

11-18-19

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

$$\begin{bmatrix} 2 \cdot (-2) + 3 \cdot 1 & 2 \cdot 4 + 3 \cdot 3 \\ 4 \cdot (-2) + 5 \cdot 1 & 4 \cdot 4 + 5 \cdot 3 \end{bmatrix}$$

$$\begin{bmatrix} -1 & 17 \\ -3 & 31 \end{bmatrix}$$

② $\begin{cases} 3n - y = 2 \Rightarrow 6n - 2y = 4 \\ 5n + 2y = 40 \Rightarrow 5n + 2y = 40 \end{cases}$

$$\begin{array}{r} 6n - 2y = 4 \\ 5n + 2y = 40 \\ \hline 11n = 44 \\ n = 4 \end{array}$$

$5(4) + 2y = 40$
 $y = 10$

③ $\begin{cases} y = 4x - 1 \\ y = 2x - 11 \end{cases}$

$$4x - 1 = 2x - 11$$
$$\begin{array}{r} 4x - 1 \\ -2x \quad -2x \\ \hline 2x - 1 = -11 \end{array}$$

$$\begin{array}{r} 2x - 1 = -11 \\ +1 \quad +1 \\ \hline 2x = -10 \end{array}$$

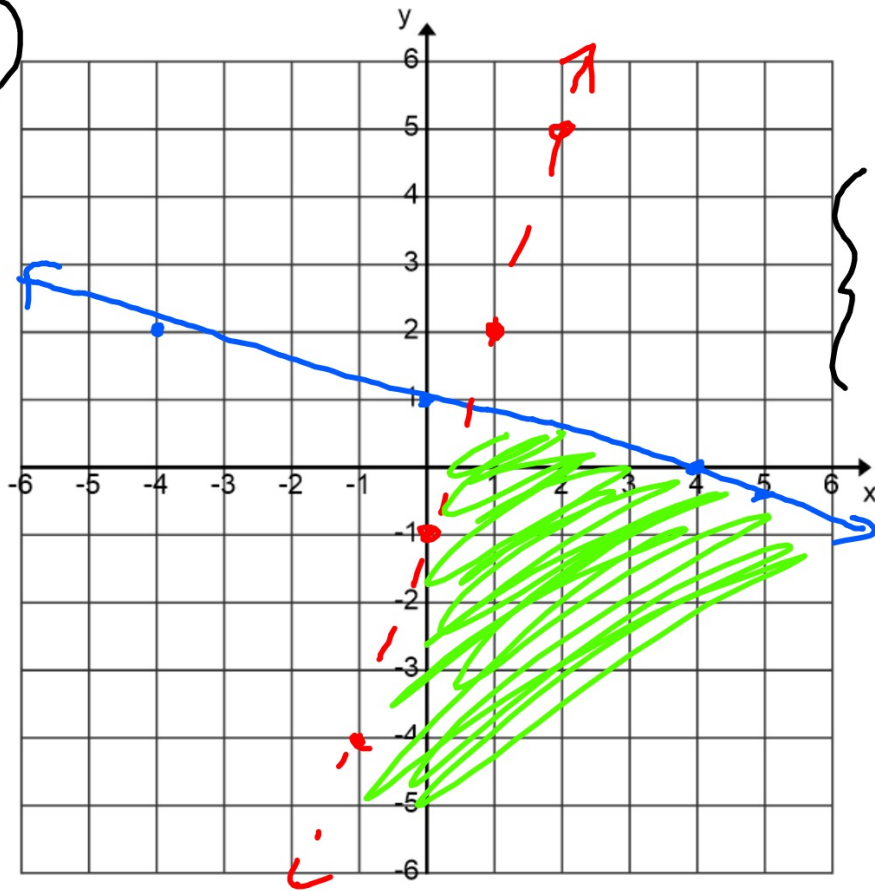
$$2x = -10$$

$$x = -5$$

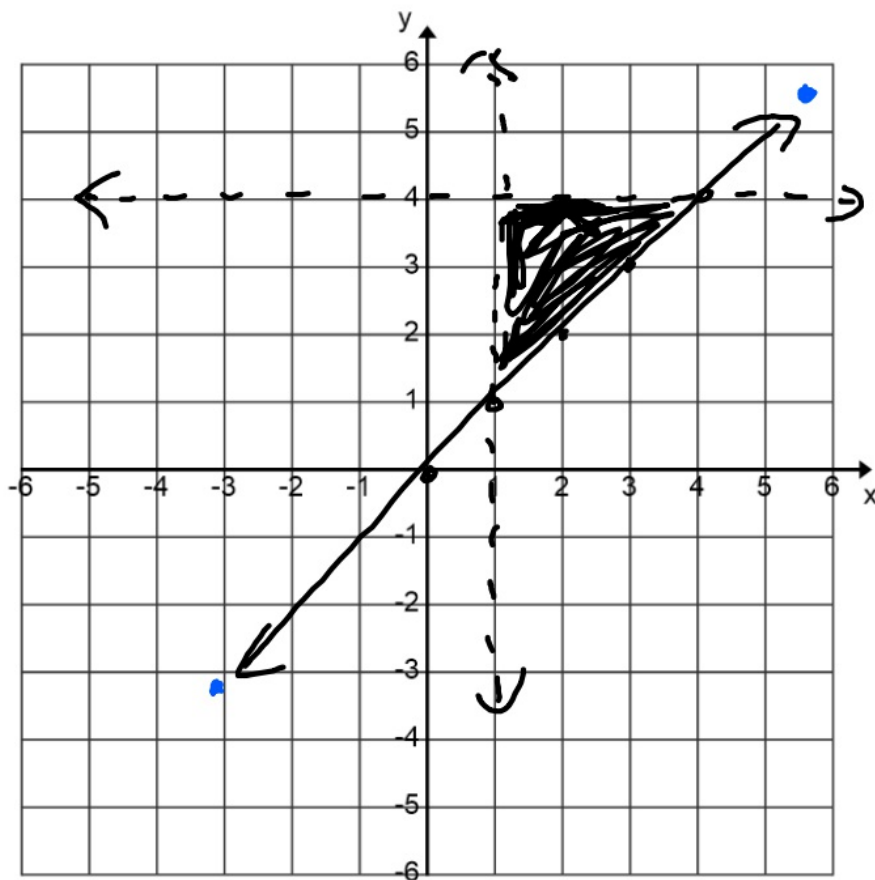
$$y = 4(-5) - 1$$

$$y = -21$$

4



$$\left. \begin{array}{l} y \leq -\frac{1}{4}x + 1 \\ y < 3x - 1 \end{array} \right\}$$



$$\left\{ \begin{array}{l} y \geq x \\ y < 4 \\ x > 1 \end{array} \right.$$

Who can be multiplied

$$A = 3 \times 2$$

$$B = 4 \times 2$$

$$C = 2 \times 2$$

$$D = 3 \times 1$$

$$\begin{array}{c} AC \\ 3 \times 2 \quad 2 \times 2 \end{array}$$

$$\begin{array}{c} BC \\ 4 \times 2 \quad 2 \times 2 \end{array}$$

$$\begin{array}{c} CC \\ 2 \times 2 \quad 2 \times 2 \end{array}$$

11-18-19 3rd Trig

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

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

$$\begin{bmatrix} 8 & 12 \\ -3 & 23 \end{bmatrix}$$

② Which of these can be multiplied?

