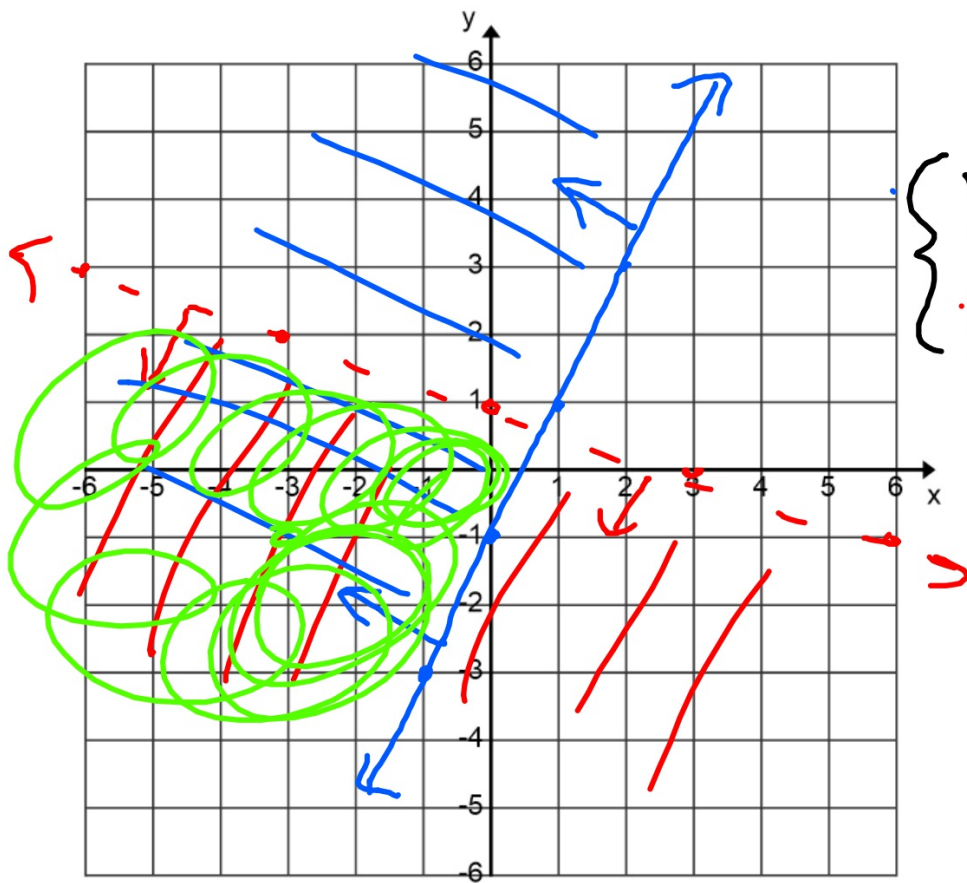
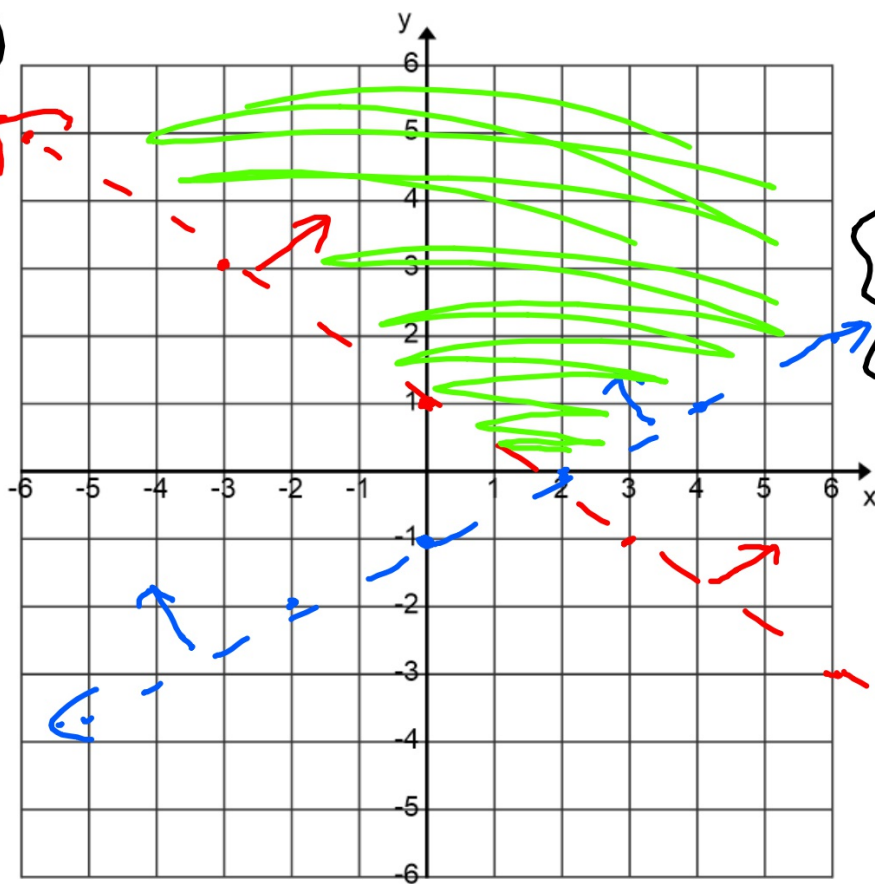


11-13-19 1st Trig

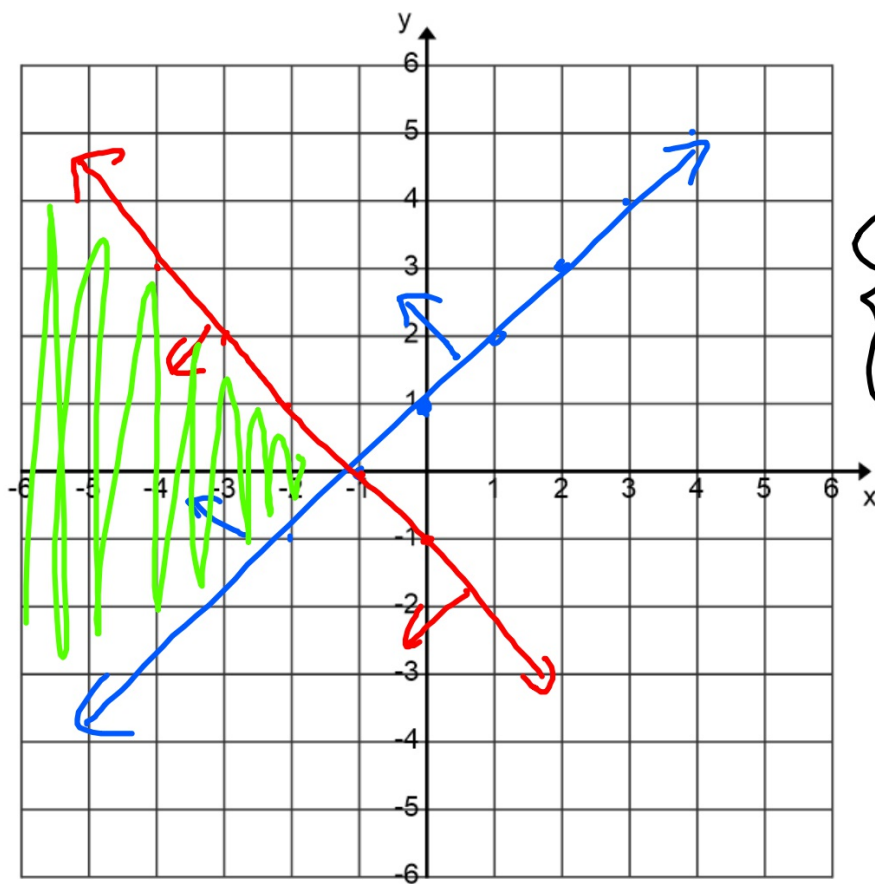


$$\begin{cases} y \geq 2x - 1 \\ y < -\frac{1}{3}x + 1 \end{cases}$$

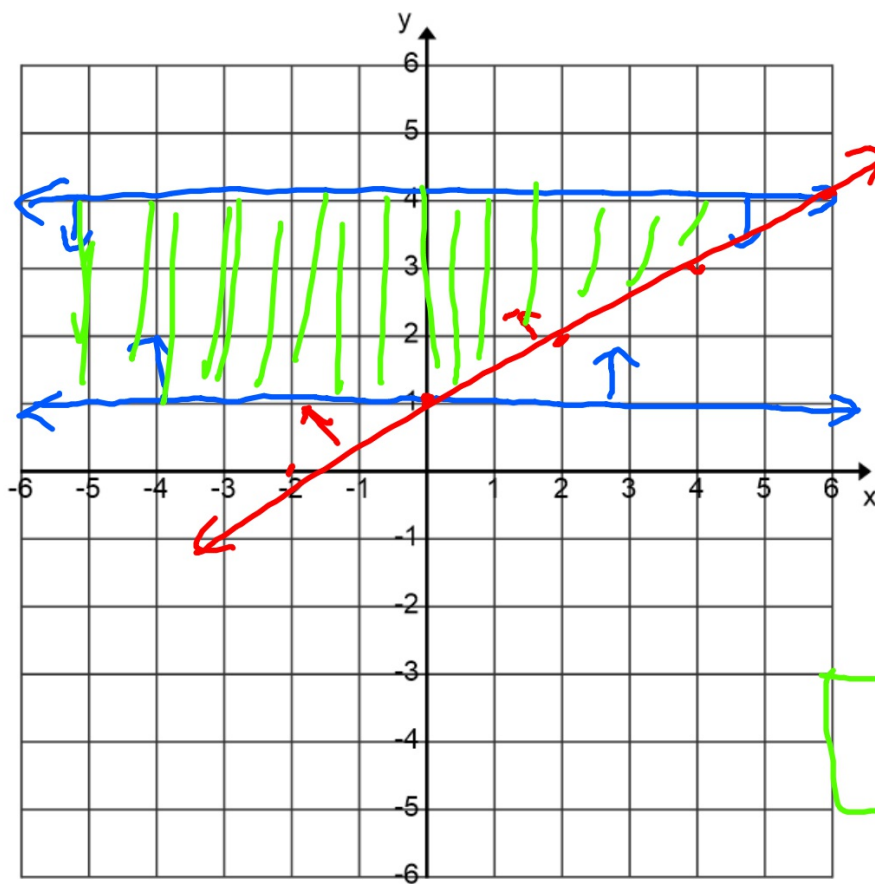
②



$$\begin{cases} \bullet y > \frac{1}{2}x - 1 \\ \bullet y > -\frac{2}{3}x + 1 \end{cases}$$

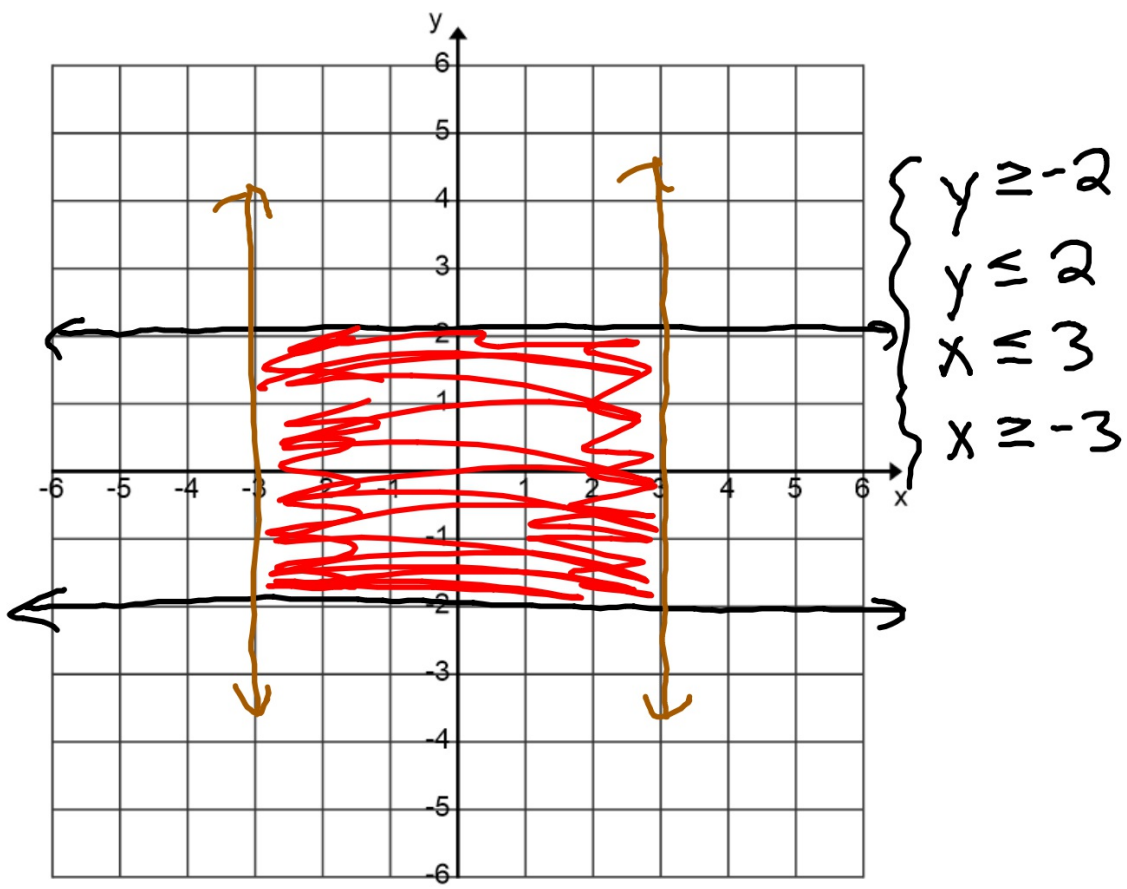


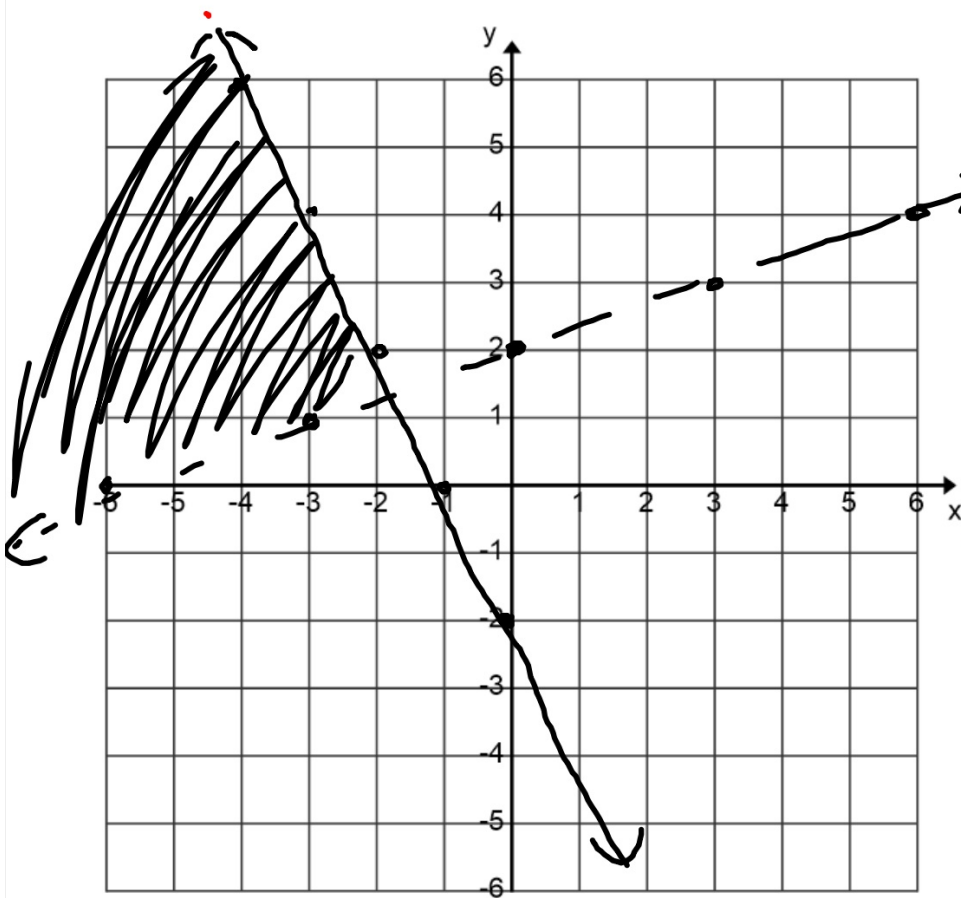
$$\begin{cases} \bullet y \geq x + 1 \\ \bullet y \leq -x - 1 \end{cases}$$



