

11-20-17 1st Trig

$$\textcircled{1} \begin{bmatrix} 2 & 1 \\ 5 & 3 \end{bmatrix} + \begin{bmatrix} 3 & 0 \\ -1 & 2 \end{bmatrix}$$

$$\begin{bmatrix} 5 & 1 \\ 4 & 5 \end{bmatrix}$$

$$\textcircled{2} \begin{bmatrix} 1 & 4 \\ 2 & -1 \end{bmatrix} \cdot \begin{bmatrix} 2 & 5 \\ -1 & 0 \end{bmatrix}$$

$$2 + -4 \quad 5 + 0$$

$$4 + 1 \quad 10 + 0$$

$$\begin{bmatrix} -2 & 5 \\ 5 & 10 \end{bmatrix}$$

$$\textcircled{3} \begin{bmatrix} 1 & 0 & 5 \\ 2 & 3 & 4 \end{bmatrix} \begin{bmatrix} 1 \\ 5 \\ 6 \end{bmatrix}$$

$$2 \times 3 \quad 3 \times 1$$

ANSWER

$$\begin{array}{l} 1 + 0 + 30 \\ 2 + 15 + 24 \end{array} \rightarrow \begin{bmatrix} 31 \\ 41 \end{bmatrix}$$

$$\textcircled{4} \begin{cases} y = 2x + 3 \\ x - y = -5 \end{cases}$$

$$x - (2x + 3) = -5$$

$$x - 2x - 3 = -5$$

$$-x - 3 = -5$$

$$\begin{array}{r} -x - 3 = -5 \\ +3 \quad +3 \\ \hline -x = -2 \end{array}$$

$$-x = -2$$

$$x = 2$$

$$y = 2 \cdot 2 + 3$$

$$y = 7$$

$$\textcircled{5} \begin{cases} 2x - y = 5 \xrightarrow{m_2} 4x - 2y = 10 \\ 5x + 2y = 17 \xrightarrow{m_2} 5x + 2y = 17 \end{cases}$$

$$\begin{array}{r} 4x - 2y = 10 \\ 5x + 2y = 17 \\ \hline 9x = 27 \end{array}$$

$$9x = 27$$

$$x = 3$$

$$5(3) + 2y = 17$$

$$15 + 2y = 17$$

$$2y = 2$$

$$y = 1$$

$$\textcircled{6} \begin{cases} 2x + 7y = 4 \xrightarrow{m_3} -6x - 21y = -12 \\ 3x + 13y = 6 \xrightarrow{m_3} 6x + 26y = 12 \end{cases}$$

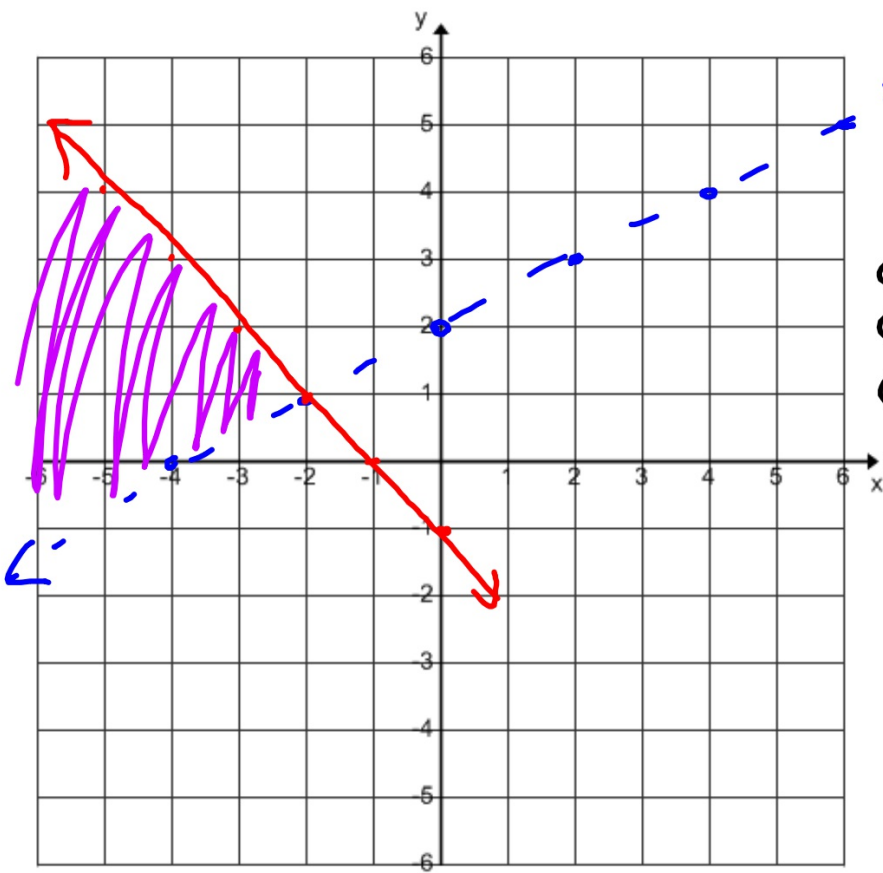
$$\begin{array}{r} -6x - 21y = -12 \\ 6x + 26y = 12 \\ \hline 5y = 0 \end{array}$$

