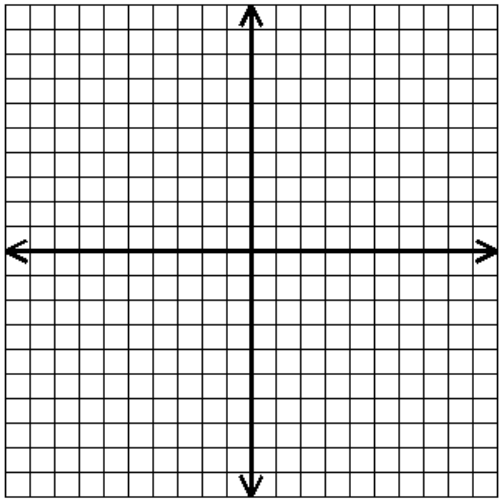
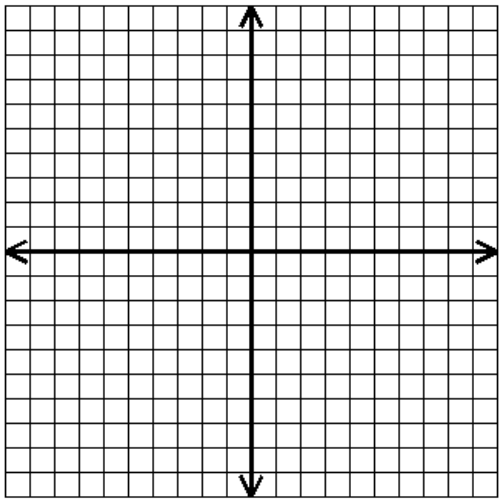
NAME_____DATE_____PER._____

Review: Graphing Two Variable Inequalities

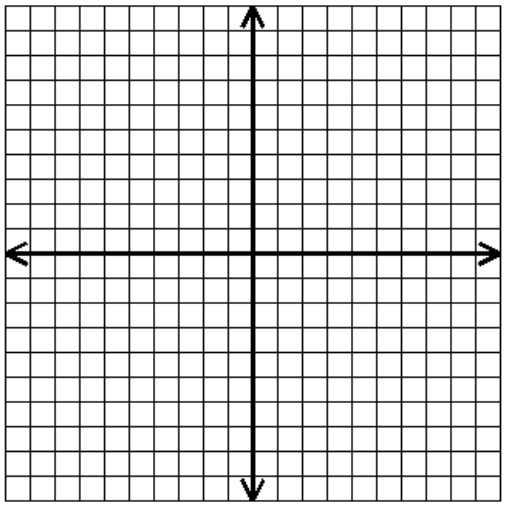
1. Graph $6x + 2y > -14$



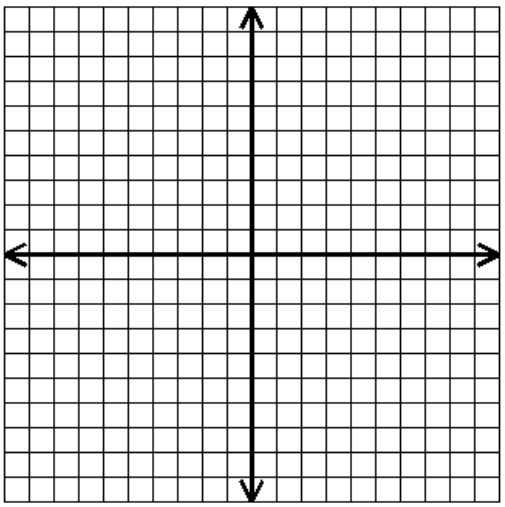
2. Graph $x + 5y < 25$



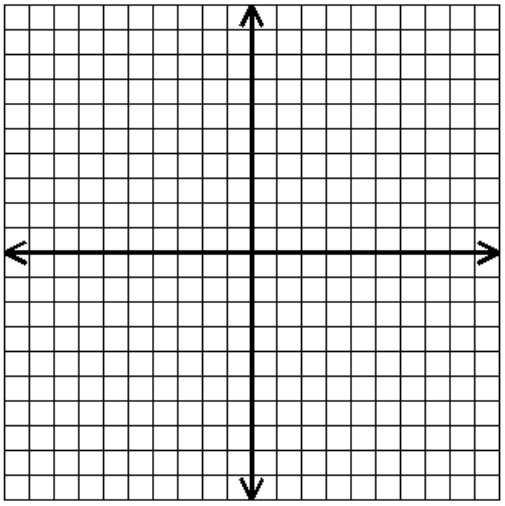
3. Graph $4x - 3y \leq -9$
   $y < 2x + 3$



4. Graph $x + 3 < -1$



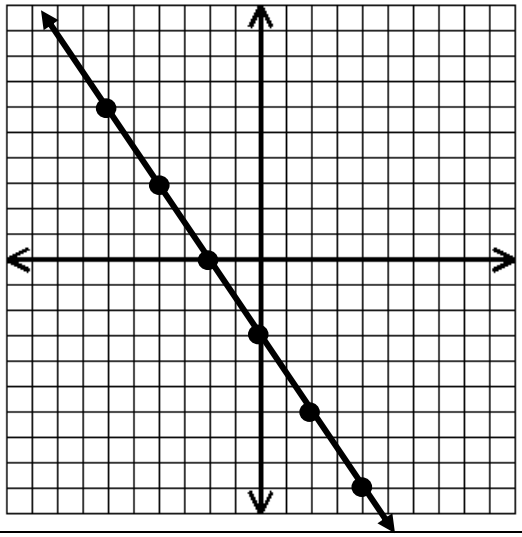
5. Graph $y - 6 \leq 0$



6. If (x, 4) is a solution to the equation $3x + 2y = 20$, what is the value of x?

7. If the point (5, y) is a solution to the equation $2x - 4y = 30$, what is the value of y?

8. Using the graph shown answer the following.

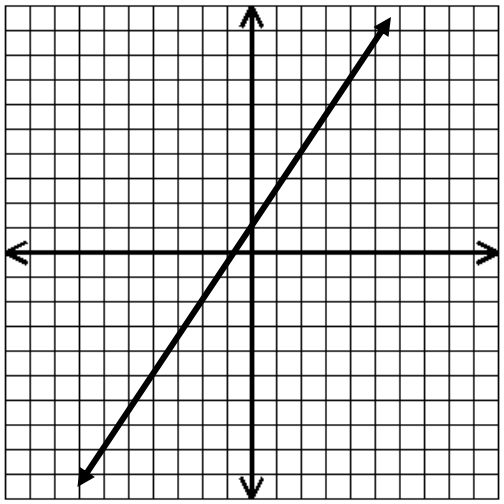


a) What is the y-intercept?

b) What is the slope?

c) What is the equation of the line?

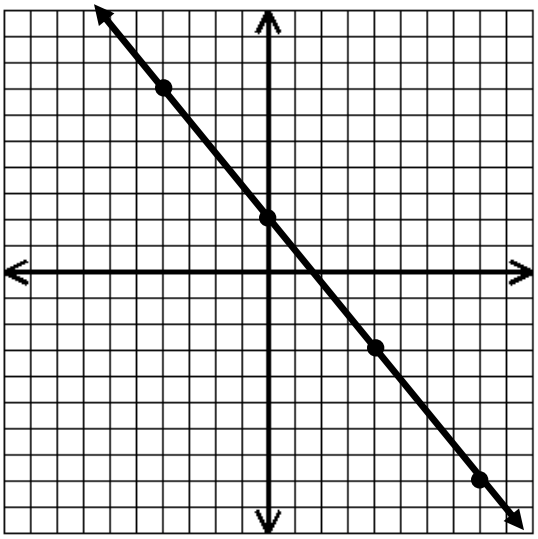
9. What is the equation of the graph shown?



