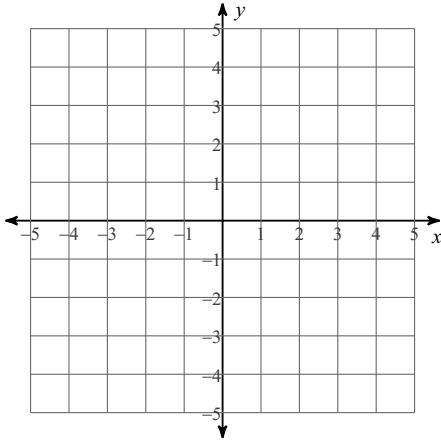


## Unit 2 Part 1 Test

Solve each system by graphing. Make sure you state the final answer.

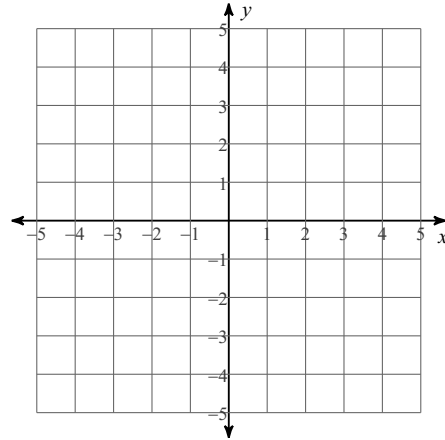
1)  $y = 3$

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



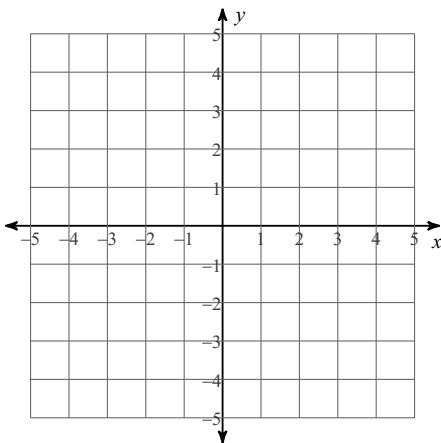
2)  $y = \frac{1}{2}x + 2$

$$y = 2x - 1$$



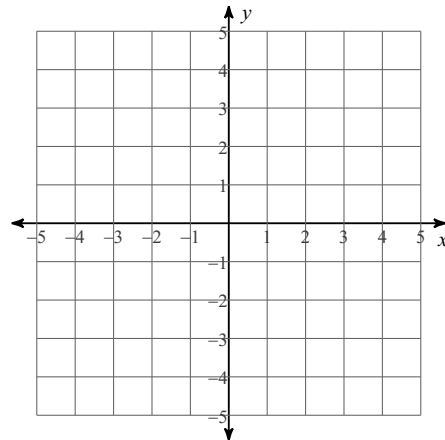
3)  $y = \frac{1}{3}x + 1$

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

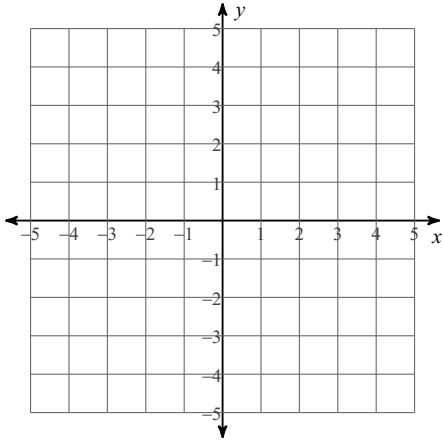


4)  $y = -6x + 2$

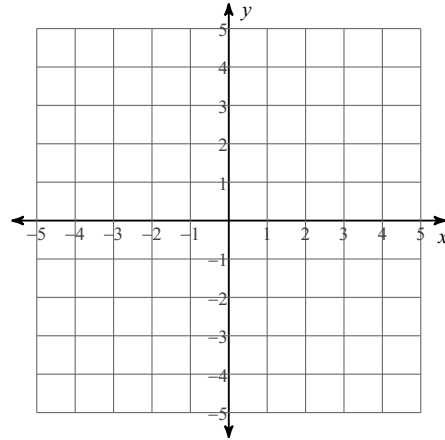
$$y = -4$$



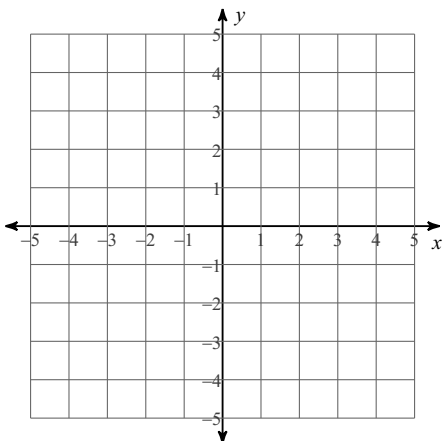
$$5) \begin{aligned} y &= x + 3 \\ y &= 7x - 3 \end{aligned}$$