A = 3x2	A · C 3x2 2x2	A · D 3x2 2x3
B = 3x3		
C = 2x2	B · A 3x3 3x2	B · B 3x3 · 3x3
D = 2x3		

C · C 2x2 2x2	C · D 2x2 2x3
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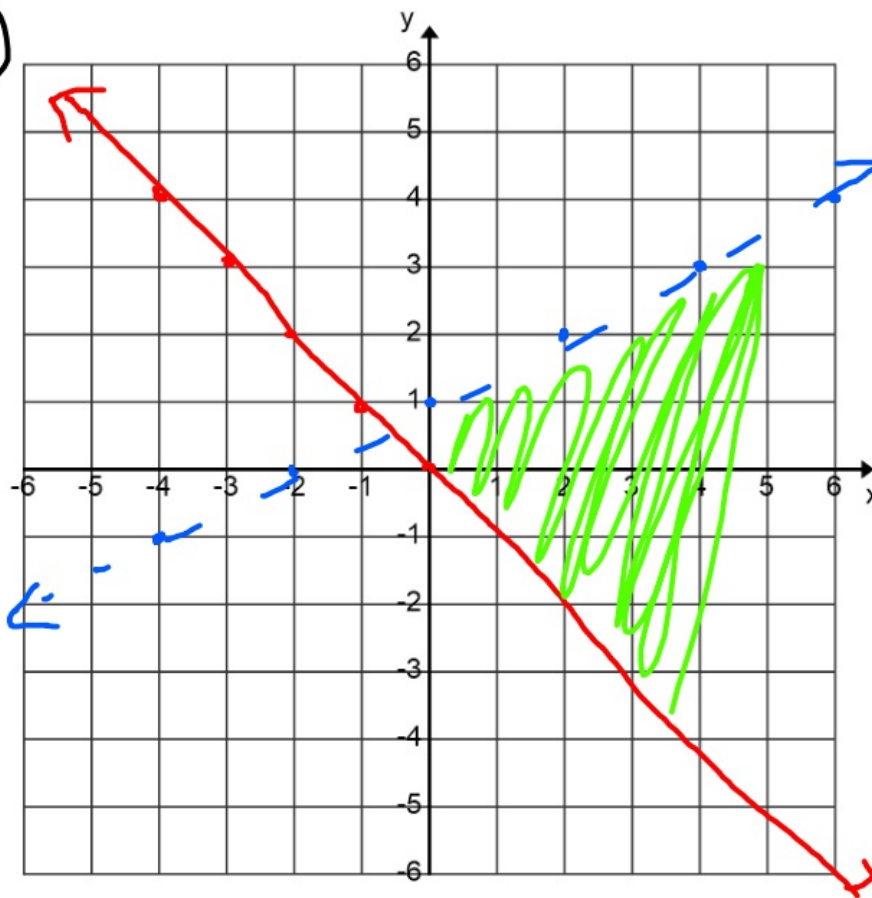
D · A 2x3 3x2	D · B 2x3 3x2
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$$\textcircled{3} \begin{cases} y = 2x - 1 \\ 3x - y = 4 \end{cases}$$

$$\begin{aligned} 3x - (2x - 1) &= 4 \\ 3x - 2x + 1 &= 4 \\ x + 1 &= 4 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} y &= 2(3) - 1 \\ y &= 5 \end{aligned}$$