$$y = 0$$

$$2x + 7(0) = 4$$

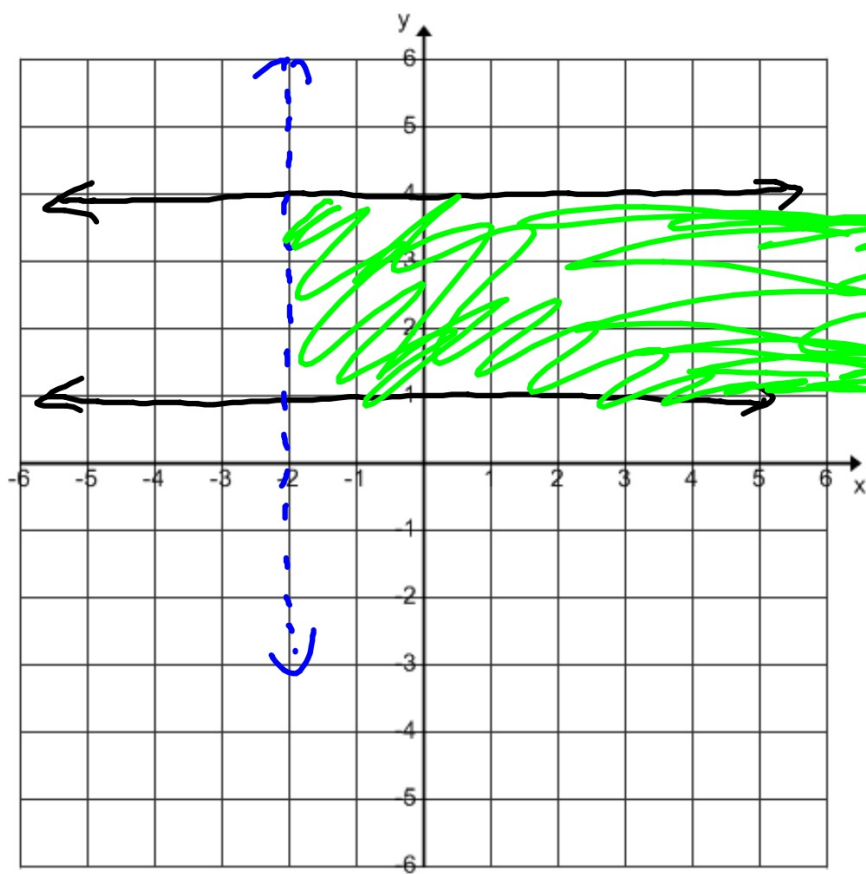
$$2x = 4$$

$$x = 2$$

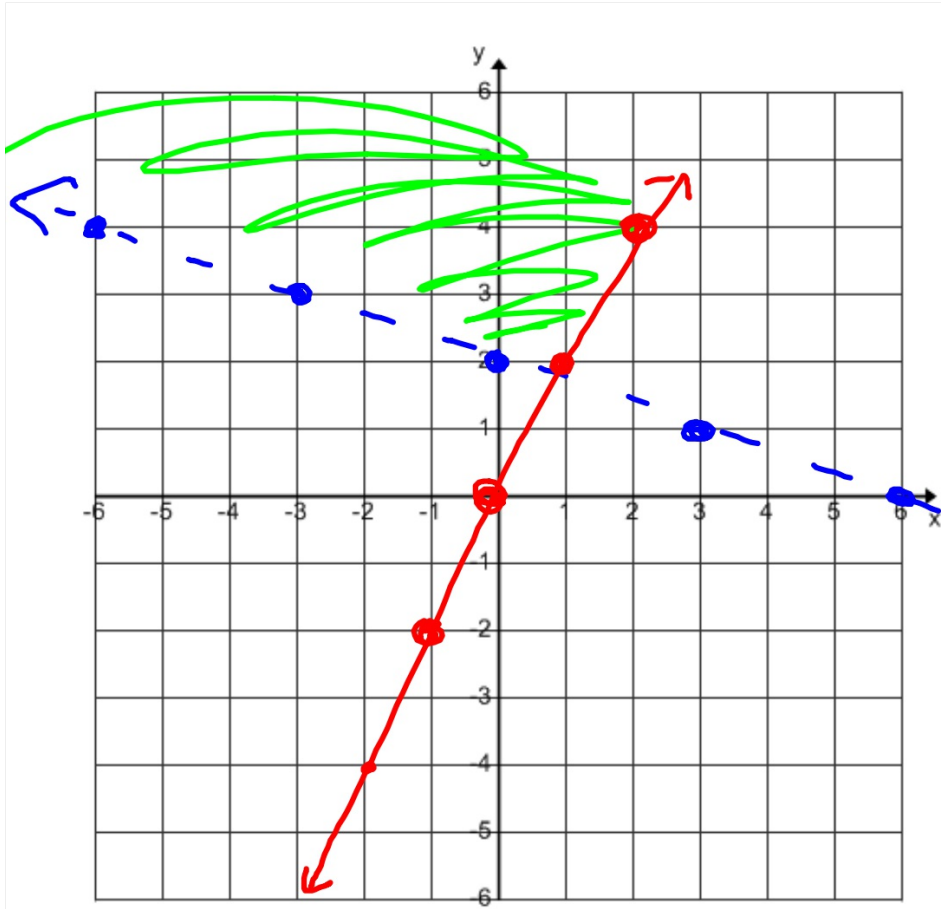


$$\Rightarrow \begin{matrix} 10 > 1 \\ 1 < 10 \\ \text{L} \end{matrix}$$

$$\left. \begin{matrix} y > \frac{1}{2}x + 2 \\ y \leq -x - 1 \end{matrix} \right\}$$



$$\begin{cases} y \leq 4 \\ y \geq 1 \\ x > -2 \end{cases}$$



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

$$y = 2x$$

ü

11-20-17 3rd Trig

$$\textcircled{1} \begin{bmatrix} 2 & 3 \\ 4 & 5 \end{bmatrix} + \begin{bmatrix} 1 & -2 \\ 3 & 4 \end{bmatrix}$$

$$\begin{bmatrix} 3 & 1 \\ 7 & 9 \end{bmatrix}$$

$$\textcircled{2} \begin{bmatrix} 1 & 4 \\ 2 & 3 \end{bmatrix} \cdot \begin{bmatrix} -2 & 0 \\ 4 & 5 \end{bmatrix}$$