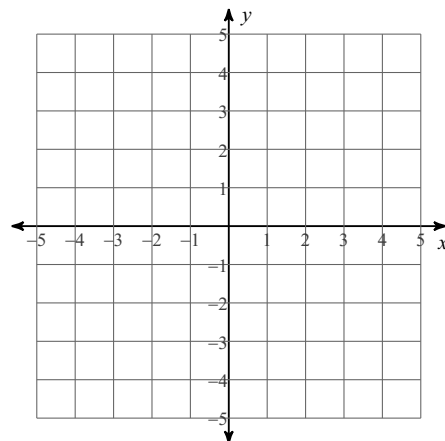
$$6) \begin{aligned} -2x + y - 2 &= 0 \\ -3y &= -2x + 6 \end{aligned}$$



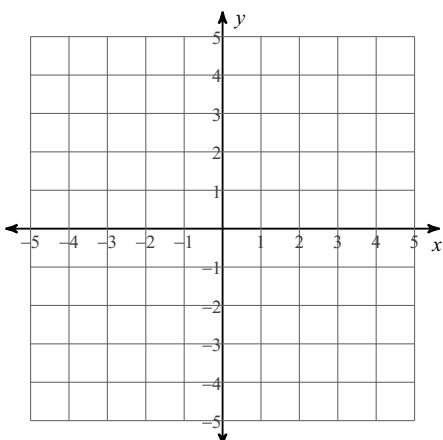
$$7) \begin{aligned} 0 &= -12 - x + 4y \\ -3y - 12 + 6x &= 0 \end{aligned}$$



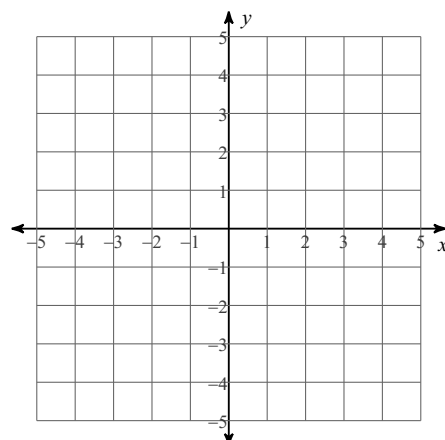
$$8) \begin{aligned} 4 - 3x + 4y &= 0 \\ 24 - 2x &= 8y \end{aligned}$$



$$9) \begin{aligned} -2x + 8 &= 2y \\ -4 &= -x - y \end{aligned}$$



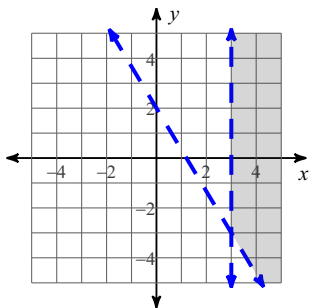
$$10) \begin{aligned} -x - y &= 2 \\ -x + 2 &= 0 \end{aligned}$$



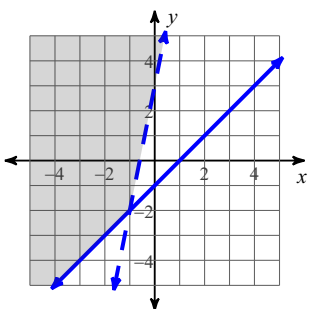
Sketch the solution to each system of inequalities.

11)  $y > -\frac{5}{3}x + 2$   
 $x > 3$

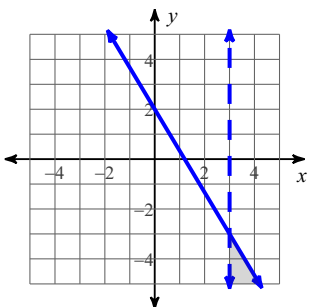
A)



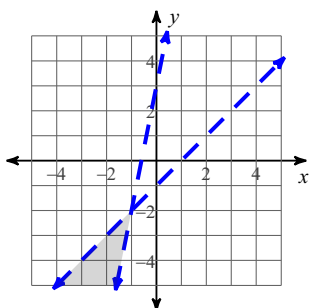
B)



C)

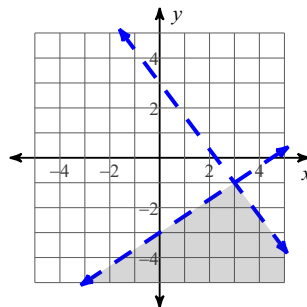


D)