④



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

⑤

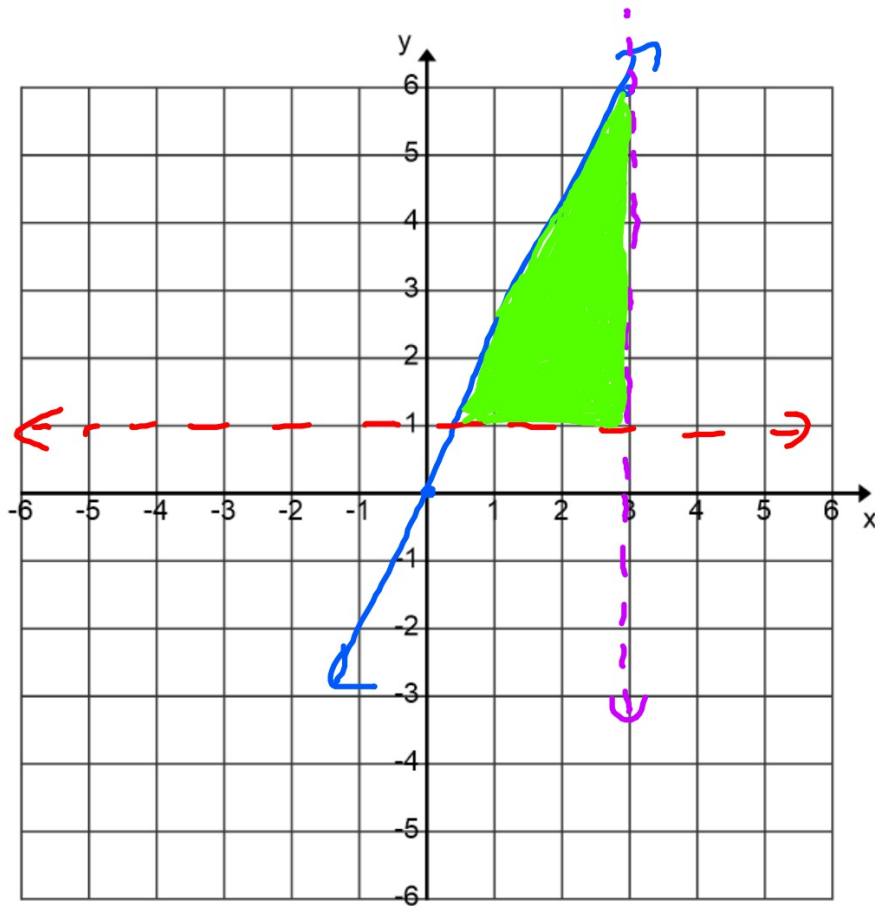
$$\begin{cases} 11x + 2y = 13 \stackrel{M3}{\Rightarrow} 33x + 6y = 39 \\ 9x - 3y = 6 \stackrel{R2}{\Rightarrow} 18x - 6y = 12 \end{cases}$$

$$\begin{array}{r} 33x + 6y = 39 \\ 18x - 6y = 12 \\ \hline 51x = 51 \\ x = 1 \end{array}$$

$$11(1) + 2y = 13$$

$$11 + 2y = 13$$

$$y = 1$$



$y \leq 2x$
 $y > 1$
 $x < 3$

11-18-19 4th Trig

$$\textcircled{1} \begin{bmatrix} 2 & 4 \\ -1 & 5 \end{bmatrix} \cdot \begin{bmatrix} 10 & 2 \\ 1 & 0 \end{bmatrix}$$

$$\begin{bmatrix} 2 \cdot 10 + 4 \cdot 1 & 2 \cdot 2 + 4 \cdot 0 \\ -1 \cdot 10 + 5 \cdot 1 & -1 \cdot 2 + 5 \cdot 0 \end{bmatrix}$$

$$\begin{bmatrix} 24 & 4 \\ -5 & -2 \end{bmatrix}$$

② Which can be multiplied?