$$\begin{bmatrix} -2+16 & 0+20 \\ -4+12 & 0+15 \end{bmatrix}$$

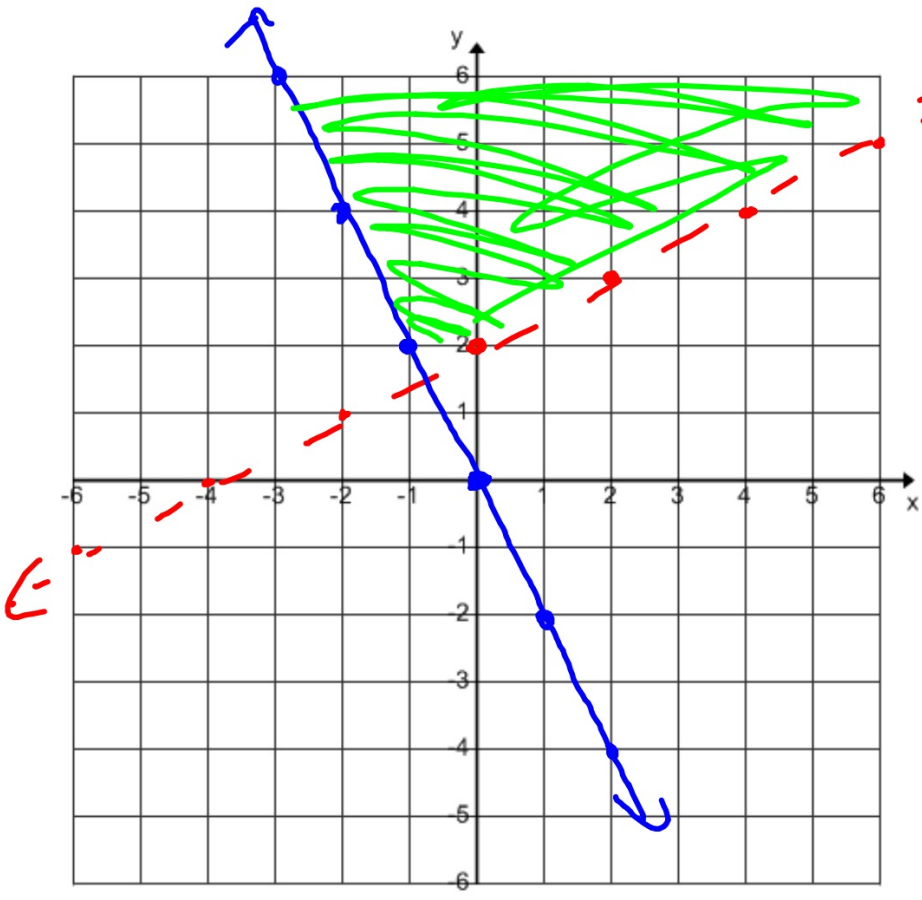
$$\begin{bmatrix} 14 & 20 \\ 8 & 15 \end{bmatrix}$$

$$\textcircled{3} \begin{bmatrix} 1 & 4 & 5 \\ 0 & -3 & 2 \end{bmatrix} \begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$$

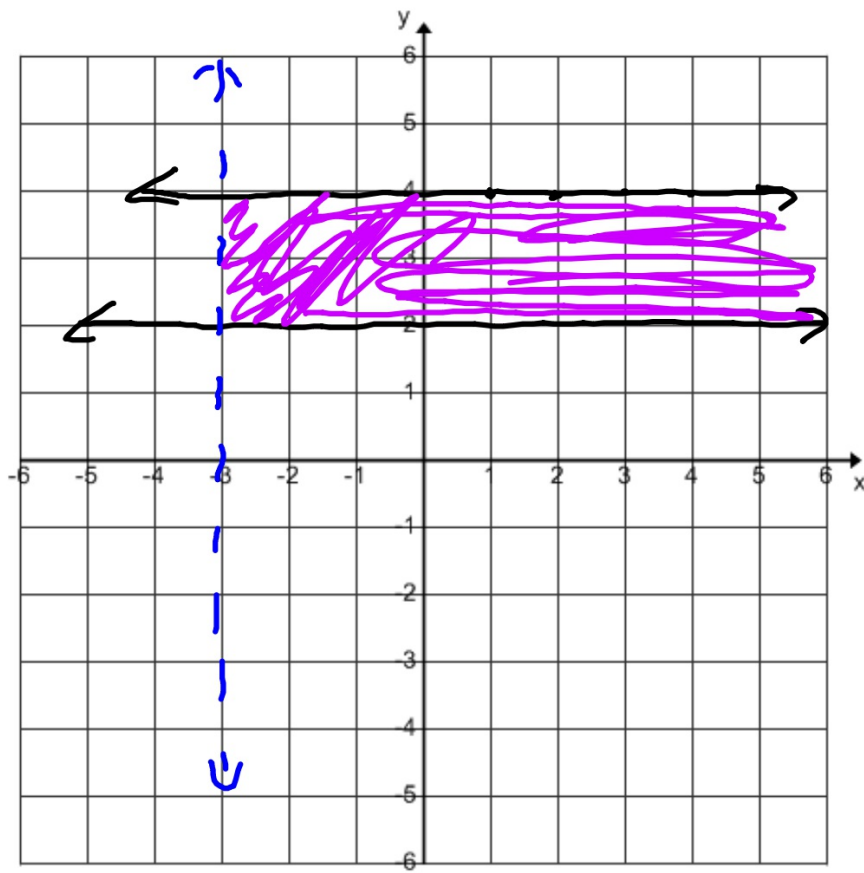
2×3 3×1
MATCH

ANSWER

$$\begin{array}{l} 1 + 8 + 15 \\ 0 + -6 + 6 \end{array} \rightarrow \begin{bmatrix} 24 \\ 0 \end{bmatrix}$$



$y \geq -2x$
 $y > \frac{1}{2}x + 2$



$$\begin{cases} y \leq 4 \\ y \geq 2 \\ x > -3 \end{cases}$$

$$\textcircled{6} \begin{cases} y = 2x - 5 \\ x - y = 2 \end{cases}$$

$$x - (2x - 5) = 2$$

$$x - 2x + 5 = 2$$

$$\begin{array}{r} -x + 5 = 2 \\ \underline{-5 \quad -5} \end{array}$$

$$-x = -3$$

$$x = 3$$

$$y = 2 \cdot 3 - 5$$

$$y = 1$$

$$\textcircled{7} \begin{cases} y = 3x - 1 \\ y = 6x + 5 \end{cases}$$

$$\begin{array}{r} 3x - 1 = 6x + 5 \\ \underline{-3x \quad -3x} \end{array}$$

$$\begin{array}{r} -1 = 3x + 5 \\ \underline{-5 \quad -5} \end{array}$$

$$-6 = 3x$$

$$x = -2$$

$$y = 3(-2) - 1$$

$$y = -7$$

$$\textcircled{8} \begin{cases} 2x - y = 9 \xrightarrow{\cdot 2} 4x - 2y = 18 \\ 5x + 2y = 27 \Rightarrow 5x + 2y = 27 \end{cases}$$

$$\underline{9x = 45}$$

$$5(5) + 2y = 27$$

$$x = 5$$

$$25 + 2y = 27$$

$$2y = 2 \quad y = 1$$

$$\textcircled{9} \begin{cases} 2x + 7y = 14 \xrightarrow{M_1 \times 3} -6x - 21y = -42 \\ 3x + 11y = 22 \xrightarrow{M_2 \times 2} \underline{6x + 22y = 44} \end{cases}$$

$y = 2$

$$2x + 7(2) = 14$$

$$\begin{array}{r} 2x + 14 = 14 \\ -14 \quad -14 \\ \hline 2x = 0 \\ x = 0 \end{array}$$

$$\textcircled{10} \quad 3 \begin{bmatrix} 2 & 1 & 6 \\ 4 & -1 & 0 \end{bmatrix} = \begin{bmatrix} 6 & 3 & 18 \\ 12 & -3 & 0 \end{bmatrix}$$

$$\textcircled{11} \quad \begin{bmatrix} 1 & 2 & 3 \end{bmatrix}_{1 \times 3} \quad \begin{bmatrix} 2 & 1 \\ 2 & 5 \\ 0 & -1 \end{bmatrix}_{3 \times 2}$$

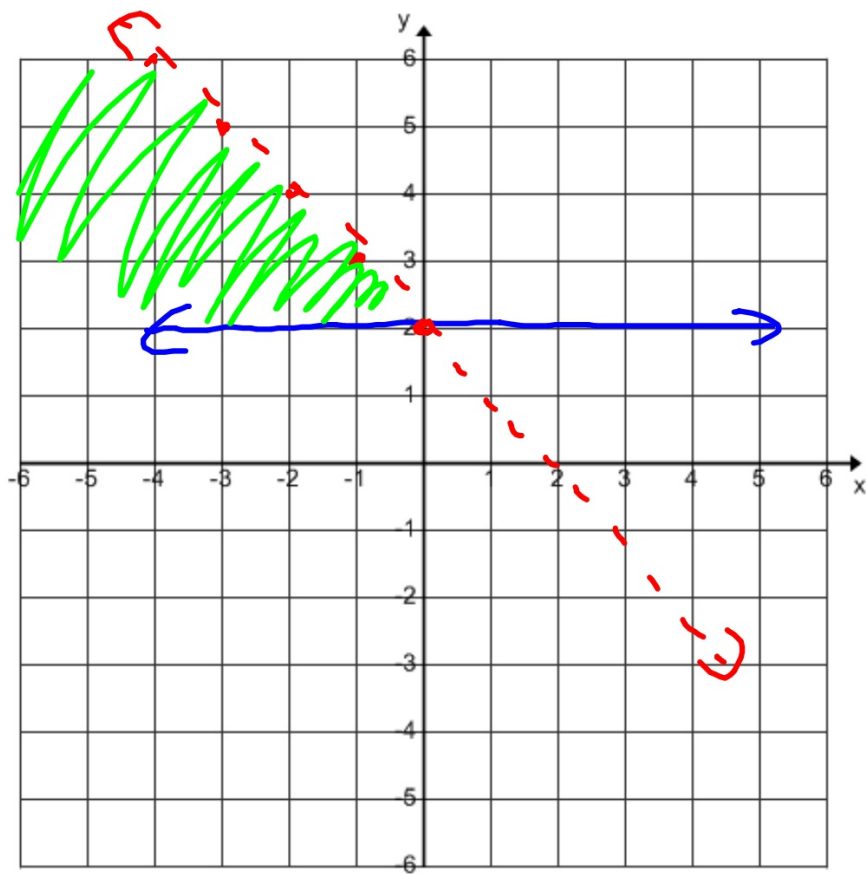
$$\begin{bmatrix} 2 + 4 + 0 & 1 + 10 + -3 \end{bmatrix}$$

$$\begin{bmatrix} 6 & 8 \end{bmatrix}$$

⑫ In matrices, does

$$AB = BA ?$$

No



$$\left\{ \begin{array}{l} y \geq 2 \\ y < -x + 2 \end{array} \right.$$

11-20-17 4th Tr. j

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

$$x - (2x - 3) = -2$$

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

$$\begin{array}{r} -x + 3 = -2 \\ \quad -3 \quad -3 \\ \hline -x = -5 \end{array}$$

$$x = 5$$

$$y = 2(5) - 3$$

$$y = 7$$

$$\textcircled{2} \begin{cases} 3x - y = 8 \xrightarrow{\times 2} 6x - 2y = 16 \\ 5x + 2y = 17 \xrightarrow{\times 1} 5x + 2y = 17 \end{cases}$$

$$\hline 11x = 33$$

$$5(3) + 2y = 17$$

$$15 + 2y = 17$$

$$2y = 2$$

$$y = 1$$

$$x = 3$$

$$\textcircled{3} \begin{cases} 2x + 19y = 10 \xrightarrow{\times 3} -6x - 57y = -30 \\ 3x + 7y = 15 \xrightarrow{\times 2} 6x + 14y = 30 \end{cases}$$

$$\hline -43y = 0$$

$$2x + 19(0) = 10$$

$$2x = 10$$

$$x = 5$$

$$y = 0$$

$$\textcircled{4} \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix} + \begin{bmatrix} 0 & -1 \\ 2 & 3 \end{bmatrix}$$


$$\begin{bmatrix} 1 & 1 \\ 5 & 7 \end{bmatrix}$$

$$\textcircled{5} \begin{bmatrix} -3 & 2 \\ 0 & 5 \end{bmatrix} \cdot \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$$