$$\left\{ \begin{array}{l} y \geq 1 \\ y \leq 4 \\ y \geq \frac{1}{2}x + 1 \end{array} \right.$$

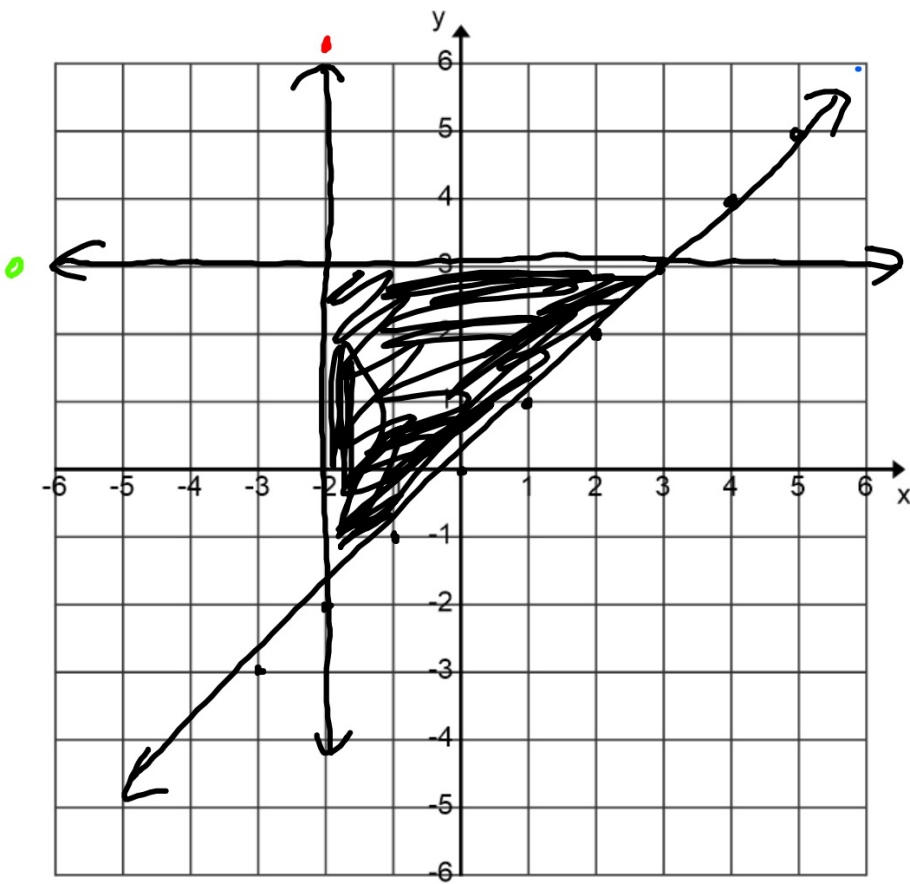






What system of inequalities was graphed?

$$\begin{cases} y > \frac{1}{3}x + 2 \\ y \leq -2x - 2 \end{cases}$$

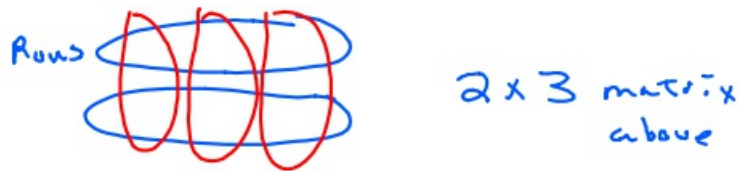


$$\begin{cases} y \geq x \\ x \geq -2 \\ y \leq 3 \end{cases}$$

Matrices

$$\begin{bmatrix} 2 & 3 & 4 \\ 5 & 1 & 6 \end{bmatrix} \quad \text{RC Cola}$$

Rows by Columns



$$\textcircled{1} \quad \begin{bmatrix} 2 & 4 \\ 3 & -1 \end{bmatrix} + \begin{bmatrix} 3 & 5 \\ 1 & 0 \end{bmatrix} = \begin{bmatrix} 5 & 9 \\ 4 & -1 \end{bmatrix}$$

$$\textcircled{2} \quad 5 \cdot \begin{bmatrix} 2 & 4 & 3 \\ 0 & -2 & 5 \end{bmatrix} = \begin{bmatrix} 10 & 20 & 15 \\ 0 & -10 & 25 \end{bmatrix}$$

$$\textcircled{3} \quad \begin{bmatrix} 4 & 1 \\ 2 & 3 \end{bmatrix} \cdot \begin{bmatrix} 2 & 5 \\ 6 & 7 \end{bmatrix} = \begin{bmatrix} 4 \cdot 2 + 1 \cdot 6 & 4 \cdot 5 + 1 \cdot 7 \\ 2 \cdot 2 + 3 \cdot 6 & 2 \cdot 5 + 3 \cdot 7 \end{bmatrix} = \begin{bmatrix} 14 & 27 \\ 22 & 31 \end{bmatrix}$$

$$\textcircled{4} \quad \begin{bmatrix} 1 & 3 \\ 2 & 0 \end{bmatrix} \cdot \begin{bmatrix} 4 & 2 \\ 3 & 1 \end{bmatrix} = \begin{bmatrix} 1 \cdot 4 + 3 \cdot 3 & 1 \cdot 2 + 3 \cdot 1 \\ 2 \cdot 4 + 0 \cdot 3 & 2 \cdot 2 + 0 \cdot 1 \end{bmatrix} = \begin{bmatrix} 13 & 5 \\ 8 & 4 \end{bmatrix}$$

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

$2 \cdot 3 + 4 \cdot 1$?

Can't be multiplied.

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

Must be the same
in order to multiply.

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

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

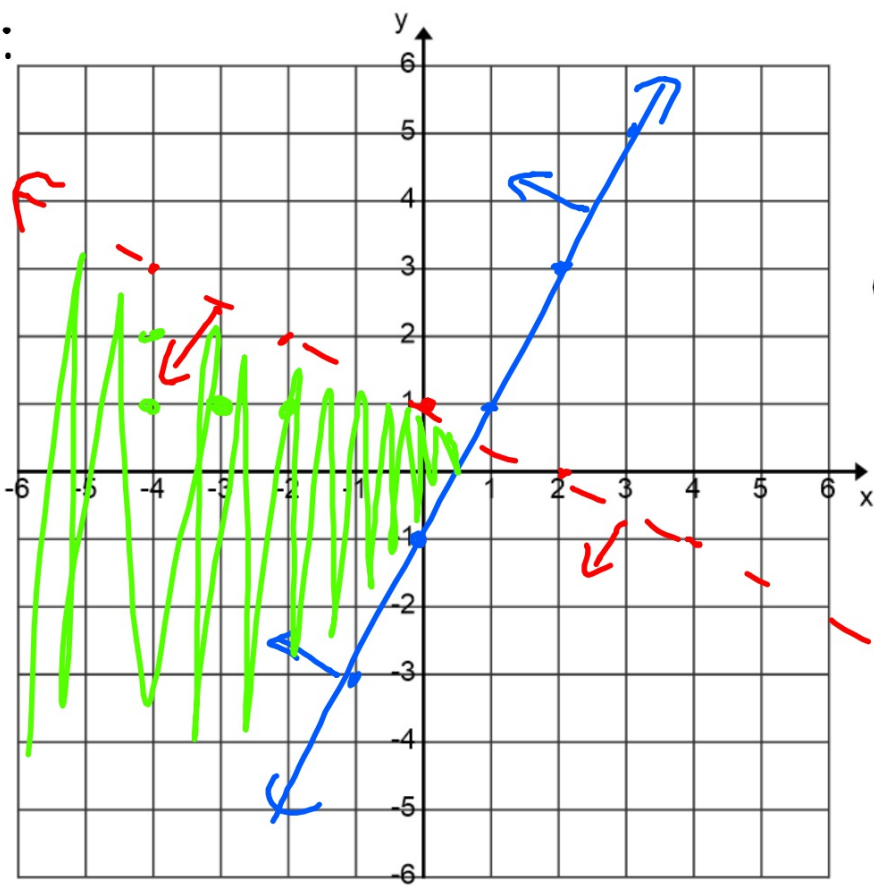
Answer size

$$\begin{bmatrix} 2 \cdot 2 + 4 \cdot 1 & 2 \cdot 6 + 4 \cdot 0 & 2 \cdot 5 + 4 \cdot 4 \\ 5 \cdot 2 + 1 \cdot 1 & 5 \cdot 6 + 1 \cdot 0 & 5 \cdot 5 + 1 \cdot 4 \end{bmatrix}$$

