

Today's Plan:

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

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 take a test on systems.

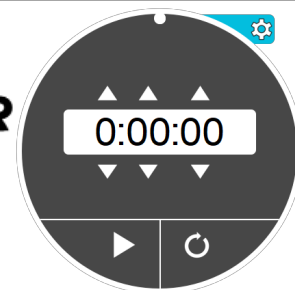
Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide test problems.

Assessment: Board work, homework check and test

Differentiation: Students will work at the board, go over and correct homework at their seats, and take a test.

NAME _____

BELL RINGER



1.) Evaluate $x^2 + 2x - 15$ when $x = -2$.

$$\begin{aligned} (-2)^2 + 2(-2) - 15 \\ 4 - 4 - 15 = -15 \end{aligned}$$

2) Solve using the substitution method.

$$-x + 7y = 20$$

$$-3x - 3y = 12$$

Solve using the substitution method.

~~$$-x + 7y = 20$$~~

$$-x = -7y + 20$$

$$-3x - 3y = 12$$

$$x = 7y - 20$$

independent
(-6, 2)

$$-3(7y - 20) - 3y = 12$$

$$-21y + 60 - 3y = 12$$

$$-24y + 60 = 12$$

$$-24y = -48$$

$$y = 2$$

$$x = 7(2) - 20$$

$$x = 14 - 20$$

$$x = -6$$

Solve using the graphing method.

$$\textcircled{1} \frac{1}{2} = -x + \frac{1}{4}y$$

$$\frac{1}{4}y = x + \frac{1}{2}$$

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

$$y = 4x + 2$$

$$y = 4x - 4$$

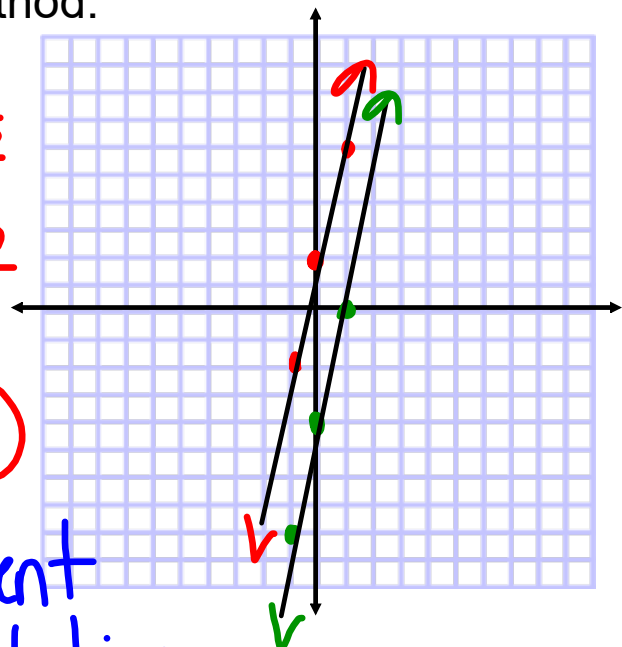
$$m = 4$$

$$m = 4$$

$$I_y: (0, 2)$$

$$I_y: (0, -4)$$

inconsistent
no solution



Solve using the elimination method.

$$\begin{array}{l} 5 \left(-21x + 6y = -18 \right) \\ 3 \left(35x - 10y = -5 \right) \end{array}$$

$$\begin{array}{r} -105x + 30y = -90 \\ 105x - 30y = -15 \\ \hline \end{array}$$

$$0 \neq -105$$

inconsistent
no solution

A community sponsored a charity square dance where admission was \$3 for adults and \$1.50 for children. If 168 people attended the dance and the money raised was \$432, how many adults and how many children attended the dance?



① $x = \#$ of adults who attended
 $y = \#$ of children who attended

$$\begin{array}{l} \textcircled{2} 3x + 1.5y = 432 \\ -3(x + y = 168) \end{array}$$

$$\begin{array}{l} x + 48 = 168 \\ x = 120 \end{array}$$

$$\begin{array}{r} \textcircled{3} 3x + 1.5y = 432 \\ -3x - 3y = -504 \\ \hline -1.5y = -72 \\ y = 48 \end{array}$$

④ \therefore There were 120 adults and 48 children who attended the square dance.