

# Chapters 1 and 2 Review

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**Evaluate each using the values given.**

1)  $y^2 + (zy)^2$ ; use  $y = 2$ , and  $z = -3$

2)  $y + y(6 - y) + z$ ; use  $y = 4$ , and  $z = -3$

**Simplify each expression.**

3)  $-6(-6b - 3) - 6(5b - 1)$

- A)  $-73b + 7$       B)  $6b + 24$   
C)  $-63b + 7$       D)  $-57b + 7$

4)  $-7(8r - 4) - 8(1 + 9r)$

- A)  $-128r + 20$       B)  $-119r + 20$   
C)  $-109r + 20$       D)  $-129r + 20$

**Solve each equation.**

5)  $5(v - 8) = -16 + 8v$

- A)  $\{-8\}$       B)  $\{14\}$   
C)  $\{15\}$       D)  $\{-3\}$

6)  $3(1 - 7a) - 5a = 5a - 28$

- A)  $\{1\}$       B)  $\{-3\}$   
C)  $\{14\}$       D)  $\{3\}$

7)  $x + 5x = 9$

- A)  $\left\{\frac{3}{2}\right\}$       B)  $\{-1\}$   
C)  $\left\{-\frac{11}{6}\right\}$       D)  $\left\{1\frac{8}{9}\right\}$

8)  $\frac{8}{3}n + 1 - \frac{10}{3}n = \frac{2}{3}$

- A)  $\left\{\frac{1}{2}\right\}$       B)  $\left\{-\frac{14}{9}\right\}$   
C)  $\left\{-\frac{6}{5}\right\}$       D)  $\left\{4\frac{1}{5}\right\}$

9)  $7.72 = 0.4r + 2.2 - 5r$

- A)  $\{2.26\}$       B)  $\{-1.2\}$   
C)  $\{-4.8\}$       D)  $\{9.4\}$

10)  $1.08 = b + 4.4b$

- A)  $\{-0.1\}$       B)  $\{2\}$   
C)  $\{-7.8\}$       D)  $\left\{\frac{1}{5}\right\}$

11)  $5 + 5|2n + 8| = 15$

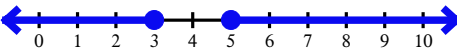
- A)  $\{-3, -5\}$       B)  $\{2\}$   
C)  $\left\{-\frac{1}{4}, 1\right\}$       D) No solution.

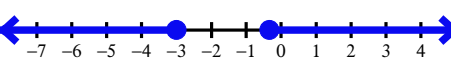
12)  $7 - 6|10m + 5| = -23$

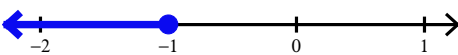
- A)  $\left\{0, -\frac{4}{7}\right\}$       B)  $\{0, -1\}$   
C)  $\left\{\frac{2}{3}, -2\right\}$       D)  $\{3, -1\}$

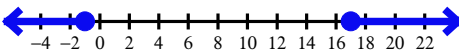
Solve each inequality and graph its solution.

13)  $6|8 - r| + 9 \geq 63$

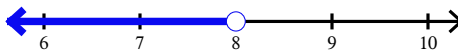
A)  $r \leq 3$  or  $r \geq 5$ : 


B)  $r \geq -\frac{1}{3}$  or  $r \leq -3$ : 

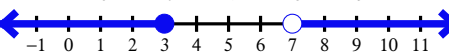
C)  $r \leq -1$ : 

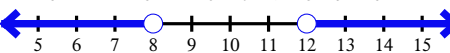
D)  $r \leq -1$  or  $r \geq 17$ : 

14)  $7 - 8|10 - n| < -9$

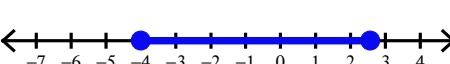
A)  $n < 8$ : 

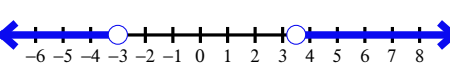
B)  $5 \leq n < 7$ : 

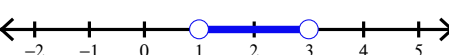
C)  $n \leq 3$  or  $n > 7$ : 

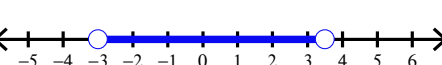
D)  $n < 8$  or  $n > 12$ : 

15)  $10 - 10|4x - 1| > -120$

A)  $-4 \leq x \leq \frac{18}{7}$ : 

B)  $x > \frac{7}{2}$  or  $x < -3$ : 

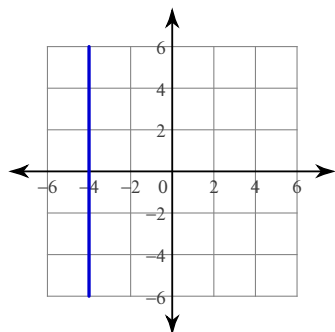
C)  $1 < x < 3$ : 

D)  $-3 < x < \frac{7}{2}$ : 

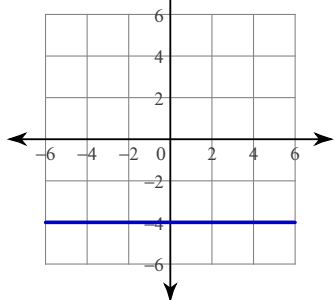
Sketch the graph of each line.

16)  $x = 4$

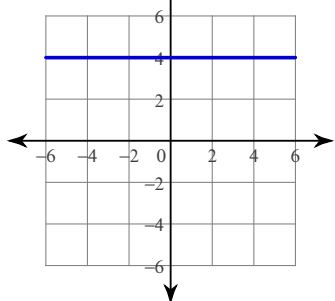
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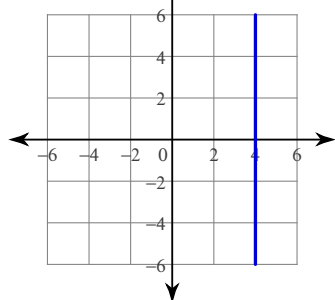
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C)

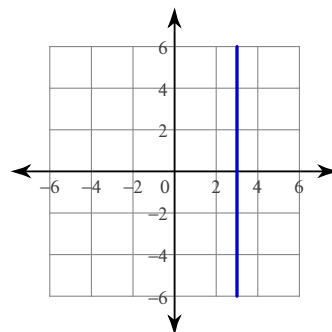


D)

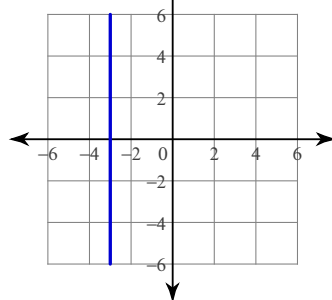


17)  $x = -3$

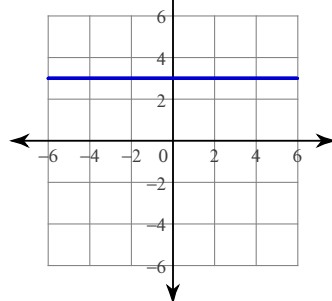
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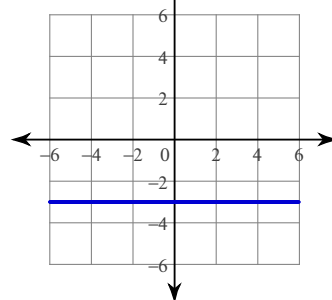
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C)

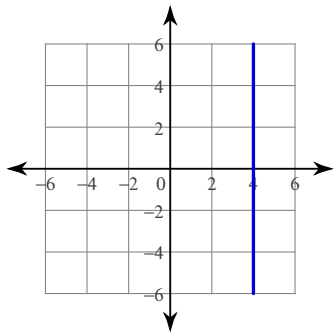


D)

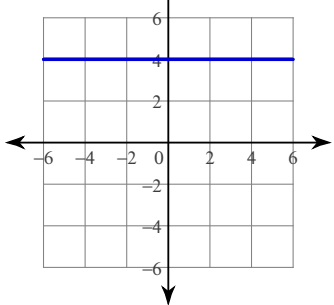


18)  $y = 4$

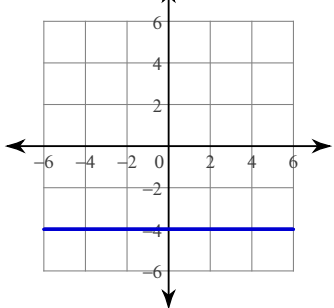
A)



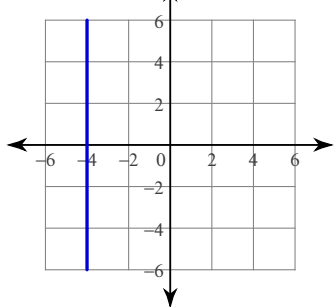
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C)

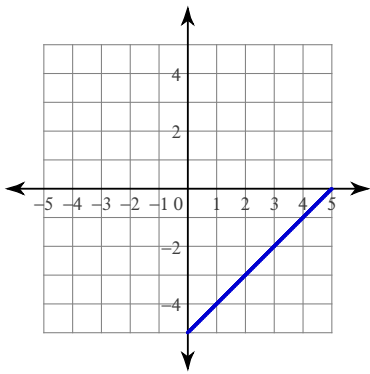


D)



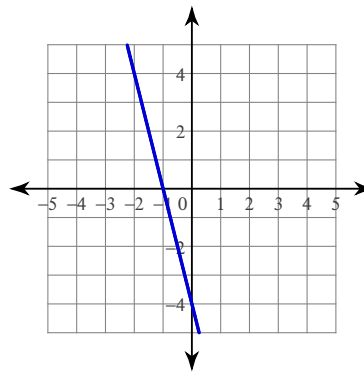
Write the slope-intercept form of the equation of each line.

19)



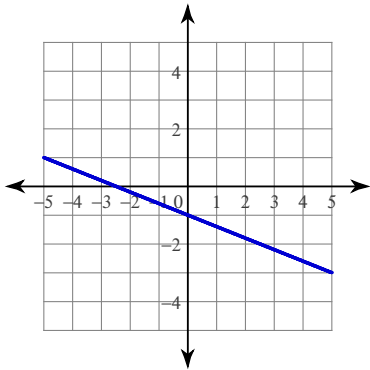
- A)  $y = x - 5$       B)  $y = 5x + 1$   
 C)  $y = 4x + 1$       D)  $y = -5x + 1$

20)



- A)  $y = 2x - 4$       B)  $y = x - 4$   
 C)  $y = -4x - 4$       D)  $y = -4x + 1$

21)



- A)  $y = -x + \frac{4}{5}$   
 B)  $y = -\frac{2}{5}x - 1$   
 C)  $y = -\frac{4}{5}x - 1$   
 D)  $y = \frac{4}{5}x - 1$

22)  $4x - y = 6$

- A)  $y = 4x - 6$       B)  $y = 2x + 4$   
 C)  $y = -6x + 4$       D)  $y = -5x + 4$

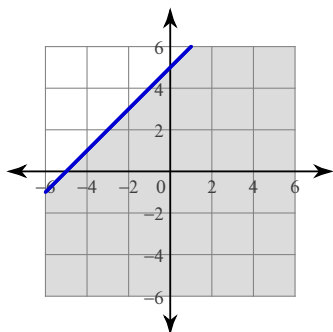
23)  $x + 2y = 12$

- A)  $y = -x + 6$   
 B)  $y = x + 6$   
 C)  $y = \frac{1}{2}x + 6$   
 D)  $y = -\frac{1}{2}x + 6$

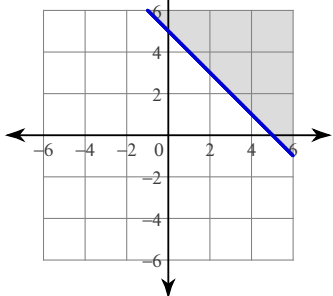
Sketch the graph of each linear inequality.

24)  $x + y \geq 5$

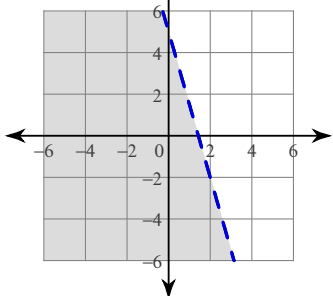
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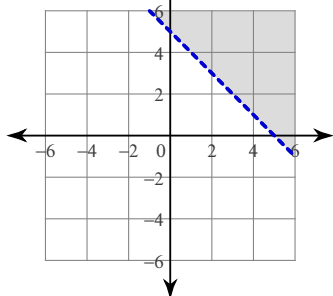
B)



C)

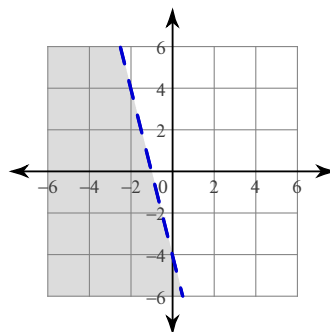


D)

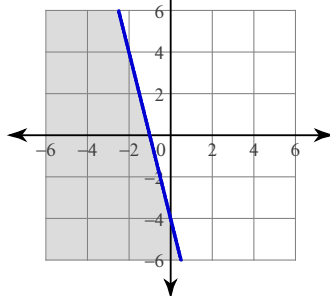


25)  $4x + y \leq -4$

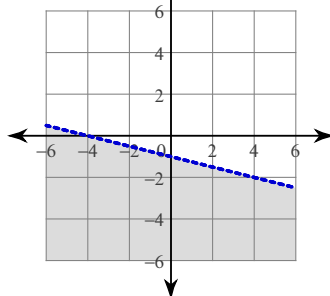
A)



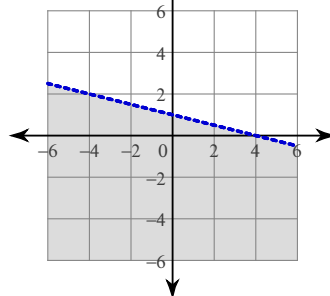
B)



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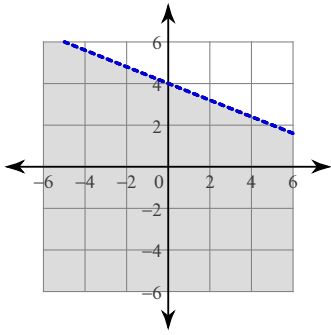


D)

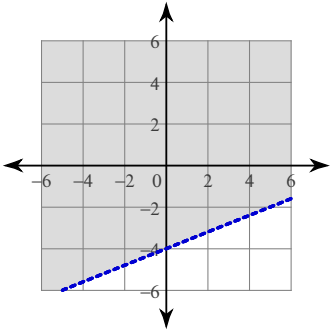


26)  $2x + 5y < 20$

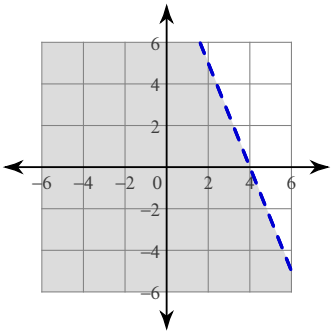
A)



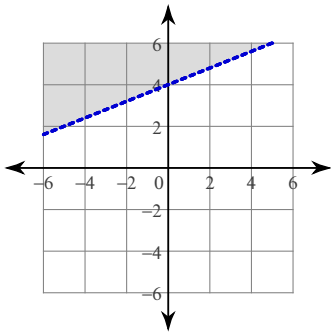
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C)



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40

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9

**Simplify each expression.**

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- A)  $-73b + 7$       \*B)  $6b + 24$   
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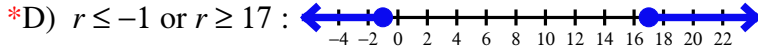
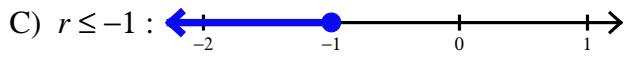
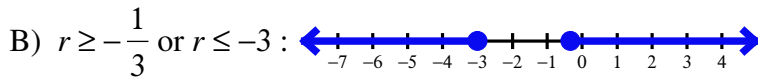
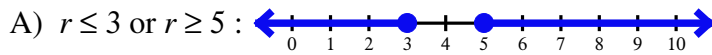
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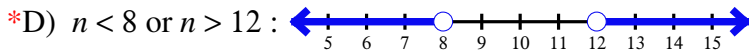
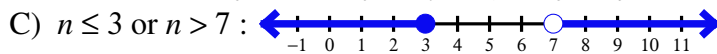
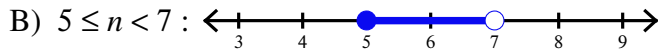
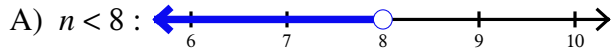


Solve each inequality and graph its solution.

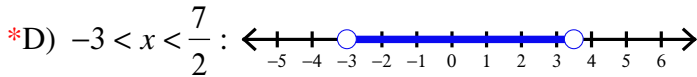
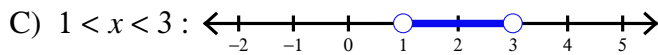
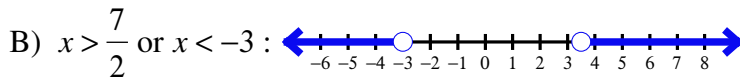
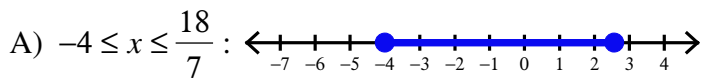
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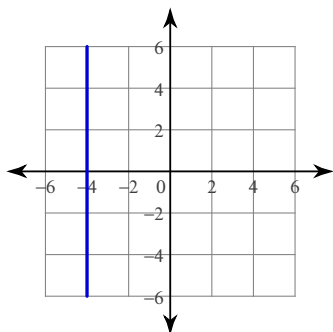
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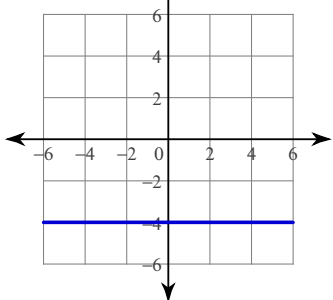
Sketch the graph of each line.

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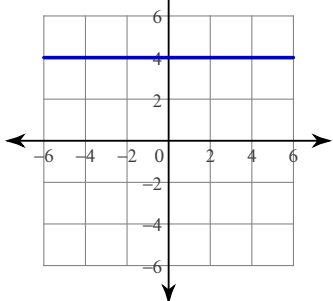
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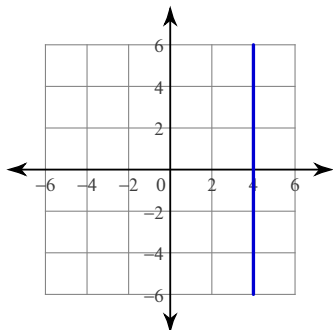
B)



C)

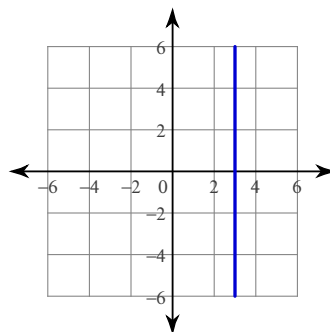


\*D)

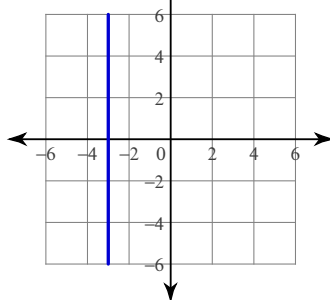


17)  $x = -3$

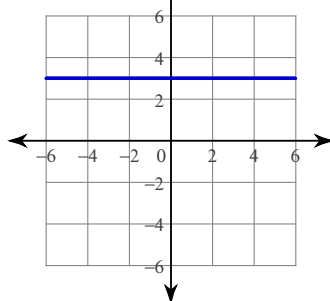
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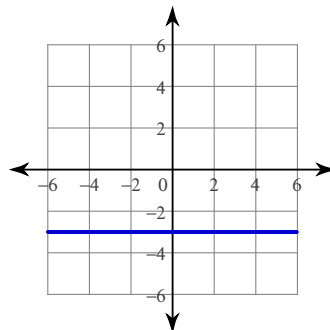
\*B)



C)

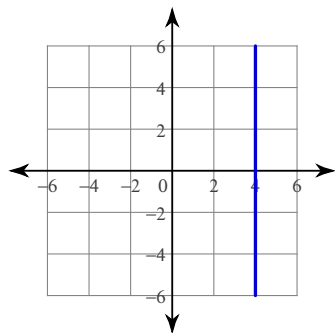


D)

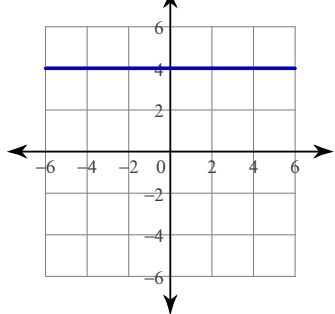


18)  $y = 4$

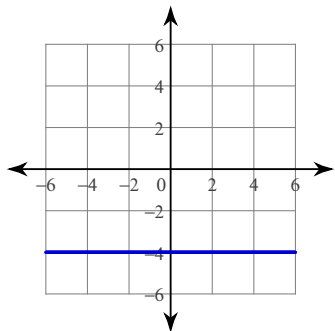
A)



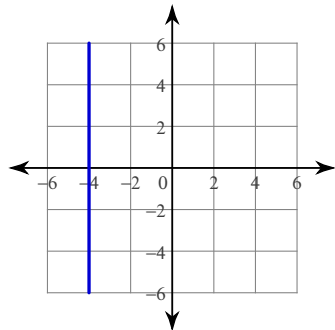
\*B)



C)

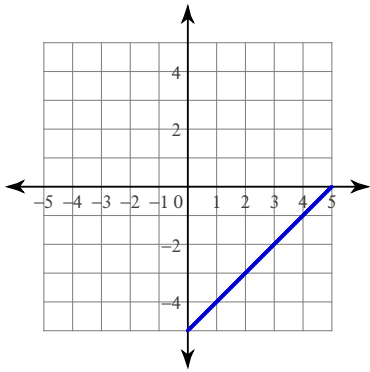


D)



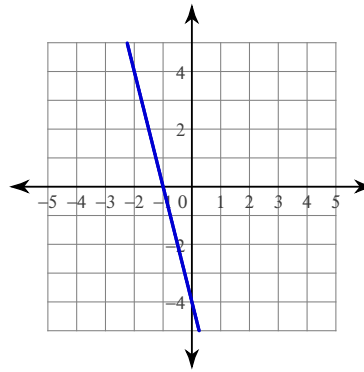
Write the slope-intercept form of the equation of each line.

19)



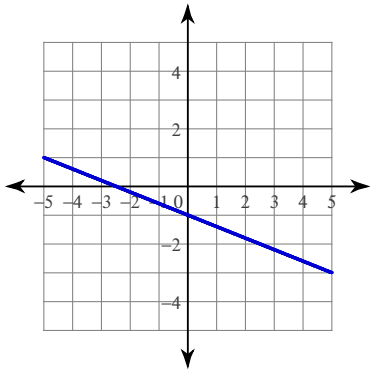
- \*A)  $y = x - 5$       B)  $y = 5x + 1$   
 C)  $y = 4x + 1$       D)  $y = -5x + 1$

20)



- A)  $y = 2x - 4$       B)  $y = x - 4$   
 \*C)  $y = -4x - 4$       D)  $y = -4x + 1$

21)



- A)  $y = -x + \frac{4}{5}$   
 \*B)  $y = -\frac{2}{5}x - 1$   
 C)  $y = -\frac{4}{5}x - 1$   
 D)  $y = \frac{4}{5}x - 1$

22)  $4x - y = 6$

- \*A)  $y = 4x - 6$       B)  $y = 2x + 4$   
 C)  $y = -6x + 4$       D)  $y = -5x + 4$