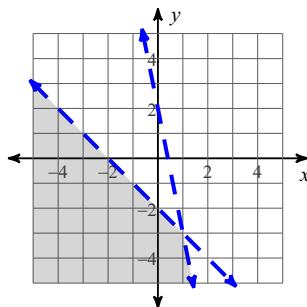


12)  $y < -x - 2$   
 $y < -5x + 2$

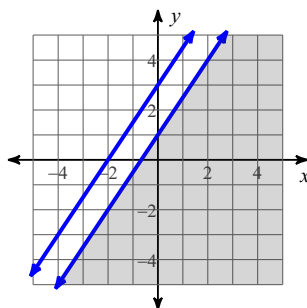
A)



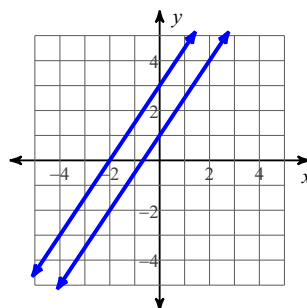
B)



C)

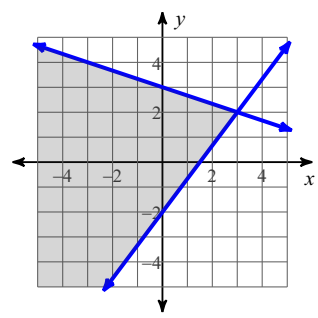


D)

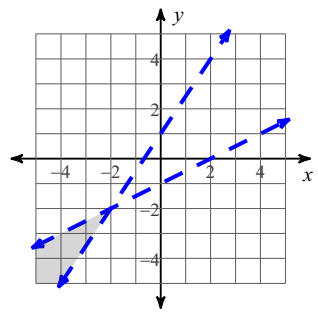


13)  $y < \frac{1}{2}x - 1$   
 $y > \frac{3}{2}x + 1$

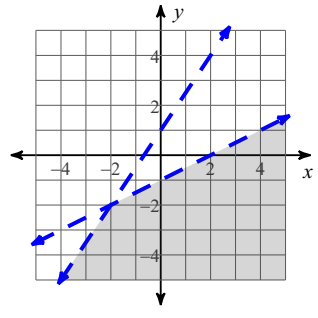
A)



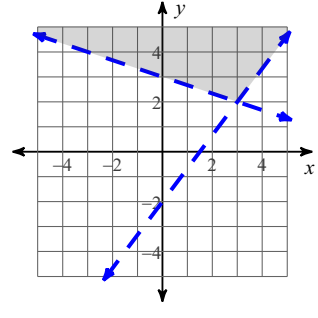
B)



C)

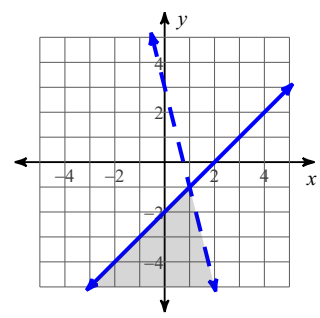


D)

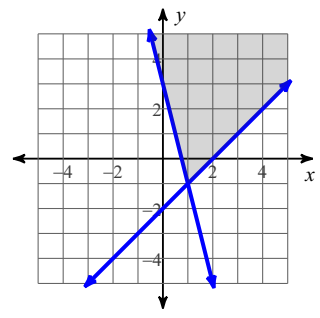


14)  $y \geq -\frac{1}{2}x - 2$   
 $y \leq -\frac{5}{2}x + 2$

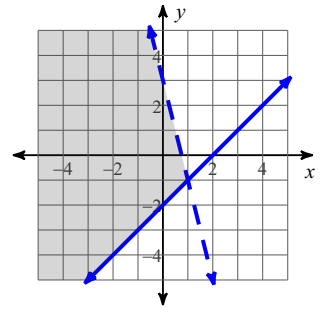
A)



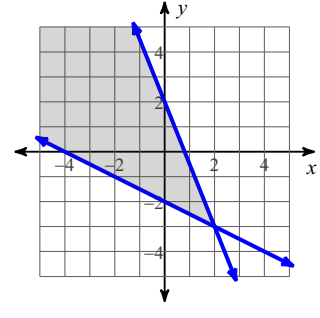
B)



C)

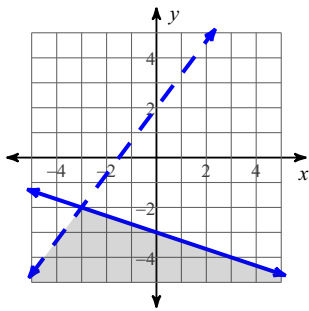


D)

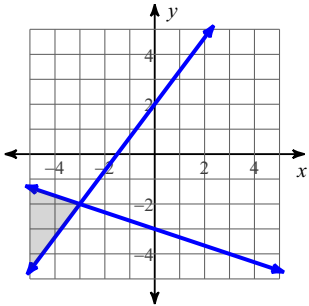


15)  $x + 3y \leq -9$   
 $4x - 3y \leq -6$

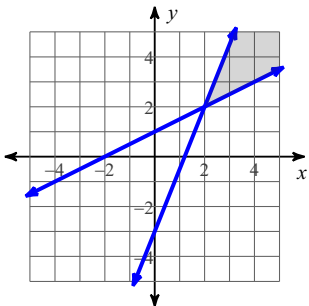
A)