$$\begin{array}{cc} -3 + 6 & -6 + 8 \\ 0 + 15 & 0 + 20 \end{array}$$

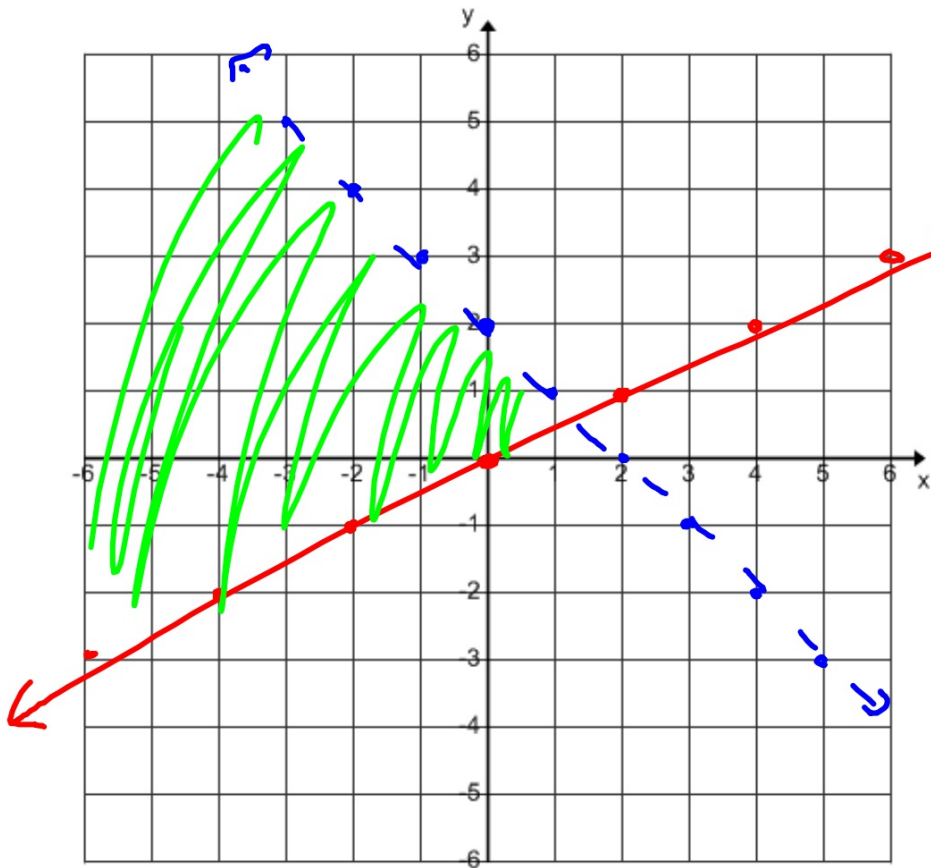
$$\begin{bmatrix} 3 & 2 \\ 15 & 20 \end{bmatrix}$$

$$\textcircled{6} \begin{bmatrix} 2 & 4 & 6 \end{bmatrix} \begin{bmatrix} 1 & 2 \\ 3 & 4 \\ 5 & 6 \end{bmatrix}$$