10. What is the slope of a vertical line?

11. What is the slope of a horizontal line?

12. Determine the rate of change of the line shown.



A. $\frac{5}{4}$

B. $\frac{4}{5}$

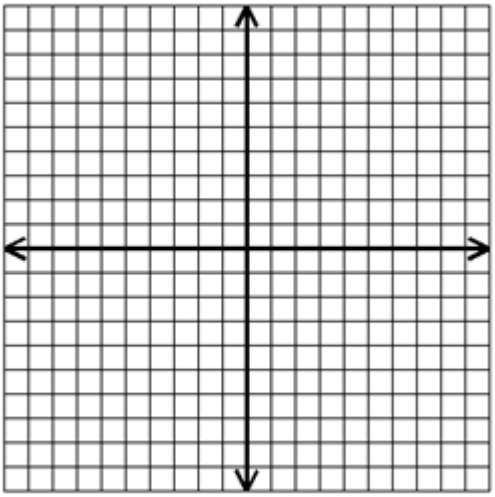
C. $-\frac{5}{4}$

D. $-\frac{4}{5}$

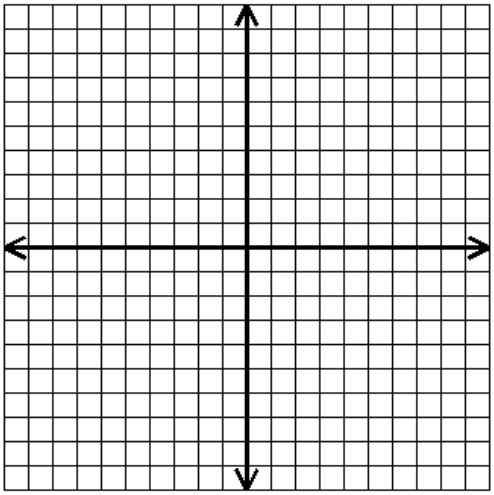
13. What is the y-intercept of $3x - 2y = 8$?

14. What is the slope of $4x + 2y = -10$?

15. Graph the inequality $y < 2x$.



16. Use the grid to graph $y < x + 4$. Which coordinate point represents a solution of this inequality?



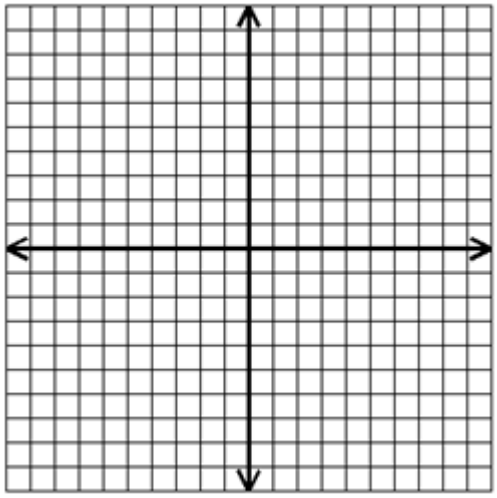
A. (-8, 2)

B. (2, 0)

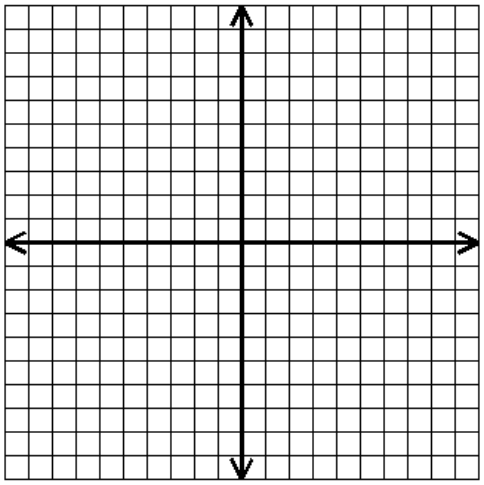
C. (-2, 2)

D. (0, 6)

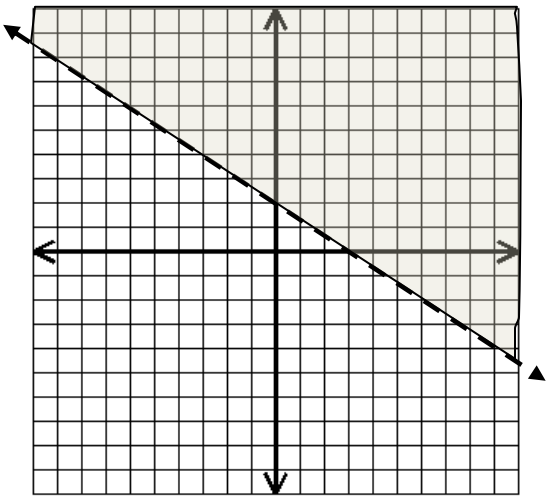
17. Write the linear function that includes the points (2, -6) and (-1, 3).



