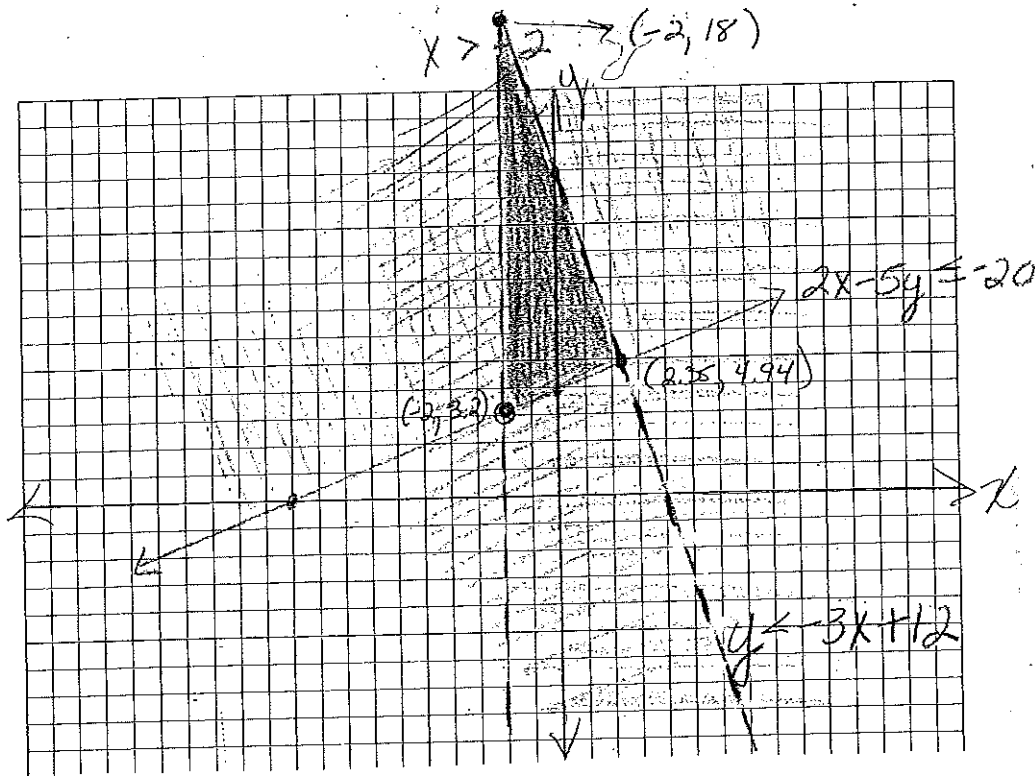


Algebra II – Anchor Responses E-H

Anchor Response E

Begin your response here.



I graphed each linear equation and tested a point not on the line to determine on which side I would shade. Where all the shaded regions overlapped was the solution region.

If you need more space, please continue writing on the next page.

To find the intersection (or critical points) of each pair of lines, I used substitution and elimination

$$x = -2$$

$$2x - 5y = -20$$

$$2(-2) - 5y = -20$$

$$-4 - 5y = -20$$

$$-5y = -16$$

$$y = \frac{16}{5} \text{ or } 3.2$$

#1 Intersection
 $(-2, 3.2)$

$$x = -2$$

$$y = -3x + 12$$

$$y = -3(-2) + 12$$

$$y = 18$$

#2 Intersection
 $(-2, 18)$

$$y = -3x + 12$$

$$\begin{array}{r} 2x - 5y = -20 \\ 5(3x + y = 12) \\ \hline 15x + 5y = 60 \end{array}$$

$$17x = 40$$

$$x = \frac{40}{17} \approx 2.35$$

$$y = -3\left(\frac{40}{17}\right) + 12 = \frac{84}{17}$$

#3 Intersection
 $\left(\frac{40}{17}, \frac{84}{17}\right)$

Thank you for your work!