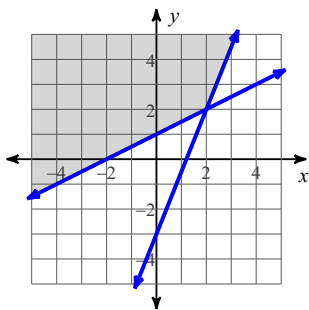
B)



C)

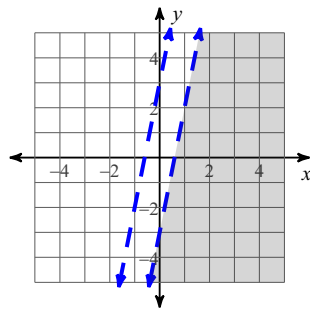


D)

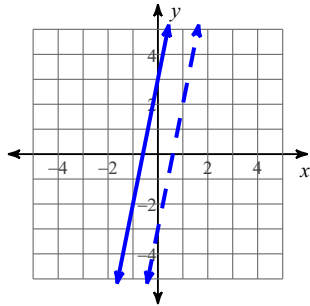


16)  $x + y < 2$   
 $y \leq 1$

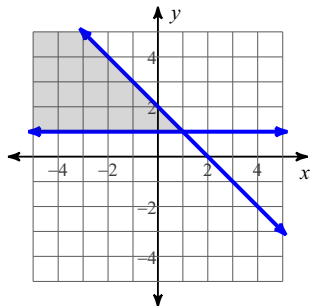
A)



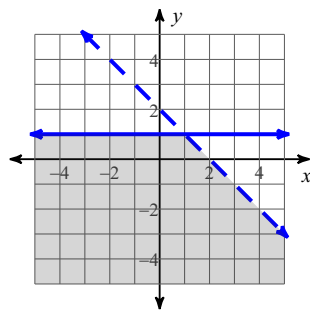
B)



C)

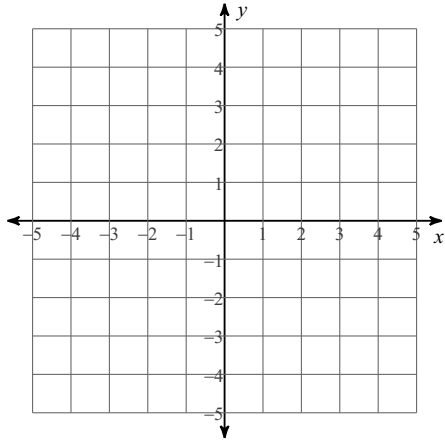


D)

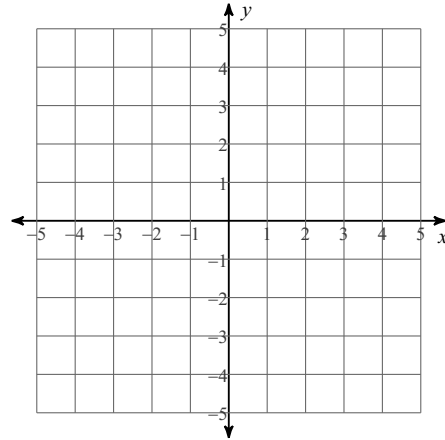


For #17-20 Determine if the given point is a solution to the inequalities (state yes or no).

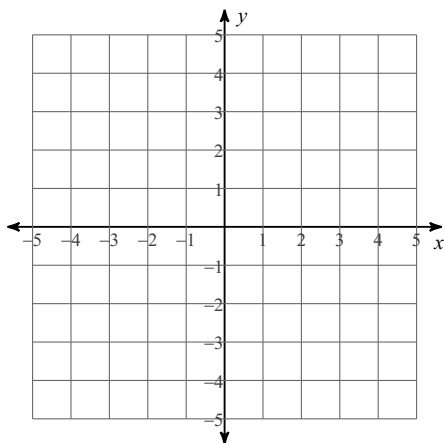
17)  $y > x + 2$   
 $y > x - 3$



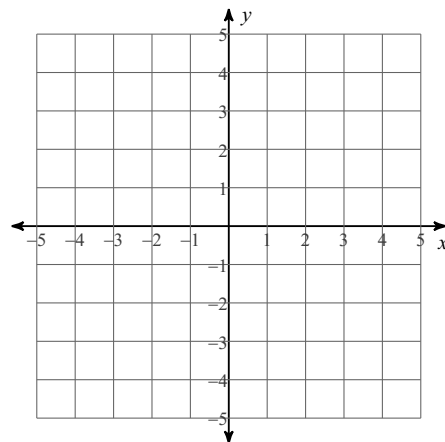
18)  $y \geq -x - 2$   
 $y \geq 3x + 2$



19)  $y < 5x + 2$   
 $y > x - 2$



20)  $y \leq -3x + 3$   
 $y < -\frac{1}{2}x - 2$



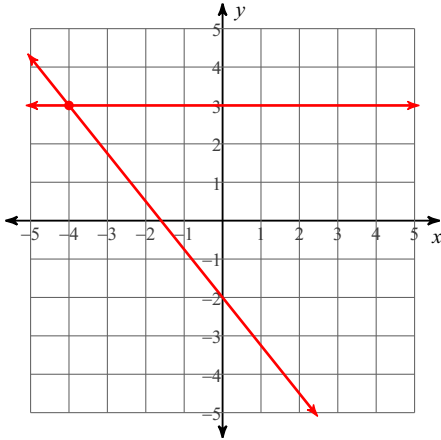
## Unit 2 Part 1 Test

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each system by graphing. Make sure you state the final answer.**

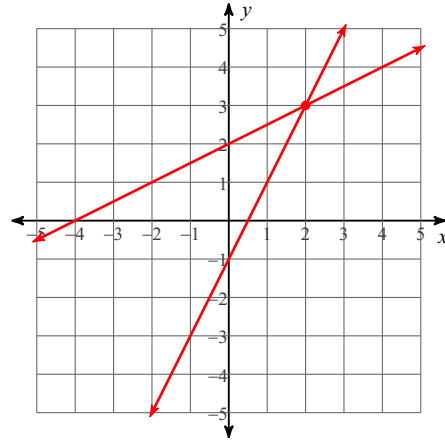
1)  $y = 3$

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

 $(-4, 3)$ 

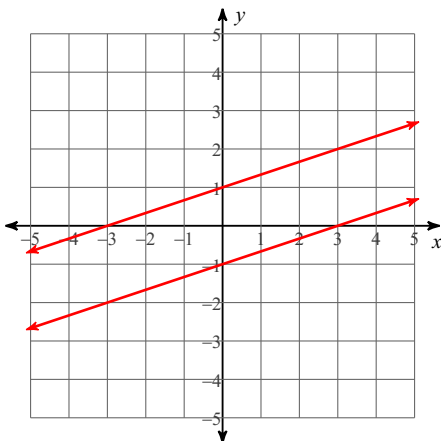
2)  $y = \frac{1}{2}x + 2$

$$y = 2x - 1$$

 $(2, 3)$ 

3)  $y = \frac{1}{3}x + 1$

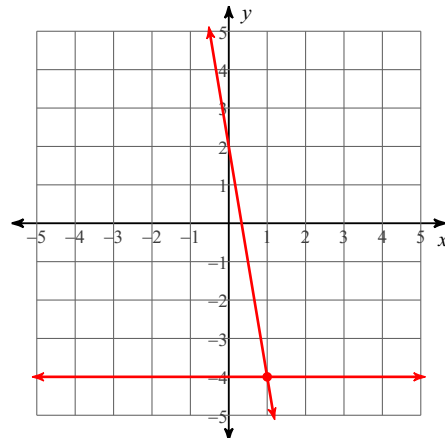
$$y = \frac{1}{3}x - 1$$



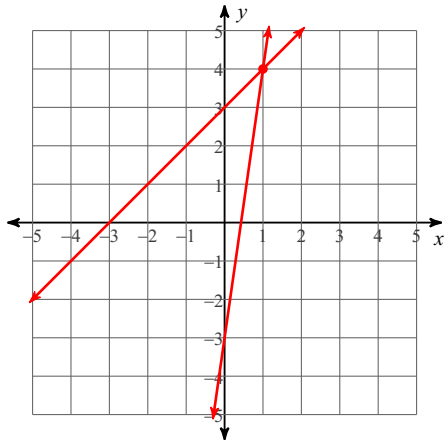
No solution

4)  $y = -6x + 2$

$$y = -4$$

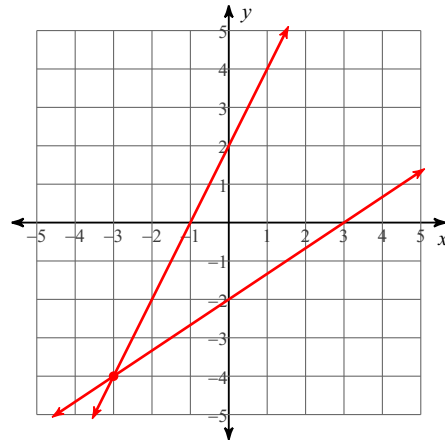
 $(1, -4)$

5)  $y = x + 3$   
 $y = 7x - 3$



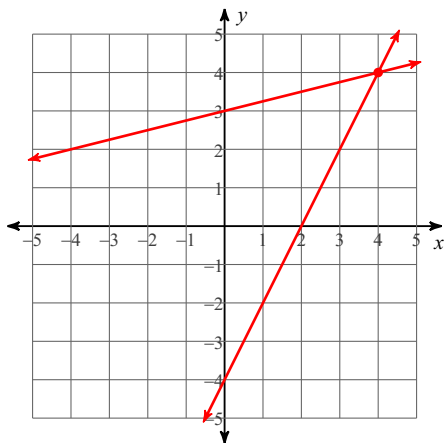
(1, 4)

6)  $-2x + y - 2 = 0$   
 $-3y = -2x + 6$



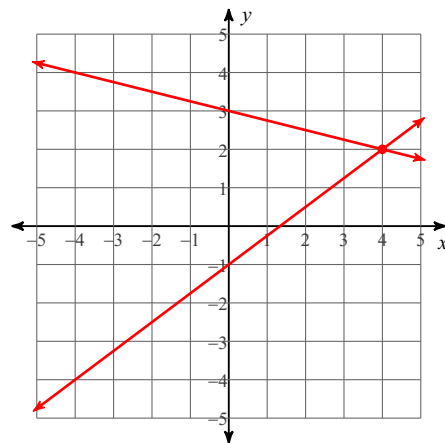
(-3, -4)

7)  $0 = -12 - x + 4y$   
 $-3y - 12 + 6x = 0$



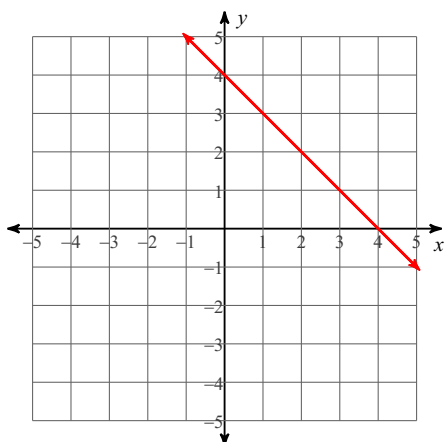
(4, 4)

8)  $4 - 3x + 4y = 0$   
 $24 - 2x = 8y$



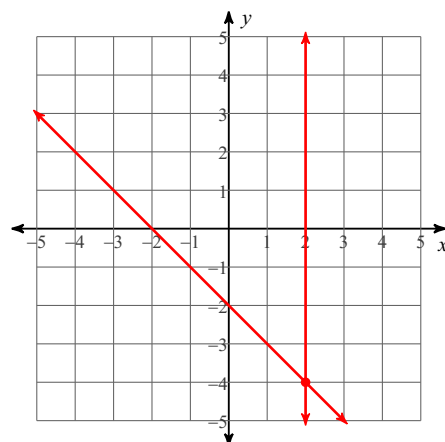
(4, 2)

9)  $-2x + 8 = 2y$   
 $-4 = -x - y$



Infinite number of solutions

10)  $-x - y = 2$   
 $-x + 2 = 0$



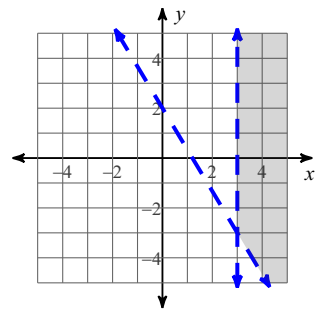
(2, -4)



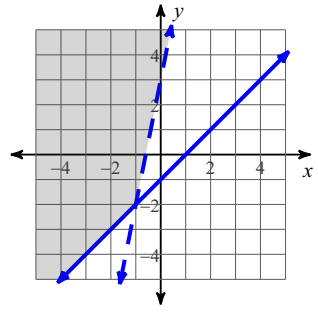
Sketch the solution to each system of inequalities.

11)  $y > -\frac{5}{3}x + 2$   
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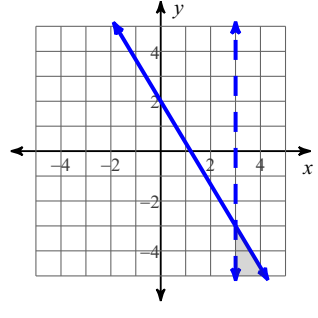
\*A)



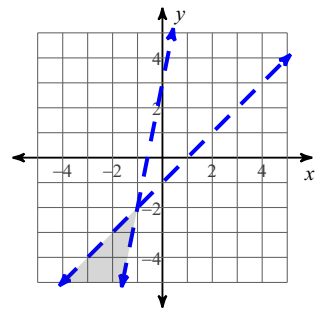
B)



C)

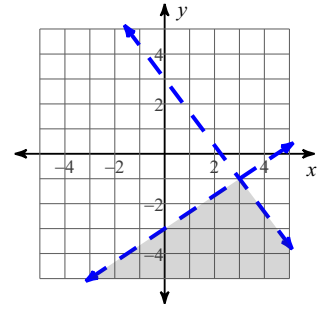


D)

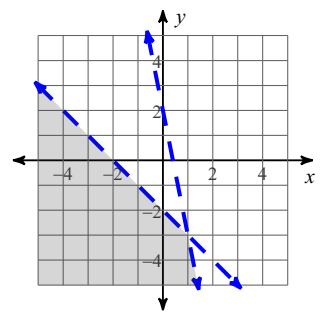


12)  $y < -x - 2$   
 $y < -5x + 2$

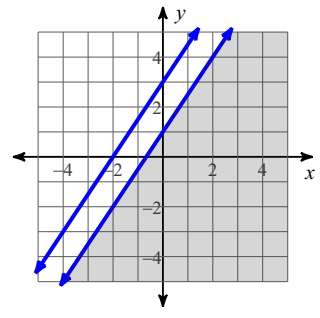
A)



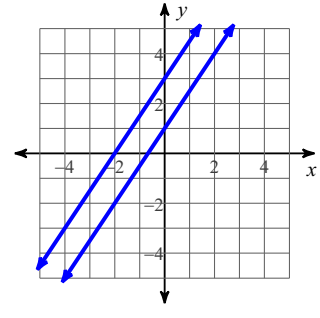
\*B)



C)

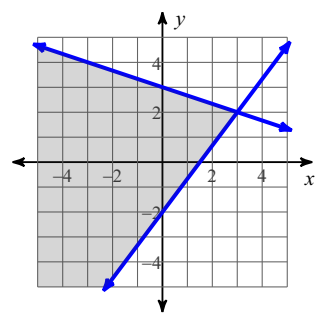


D)

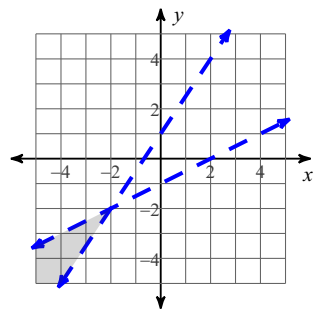


13)  $y < \frac{1}{2}x - 1$   
 $y > \frac{3}{2}x + 1$

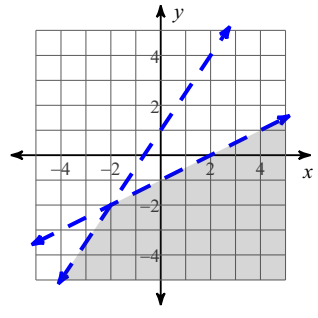
A)



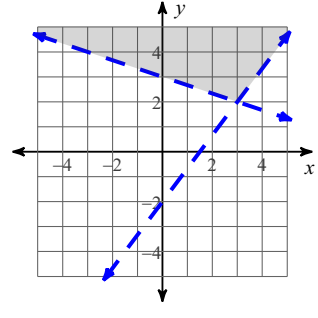
\*B)



C)

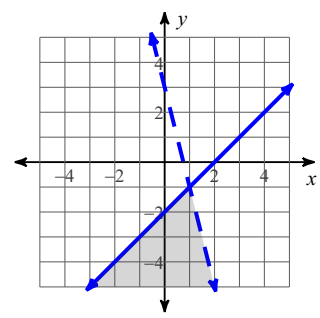


D)

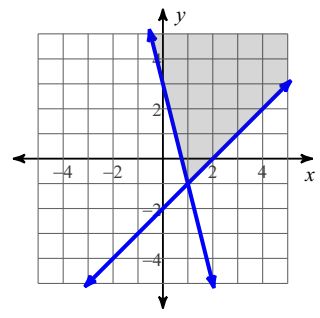


14)  $y \geq -\frac{1}{2}x - 2$   
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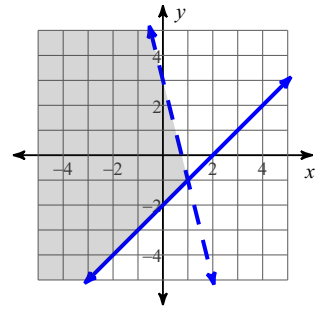
A)



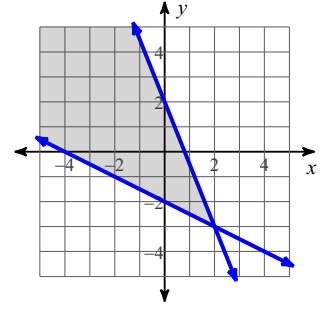
B)



C)

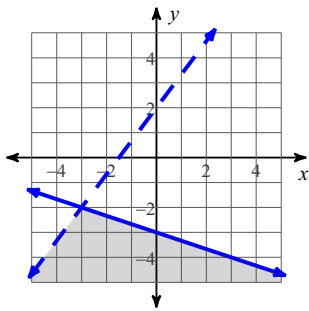


\*D)