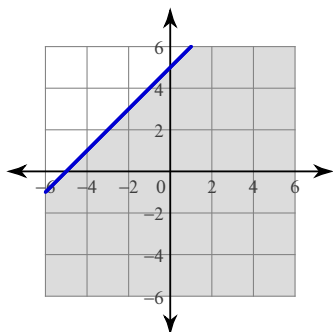
23)  $x + 2y = 12$

- A)  $y = -x + 6$   
 B)  $y = x + 6$   
 C)  $y = \frac{1}{2}x + 6$   
 \*D)  $y = -\frac{1}{2}x + 6$

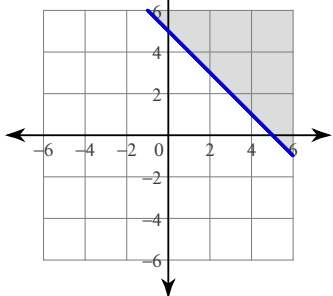
Sketch the graph of each linear inequality.

24)  $x + y \geq 5$

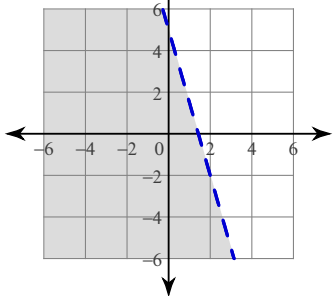
A)



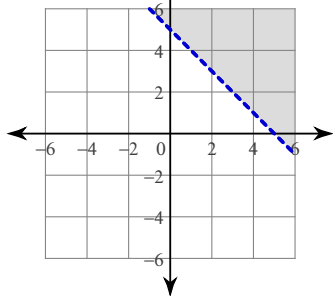
\*B)



C)

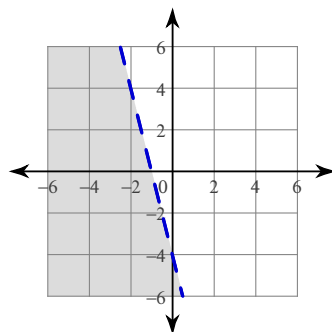


D)

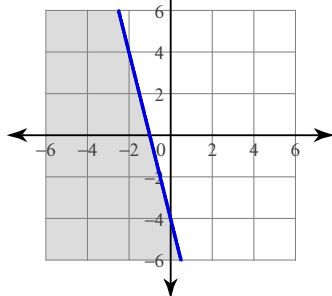


25)  $4x + y \leq -4$

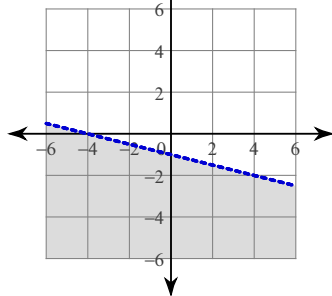
A)



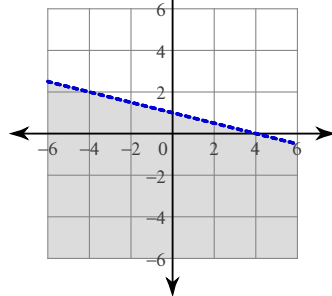
\*B)



C)

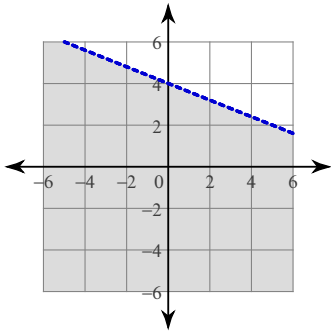


D)

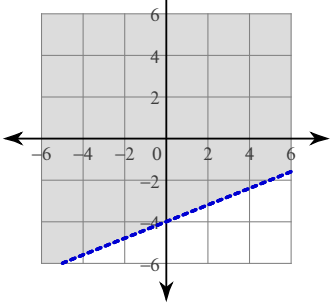


26)  $2x + 5y < 20$

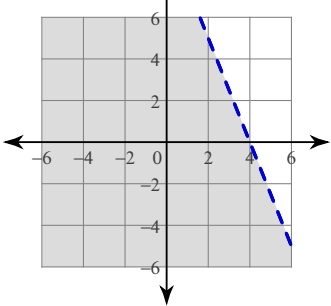
\*A)



B)



C)



D)