Anchor Response F

Begin your response here.

$$x > -2$$

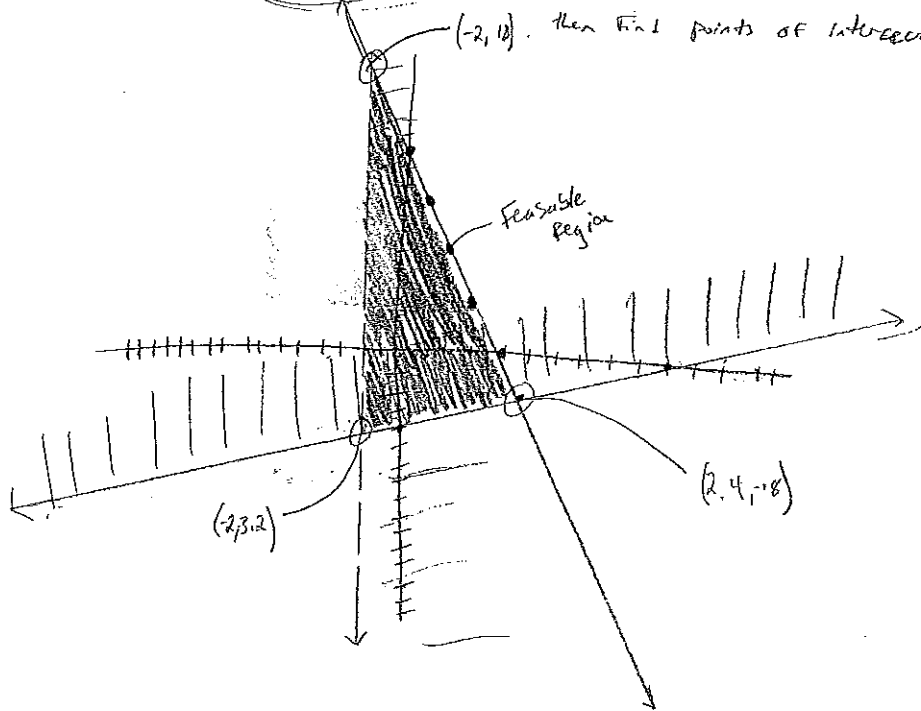
$$2x + -5y \leq -20$$

$$y < -3x + 12$$

$$\frac{-5y}{-5} \leq \frac{-2x - 20}{-5}$$

$$y \geq \frac{2}{5}x - 4$$

Put all formulas in slope-intercept form. Graph points
 use $\frac{\text{rise}}{\text{run}}$ to plot points. If \leq line is solid
 if line $>$ line is dotted, Plug 0 in for both x & y
 If true shade accordingly, find Feasible region
 then find points of intersection.



$$x > -2$$

$$2x + -5y \leq -20$$

$$2(-2) + -5y \leq -20$$

$$-4 + -5y \leq -20$$

$$-5y \leq -16$$

$$y \geq 3.2$$

$$y = -3(-2) + 12$$

$$y = 6 + 12$$

$$y = 18$$

$$\begin{cases} 2x + -5y = -20 \\ 5(3x + y = 12) \end{cases}$$

$$\begin{array}{r} 2x + -5y = -20 \\ 15x + 5y = 60 \\ \hline 17x = 40 \\ \hline x = 2.4 \end{array}$$

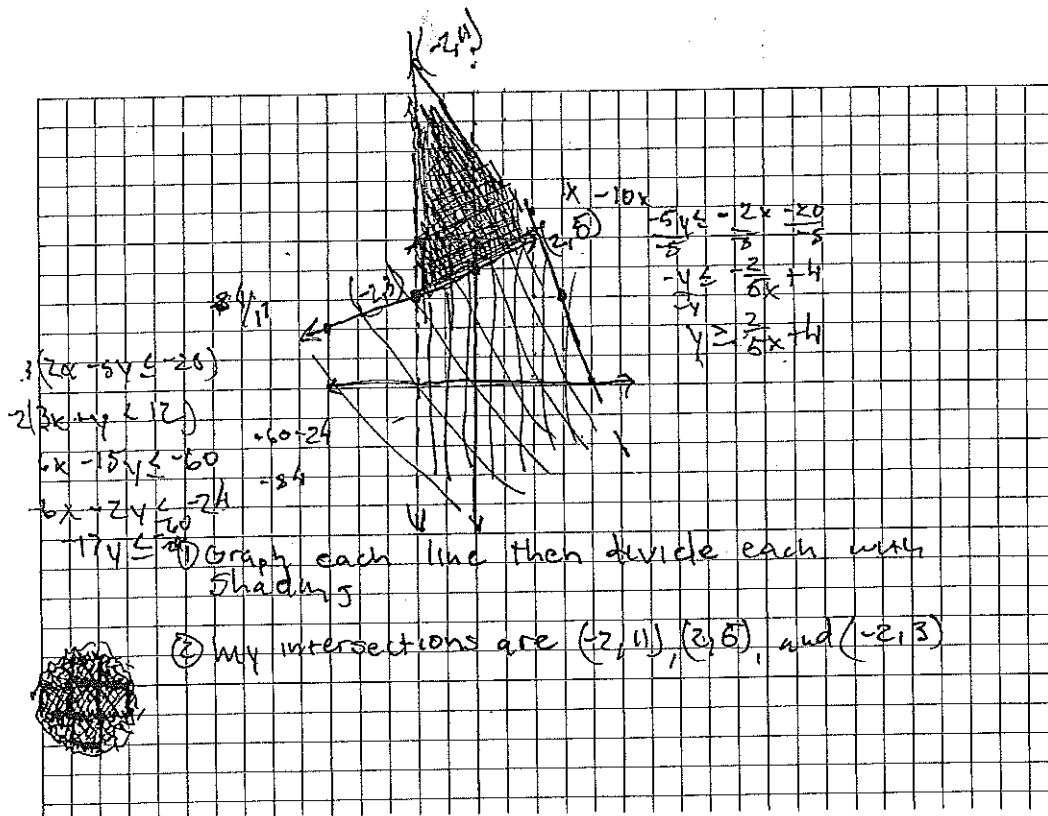
elimination method + find x & y .