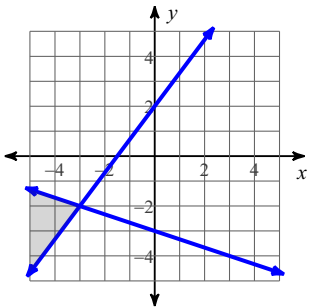


15)  $x + 3y \leq -9$   
 $4x - 3y \leq -6$

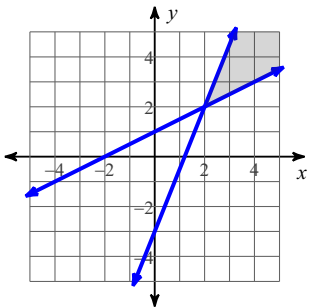
A)



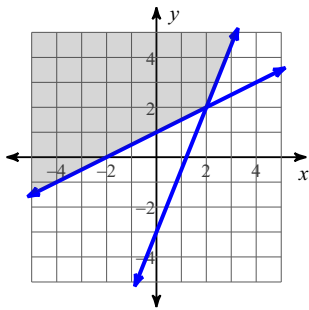
\*B)



C)

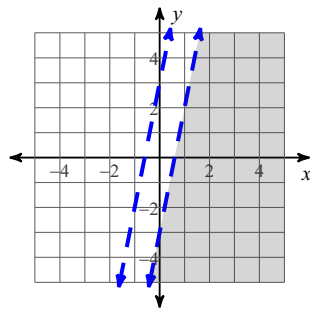


D)

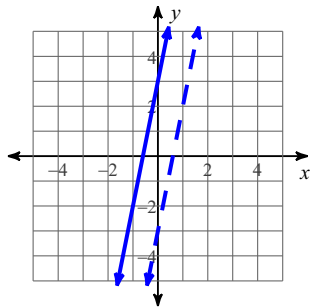


16)  $x + y < 2$   
 $y \leq 1$

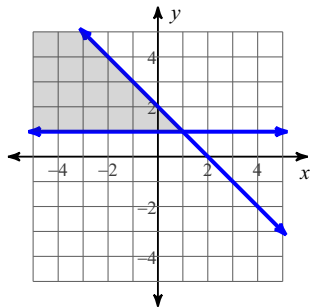
A)



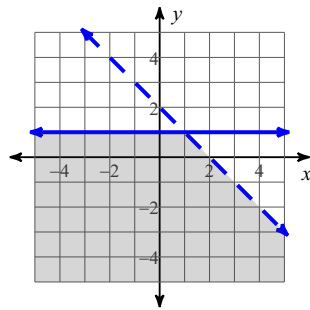
B)



C)

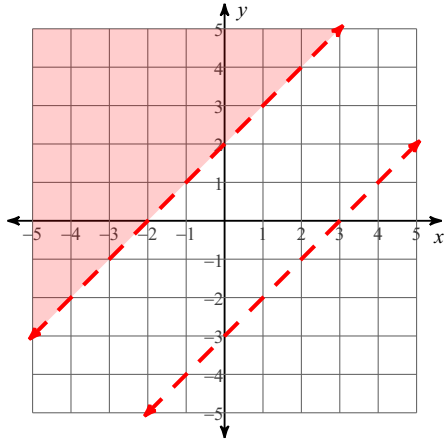


\*D)

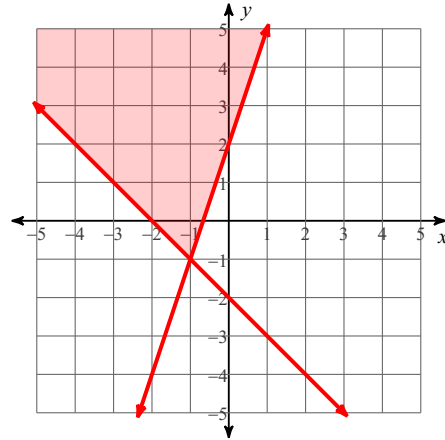


For #17-20 Determine if the given point is a solution to the inequalities (state yes or no).

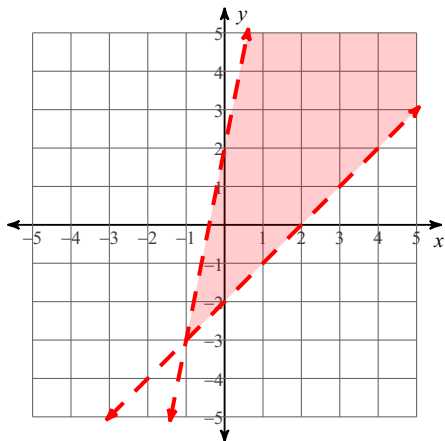
17)  $y > x + 2$   
 $y > x - 3$



18)  $y \geq -x - 2$   
 $y \geq 3x + 2$



19)  $y < 5x + 2$   
 $y > x - 2$



20)  $y \leq -3x + 3$   
 $y < -\frac{1}{2}x - 2$