A = 4x2 A · C A · D
4x2 2x3 4x2 2x2

B = 3x2

C = 2x3 B · C B · D
3x2 2x3 3x2 2x2

D = 2x2

C · B D · C
2x3 3x2 2x2 2x3

D · D
2x2 2x2

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

$$ax - 2(3x - 1) = -2$$

$$ax - 6x + 2 = -2$$

$$-4x + 2 = -2$$

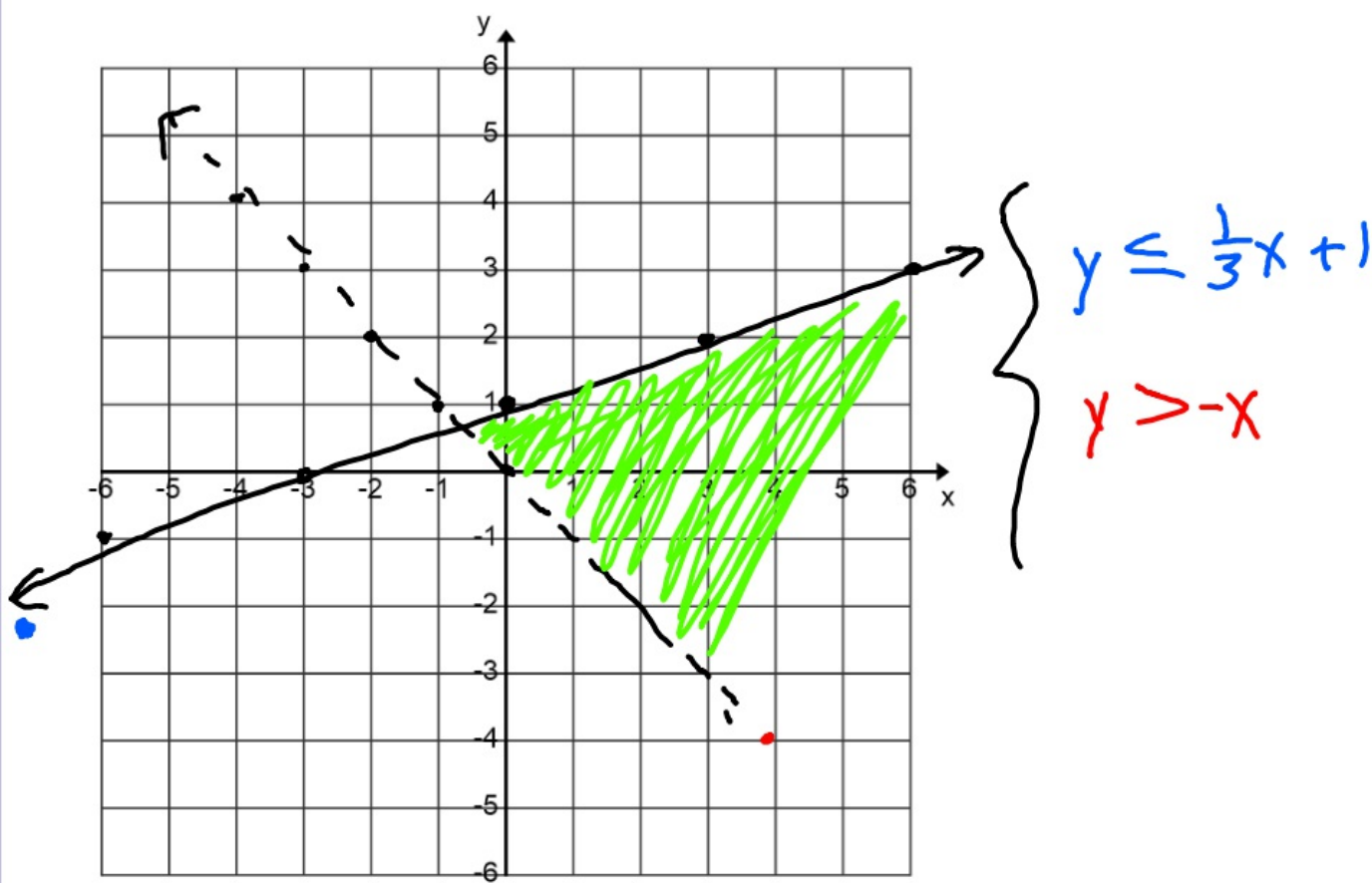
$$\begin{array}{r} -4x + 2 = -2 \\ -2 \quad -2 \\ \hline -4x = -4 \end{array}$$

$$-4x = -4$$

$$x = 1$$

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

$$y = 2$$



$$\textcircled{5} \begin{cases} 3x + 11y = 17 & \stackrel{M \cdot 2}{\Rightarrow} -6x - 22y = -34 \\ 2x + 9y = 13 & \stackrel{M \cdot 3}{\Rightarrow} 6x + 27y = 39 \end{cases}$$

$$5y = 5$$

$$y = 1$$

$$2x + 9(1) = 13$$

$$2x + 9 = 13$$

$$x = 2$$

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