

Systems of Equations with Elimination

Essential Question:

Questions:

Notes:

$$\begin{cases} 2(2x + 7y = 30) \\ 7(-3x - 2y = -28) \end{cases}$$

$$\begin{array}{r} 4x + 14y = 60 \\ -21x - 14y = -196 \\ \hline -17x = -136 \\ \hline -17 \quad -17 \\ \hline x = 8 \end{array}$$

$$\begin{array}{r} 2(8) + 7y = 30 \\ 16 + 7y = 30 \\ -16 \quad -16 \\ \hline 7y = 14 \\ \hline 7 \quad 7 \\ \hline y = 2 \end{array}$$

$$\begin{cases} 3x + 4y = 1 \\ -3x - 2y = 2 \end{cases}$$

$$(8, 2)$$

Summary:

Questions:

Notes:

$$4 \begin{cases} x - 6y = -8 \\ -4x - 7y = 1 \end{cases}$$

$$-4x - 7y = 1$$

$$4x - 24y = -32$$

$$-4x - 7y = 1$$

$$\frac{-31y = -31}{-31} \quad \frac{-31}{-31}$$

$$y = 1$$

$$-4x - 7(1) = 1$$

$$-4x - 7 = 1$$

$$+7 \quad +7$$

$$-4x = 8$$

$$\frac{-4x}{-4} = \frac{8}{-4}$$

$$x = -2$$

$$(-2, 1)$$

Summary: