

## EOC Review #2

Write the slope-intercept form of the equation of each line.

1)  $3x + 5y = 15$

2)  $8x - 7y = 42$

3)  $y + 2 = -\frac{5}{2}(x - 2)$

4)  $y - 1 = -(x + 4)$

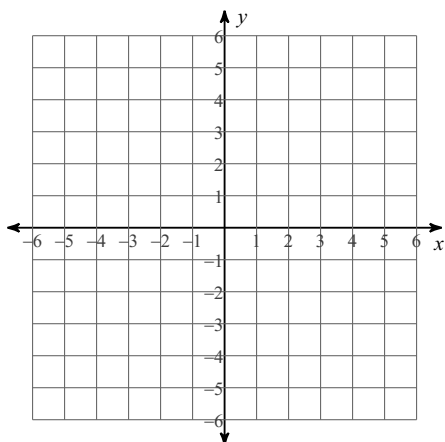
Write the slope-intercept form of the equation of the line through the given point with the given slope.

5) through:  $(-3, -3)$ , slope =  $-\frac{5}{2}$

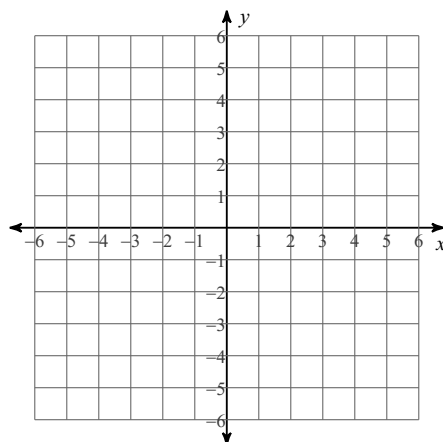
6) through:  $(-2, -1)$ , slope =  $-\frac{3}{2}$

Sketch the graph of each line.

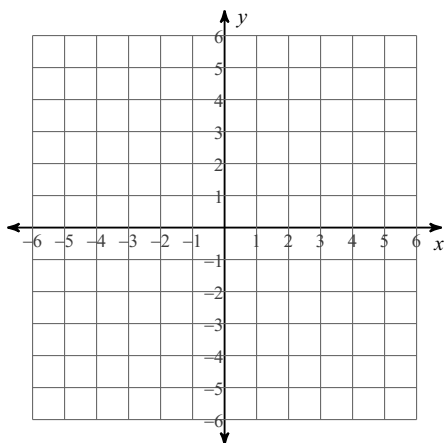
7)  $y = -2x + 5$



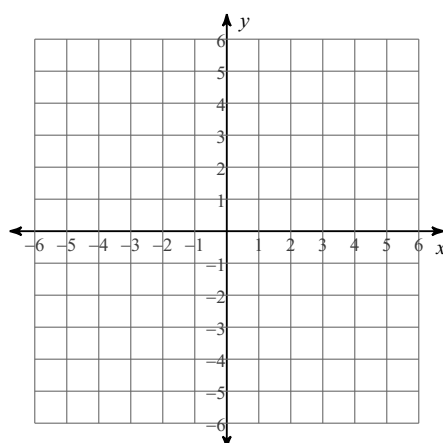
8)  $y = x - 3$



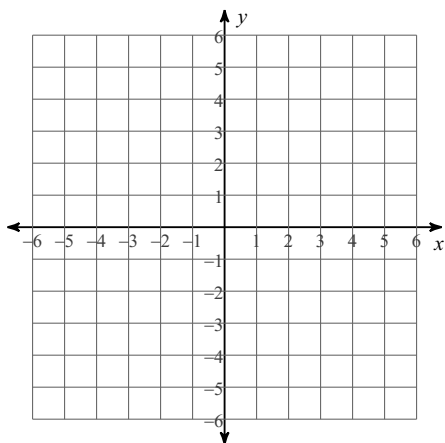
9)  $y = -1$



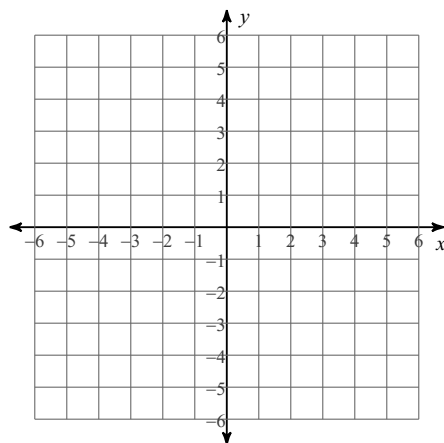
10)  $y = -\frac{7}{3}x - 4$



11)  $8x - 5y = 15$

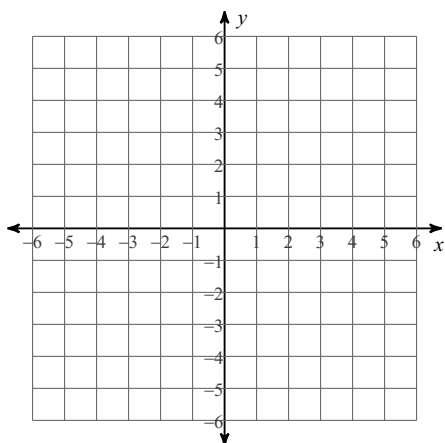


12)  $x$ -intercept =  $-5$ ,  $y$ -intercept =  $2$

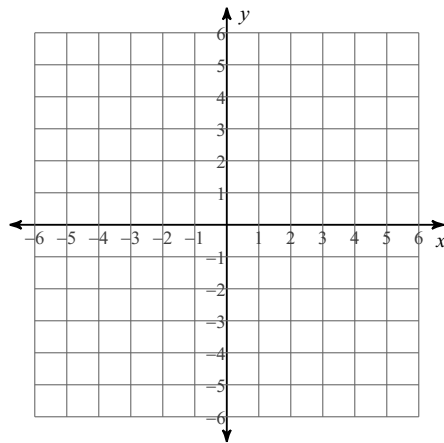


Sketch the graph of each linear inequality.

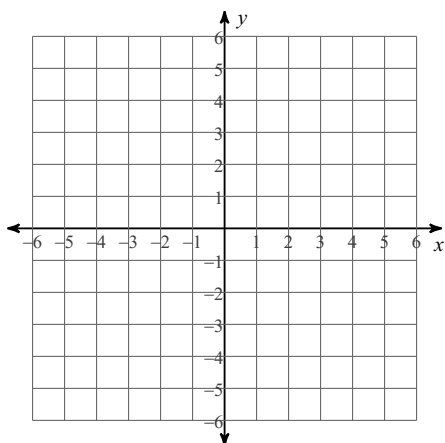
13)  $y \geq -\frac{3}{2}x + 3$



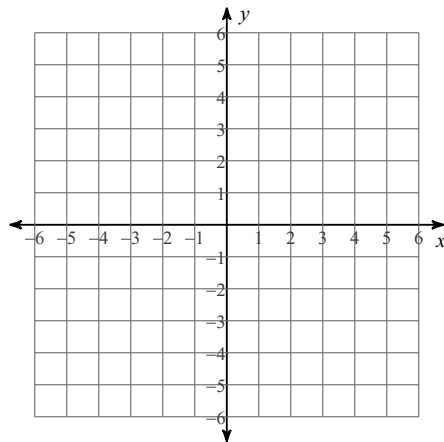
14)  $x < -2$



15)  $y \leq \frac{1}{5}x + 2$

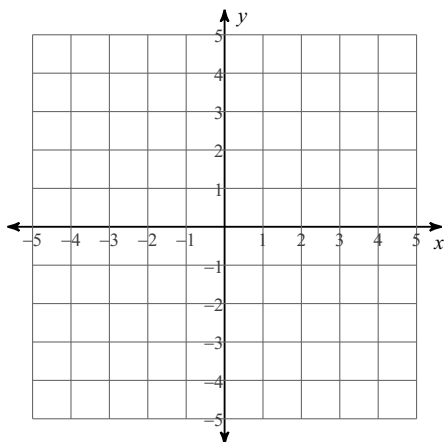


16)  $3x + 2y > 0$

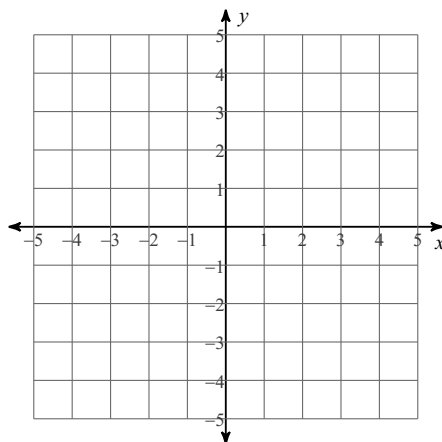


**Sketch the solution to each system of inequalities.**

17)  $y \geq -3x - 1$   
 $y < x + 3$

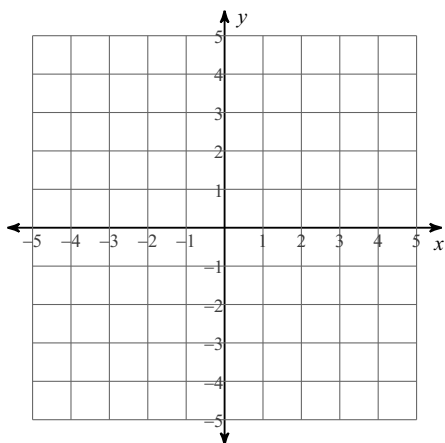


18)  $x \leq 3$   
 $4x - 3y \geq 3$

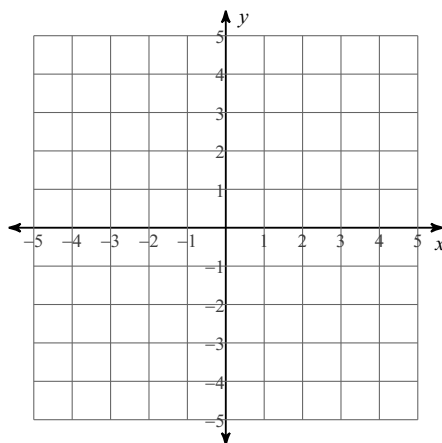


**Solve each system by graphing.**

19)  $y = x + 4$   
 $y = -7x - 4$



20)  $y = -x - 4$   
 $y = -x + 3$



**Solve each system by substitution.**

21)  $3x + 7y = 24$   
 $y = 6$

22)  $y = 8x - 4$   
 $y = -6x - 4$

23)  $8x + 2y = -3$   
 $4x + y = 3$

24)  $-4x - y = -13$   
 $4x + y = 13$

**Solve each system by elimination.**

$$\begin{aligned} 25) \quad & -4x + 2y = -28 \\ & 3x - 2y = 26 \end{aligned}$$

$$\begin{aligned} 26) \quad & -8x - 9y = -11 \\ & -10x - 9y = -7 \end{aligned}$$

$$\begin{aligned} 27) \quad & -12x - 3y = -12 \\ & -4x - y = -4 \end{aligned}$$

$$\begin{aligned} 28) \quad & -6x - 5y = -16 \\ & -5x - 3y = -4 \end{aligned}$$

**Write the slope-intercept form of the equation of the line described.**

29) through:  $(1, -2)$ , parallel to  $y = 2x + 5$

30) through:  $(-5, 5)$ , parallel to  $y = -\frac{4}{5}x + 5$

31) through:  $(1, 0)$ , perp. to  $y = x - 5$

32) through:  $(2, 3)$ , perp. to  $y = -\frac{1}{2}x - 2$

**Write the point-slope form of the equation of each line given the slope and y-intercept.**

33) Slope =  $-\frac{5}{2}$ , y-intercept = 5

34) Slope = 6, y-intercept = -1

# Answers to EOC Review #2

1)  $y = -\frac{3}{5}x + 3$

2)  $y = \frac{8}{7}x - 6$

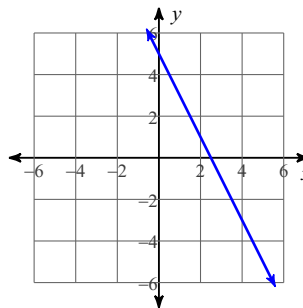
3)  $y = -\frac{5}{2}x + 3$

4)  $y = -x - 3$

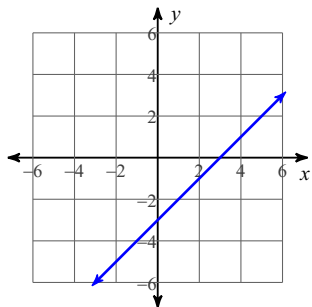
5)  $y = -\frac{5}{2}x - \frac{21}{2}$

6)  $y = -\frac{3}{2}x - 4$

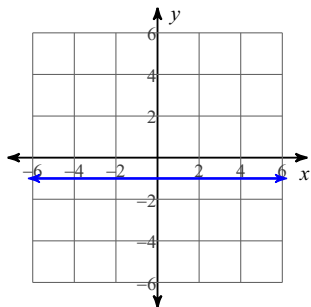
7)



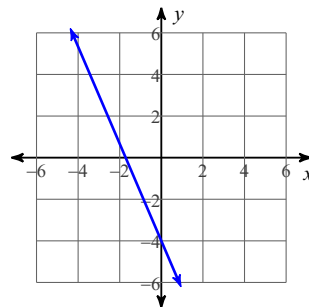
8)



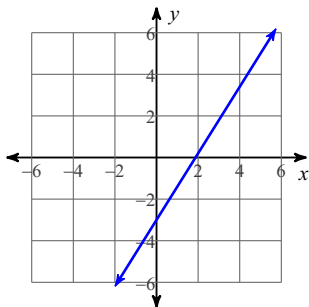
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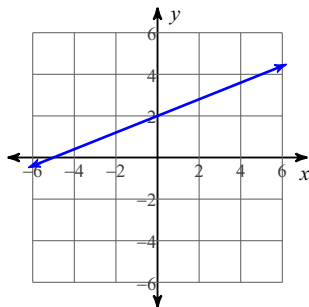
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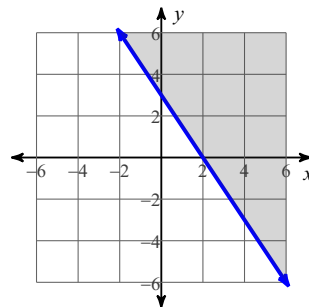
11)



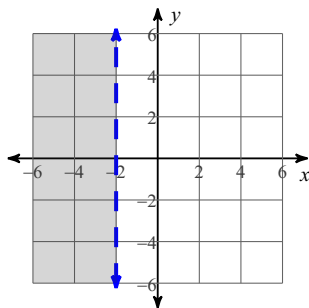
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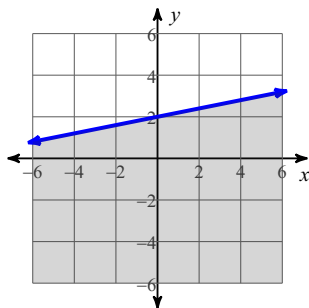
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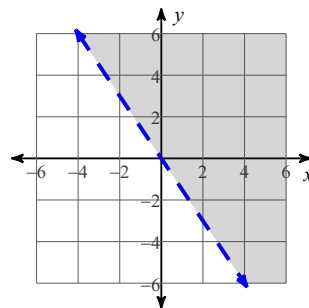
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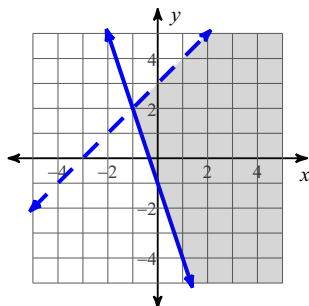
15)



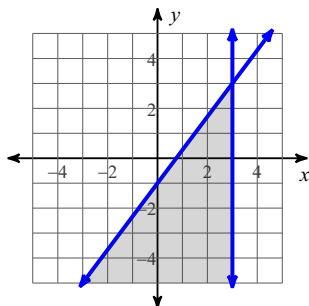
16)



17)



18)



19)  $(-1, 3)$

20) No solution

21)  $(-6, 6)$

22)  $(0, -4)$

23) No solution

24) Infinite number of solutions

25)  $(2, -10)$

26)  $(-2, 3)$

27) Infinite number of solutions

28)  $(-4, 8)$

29)  $y = 2x - 4$

$$30) y = -\frac{4}{5}x + 1$$

$$34) y + 1 = 6x$$

$$31) y = -x + 1$$

$$32) y = 2x - 1$$

$$33) y - 5 = -\frac{5}{2}x$$