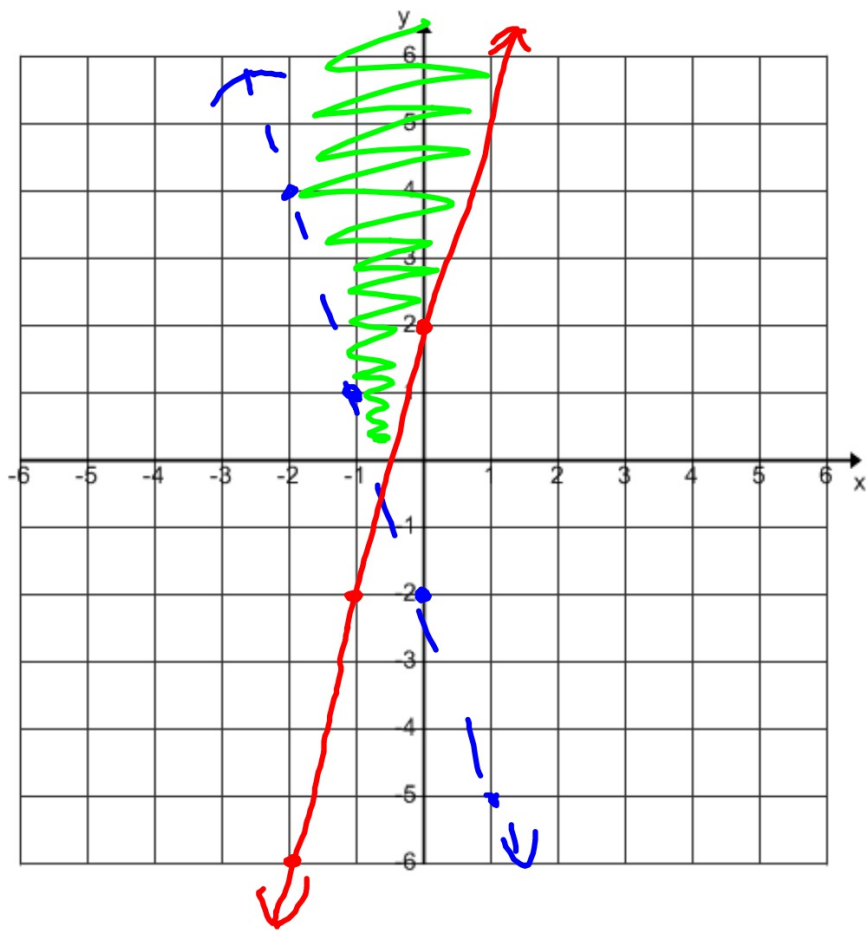
$1 \times 3 \quad 3 \times 2$

ANSWER

$$\begin{bmatrix} 2 + 12 + 30 & 4 + 16 + 36 \end{bmatrix}$$

$$\begin{bmatrix} 44 & 56 \end{bmatrix}$$

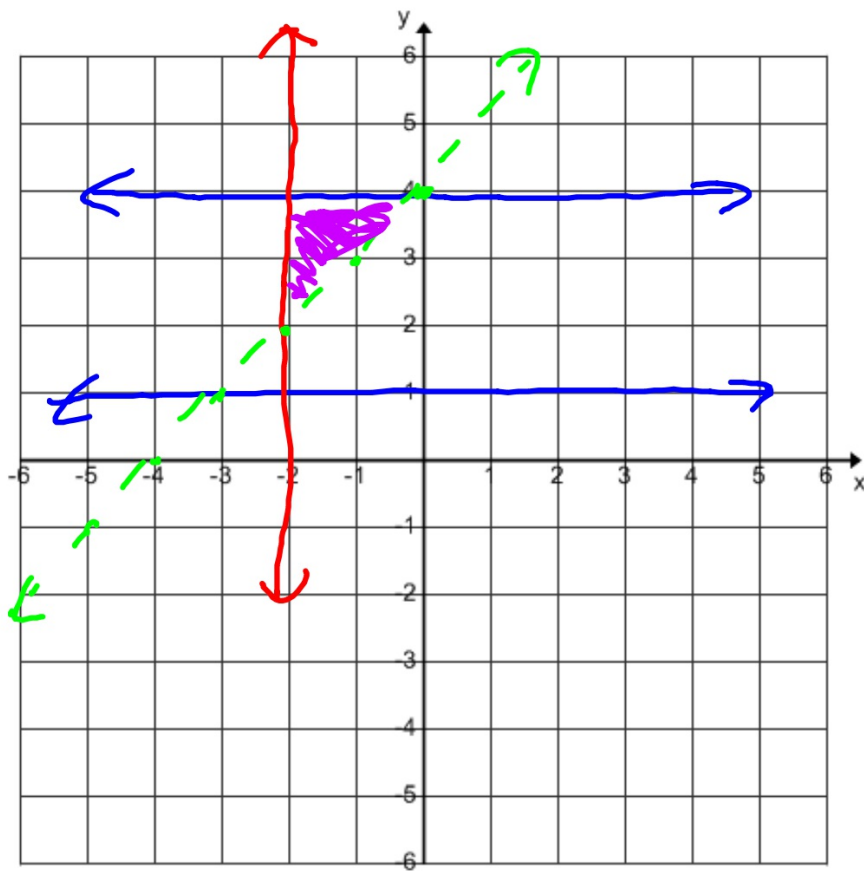


$$\begin{cases} y < -x + 2 \\ y \geq \frac{1}{2}x \end{cases}$$



$$y > -3x - 2$$

$$y \geq 4x + 2$$



$$y \leq 4$$

$$y \geq 1$$

$$x \geq -2$$

$$y > x + 4$$

⑤

$$2 \begin{bmatrix} 1 & 4 \\ 6 & 7 \end{bmatrix} = \begin{bmatrix} 2 & 8 \\ 12 & 14 \end{bmatrix}$$