$$\begin{array}{r} 2(2.4) + 5y = -20 \\ 4.8 + 5y = -20 \\ \frac{5y}{5} = \frac{-24.8}{5} \\ 4.8 + y = -4.96 \\ -4.8 \quad -4.8 \\ \hline y = -9.76 \end{array}$$

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Anchor Response G

Begin your response here.



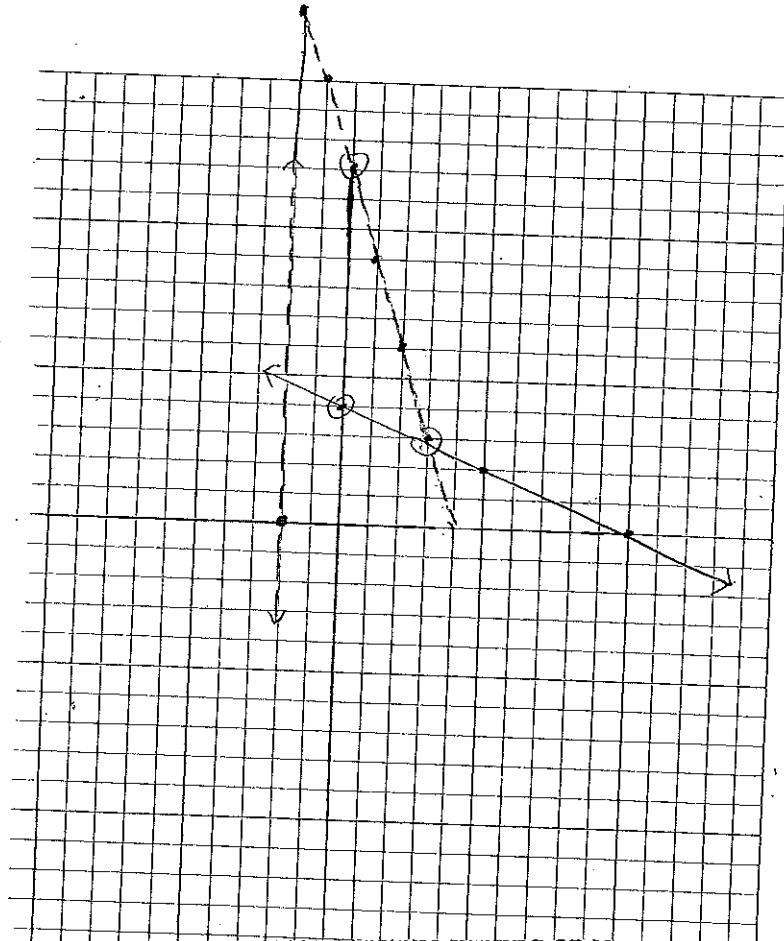
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Anchor Response H

Begin your response here.

A) With the inequalities I was given only one was in slope intercept form so I put the others into that form as well. Afterward I graphed accordingly to the equations.

B) The points were $(-2, 16)$ $(-2, 4.5)$ $(3, 3)$ which I got by looking at the intersecting points in the shaded area.



If you need more space, please continue writing on the next page.