

Date:

Oct 30

Bell ringer

Solve by substitution

$$-3x + 4y = 12$$

$$\underline{3x - 6y = 18}$$

$(-24, -15)$

$$3x - 6y = 18$$

$$\underline{+6y} \quad \underline{+6y}$$

$$3x = 6y + 18$$

$$x = 2y + 6$$

Assignment:

WS review on solving systems by graphing and substitution

$$20) \begin{cases} 5x - y = 5 \\ -x + 3y = 13 \end{cases}$$

$$\underline{-x + 3y = 13} \rightarrow \begin{array}{r} -x + 3y = 13 \\ \underline{3y - 3y} \end{array}$$

$$5(3y - 13) - y = 5$$

$$15y - 65 - y = 5$$

$$14y - 65 = 5$$

$$14y = 70$$

$$-x = -3y + 13$$

$$x = 3y - 13$$

$$x = 3(5) - 13$$

$$y = 5$$

$$x = 2$$

(2, 5)

(b) ~~$x = y - 1$~~

~~$-x + y = -1$~~

$$-1(y - 1) + y = -1$$

$$-y + 1 + y = -1$$

$$1 = -1$$

NS

$$18) y = -3x + 1$$

$$2x + y = 1$$

$$2x - 3x + 1 = 1$$

$$\begin{array}{r} -x + 1 = 1 \\ \quad -1 \quad -1 \\ \hline \end{array}$$

$$\begin{array}{r} -x = 0 \\ x = 0 \end{array}$$

$$12) 2x + y = 3$$

$$4x + 4y = 8 \rightarrow 4x + 4y = 8$$

$$\frac{-4x}{-4x}$$

$$4y = -4x + 8$$

$$y = -x + 2$$