18. Solve and graph the inequality $4x - 3y \leq -12$



19. Which inequality is represented by this graph?



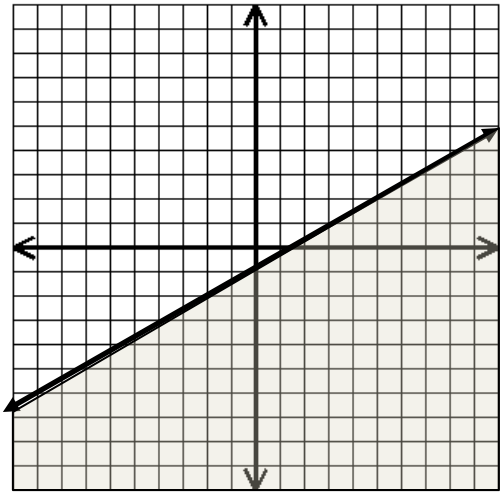
A. $y < -\frac{2}{3}x + 2$

C. $y < -\frac{3}{2}x + 2$

B. $y > -\frac{2}{3}x + 2$

D. $y > -\frac{3}{2}x + 2$

20. Which inequality represents the graph shown?



A. $y > \frac{3}{5}x - 1$

C. $y \leq \frac{3}{5}x - 1$

B. $y \geq \frac{3}{5}x - 1$

D. $y < \frac{3}{5}x - 1$

21. Which of the following relations is a function?

I. {(3, 4), (4, 5), (3, 6)}
II. {(3, 4), (4, 4), (5, 4)}
III. {(3, 6), (3, 5), (3, 4)}
IV. {(3, 6), (4, 5), (5, 3)}

A. I and II only

C. I, II, and III only

B. II and IV only

D. II and III only

Match each of the inequalities to the graphs shown.

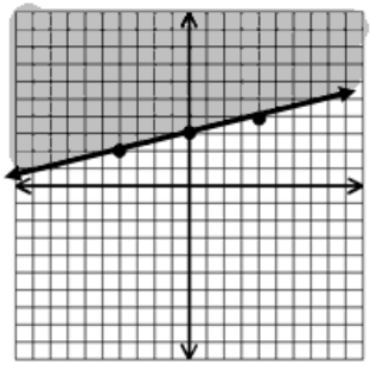
_____ 22. $y \geq -0.25x + 1$

_____ 23. $y \geq 0.25x + 3$

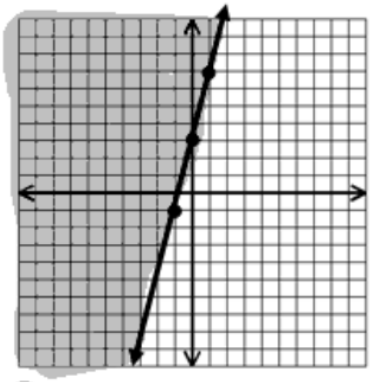
_____ 24. $y \geq -0.25x + 3$

_____ 25. $y \geq 4x + 3$

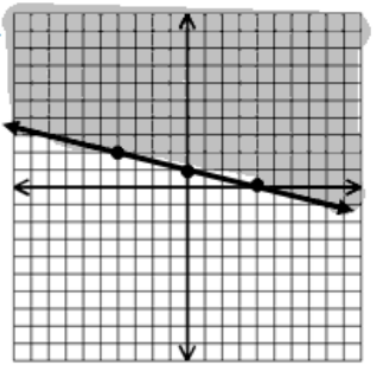
F.



H.



G.



J.