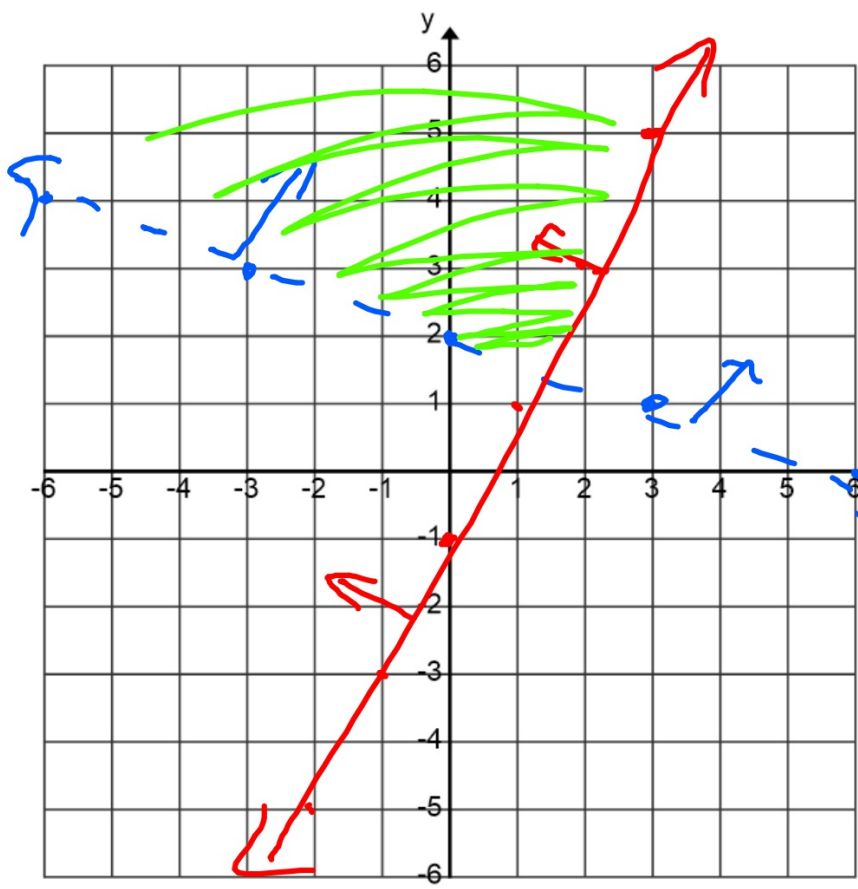
$$\begin{bmatrix} 8 & 12 & 26 \\ 11 & 30 & 29 \end{bmatrix}$$

11-13-19 3rd Try

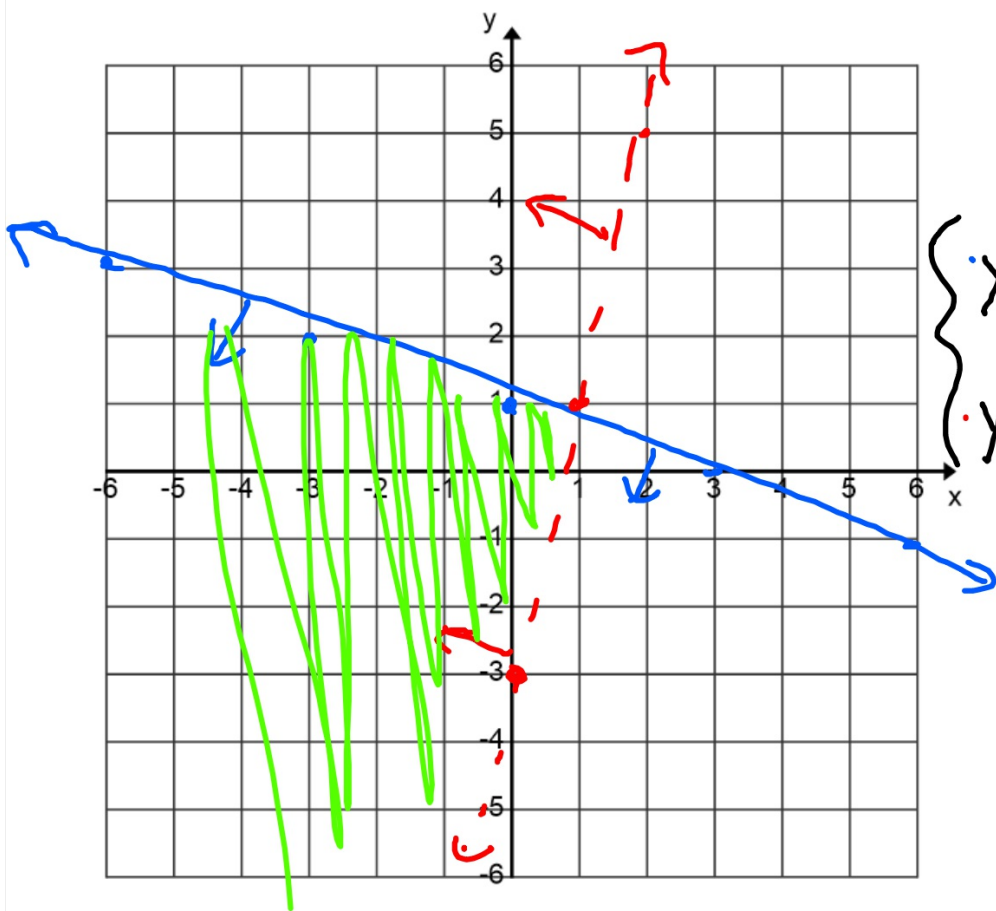
Ex:



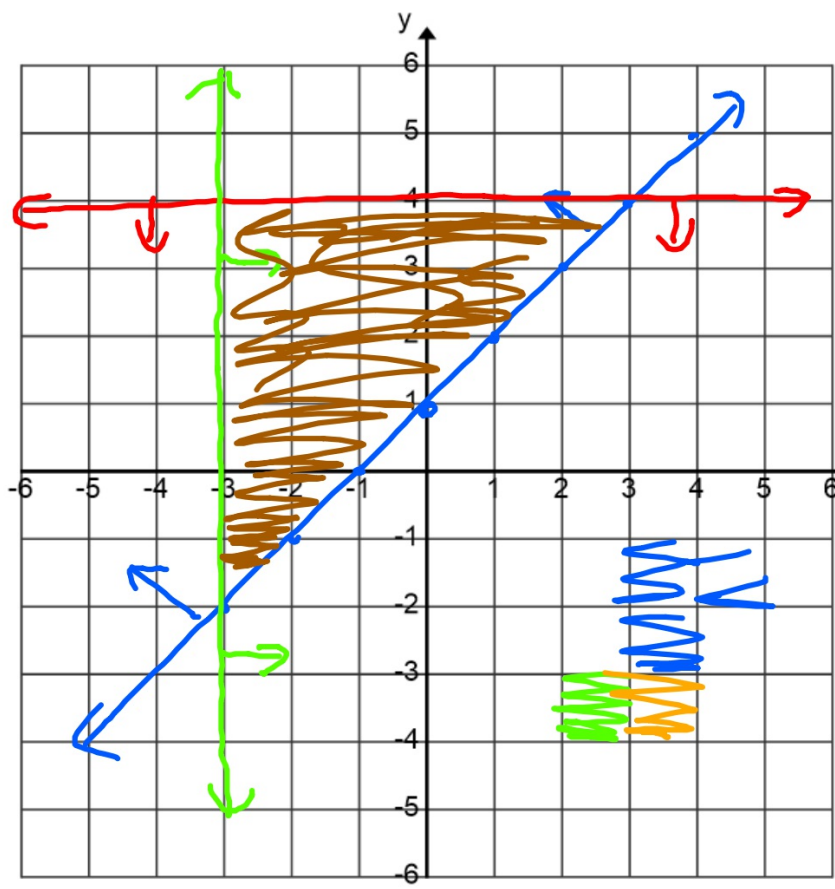
$$\begin{cases} y \geq 2x - 1 \\ y < -\frac{1}{2}x + 1 \end{cases}$$



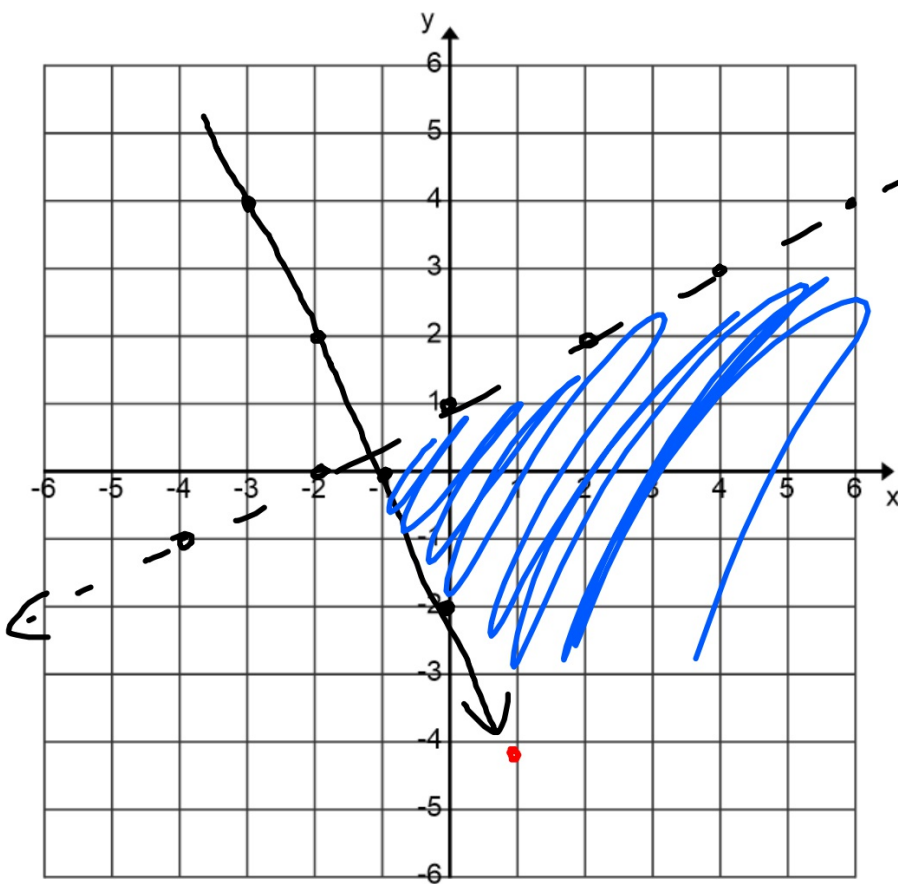
$$\begin{cases} \bullet y > -\frac{1}{3}x + 2 \\ \bullet y \geq 2x - 1 \end{cases}$$



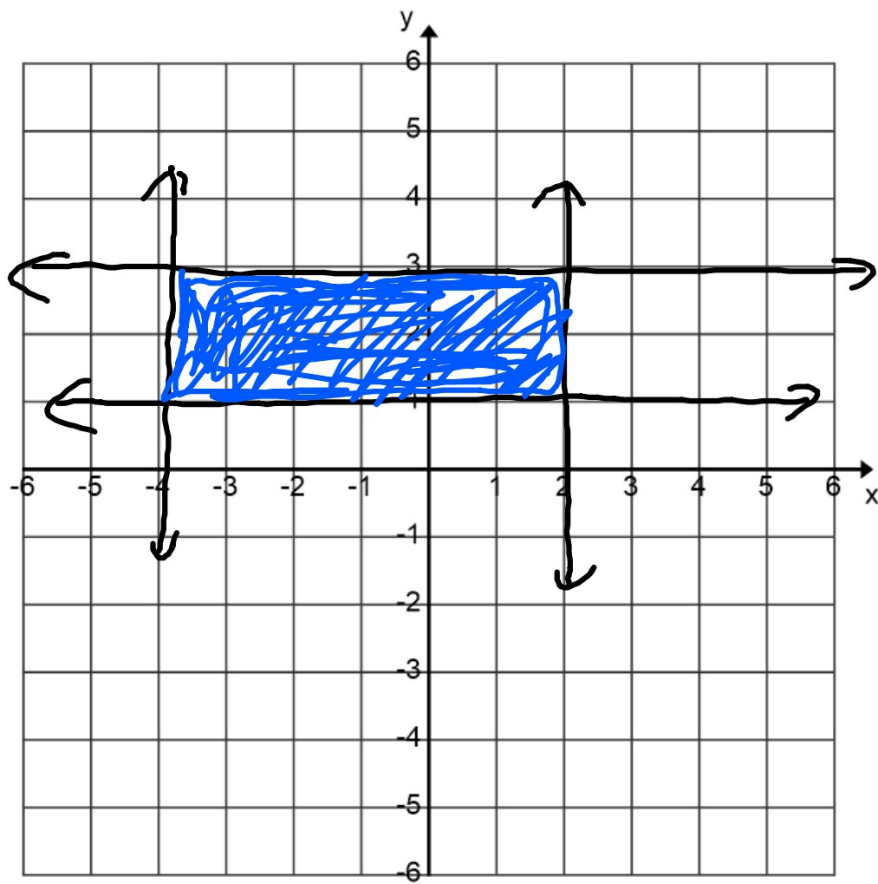
$$\begin{cases} y \leq -\frac{1}{3}x + 1 \\ y > 4x - 3 \end{cases}$$



$$\begin{cases} \bullet y \geq x + 1 \\ \bullet y \leq 4 \\ \bullet x \geq -3 \end{cases}$$



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



$$\left\{ \begin{array}{l} y \leq 3 \\ y \geq 1 \\ x \geq -4 \\ x \leq 2 \end{array} \right.$$

Matrices

$$\begin{bmatrix} 2 & 4 & 7 \\ 3 & 5 & 8 \end{bmatrix}$$

RC

Rows by Columns

$$2 \times 3$$

$$\begin{aligned} \textcircled{1} \quad & \begin{bmatrix} 1 & 6 & 2 \\ 4 & 1 & 3 \end{bmatrix} + \begin{bmatrix} 0 & 1 & 4 \\ -2 & -1 & 5 \end{bmatrix} \\ & = \begin{bmatrix} 1 & 7 & 6 \\ 2 & 0 & 8 \end{bmatrix} \end{aligned}$$

$$\textcircled{2} \quad 6 \cdot \begin{bmatrix} 2 & 4 \\ 5 & 1 \end{bmatrix} = \begin{bmatrix} 12 & 24 \\ 30 & 6 \end{bmatrix}$$

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

$$\left[\begin{array}{cc} 2 \cdot 1 + 3 \cdot 2 & 2 \cdot 5 + 3 \cdot 3 \\ 4 \cdot 1 + 1 \cdot 2 & 4 \cdot 5 + 1 \cdot 3 \end{array} \right]$$

$$\begin{bmatrix} 8 & 19 \\ 6 & 23 \end{bmatrix}$$

$$\textcircled{4} \begin{bmatrix} 2 & 1 \\ 3 & 7 \end{bmatrix} \cdot \begin{bmatrix} 3 & 0 \\ 1 & 4 \end{bmatrix}$$

$$\left[\begin{array}{cc} 2 \cdot 3 + 1 \cdot 1 & 2 \cdot 0 + 1 \cdot 4 \\ 3 \cdot 3 + 7 \cdot 1 & 3 \cdot 0 + 7 \cdot 4 \end{array} \right]$$

$$\begin{bmatrix} 7 & 4 \\ 16 & 28 \end{bmatrix}$$

$$\textcircled{5} \begin{bmatrix} 2 & 1 \\ 6 & 7 \end{bmatrix} \begin{bmatrix} 3 & 2 & -1 \\ 1 & 5 & -2 \\ 7 & 3 & 0 \end{bmatrix}$$

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

Must match in order to X.

$$2 \cdot 3 + 1 \cdot 1 + ?$$

$$\textcircled{6} \begin{bmatrix} 2 & 4 \\ 1 & 6 \end{bmatrix} \cdot \begin{bmatrix} 3 & 1 & 5 \\ 2 & 7 & 8 \end{bmatrix}$$

$$2 \times 2 \checkmark 2 \times 3$$

Size of your answer

$$\begin{bmatrix} 2 \cdot 3 + 4 \cdot 2 & 2 \cdot 1 + 4 \cdot 7 & 2 \cdot 5 + 4 \cdot 8 \\ 1 \cdot 3 + 6 \cdot 2 & 1 \cdot 1 + 6 \cdot 7 & 1 \cdot 5 + 6 \cdot 8 \end{bmatrix}$$

$$\begin{bmatrix} 14 & 30 & 42 \\ 15 & 43 & 53 \end{bmatrix}$$