = -2x + 1$$

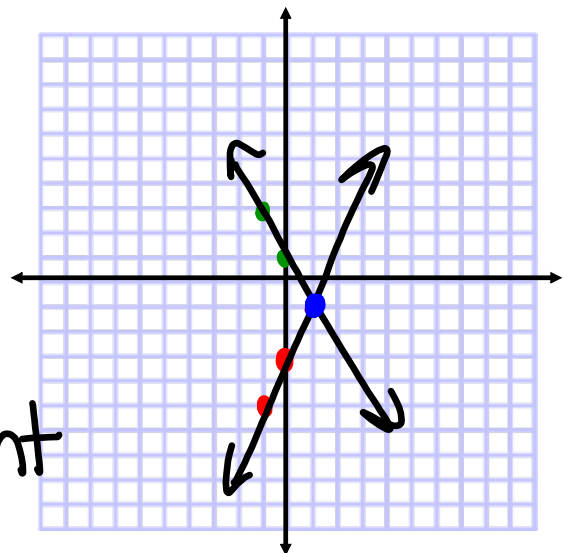
$$m = 2$$

$$m = -2$$

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

$$I_y: (0, 1)$$

independent
 $(1, -1)$



Solve using substitution.

~~$-4x + 3y = 0$~~

$-8x + 3y = 0$

$3y = 4x$

$y = \frac{4}{3}x$

$-8x + 3\left(\frac{4}{3}x\right) = 0$

$-8x + 4x = 0$

$-4x = 0$

$x = 0$

independent
 $(0, 0)$

$y = \frac{4}{3}(0)$

$y = 0$

Solve using the elimination method.

$-7y = 2 + 6x$

$30x = -9y + 42$

$5(-6x - 7y = 2)$

$30x + 9y = 42$

$-30x - 35y = 10$

$30x + 9y = 42$

independent
 $(2, -2)$

$-6x + 14 = 2$

$-6x = -12$

$x = 2$

$-26y = 52$

$y = -2$

Solve using the elimination method.

$$-10y + 7x - 13 = 0 \quad 7x - 10y = 13$$

$$1 - \frac{1}{2}x + \frac{3}{4}y = 0 \quad 4 \left(-\frac{1}{2}x + \frac{3}{4}y = -1 \right)$$

$$2(7x - 10y = 13) \quad 14x - 20y = 26$$

$$7(-2x + 3y = -4) \quad -14x + 21y = -28$$

independent
 $(-1, -2)$

$$y = -2$$

$$-2x - 6 = -4$$

$$-2x = 2$$

$$x = -1$$

Assignment:

Systems Practice #1-12