Name:_____ Period:_____ Score:_____

Graphing Inequalities in Two Variables ASSIGNMENT

Circle the point if it is part of the solution set for each inequality. Cross out points that are NOT solutions to the inequality.

1. Inequality: $3x + y \geq 6$, Possible solutions: (4,3), (-2, 4), (-5,-3), (3, -3)

2. Inequality: $y \geq x + 3$, Possible solutions: (6, 3), (-3, 2), (3, -2), (4, 3)

3. Inequality: $3x - 2y < 5$, Possible solutions: (4, -4), (3, 5), (5, 2), (-3, 4)

Match each inequality with its graph.

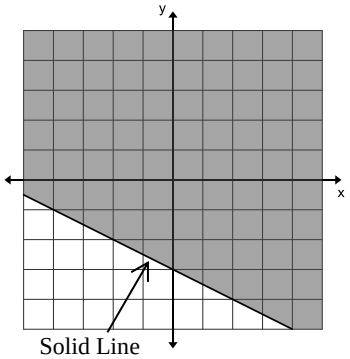
4. $5y - 2x \leq 10$

5. $3y > 3x + 9$

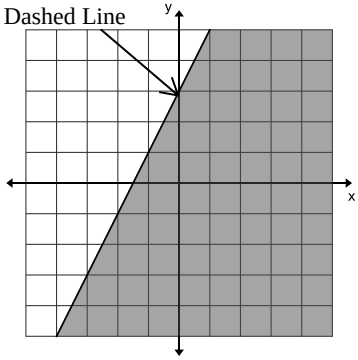
6. $y - 2x < 3$

7. $x + 2y \geq -6$

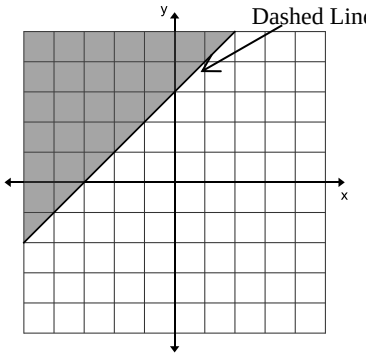
A.



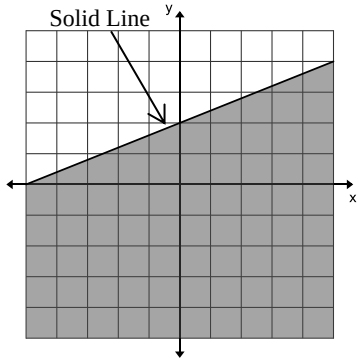
B.



C.

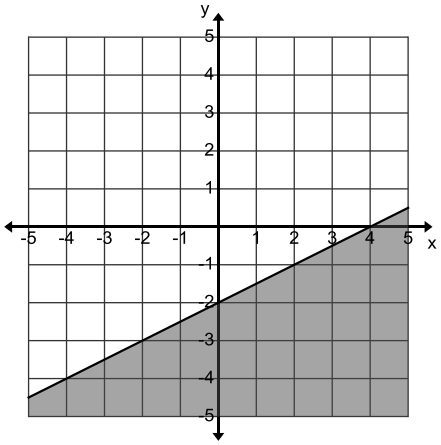


D.



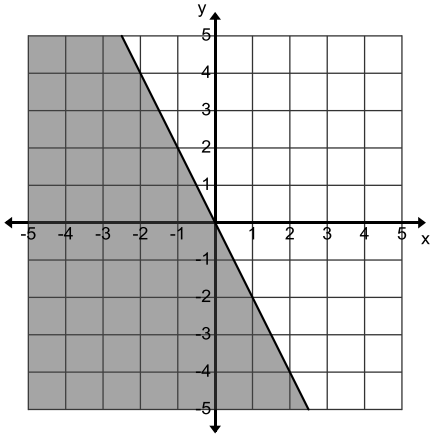
For each of the following graphs, write an inequality.

8.



Inequality:

9.

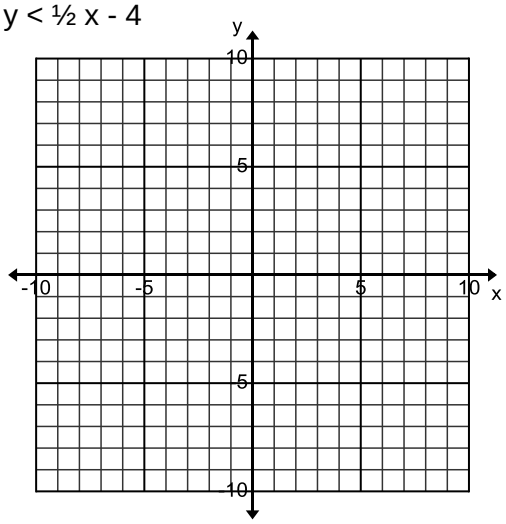


Inequality:

10. **MOVING** A moving van has an interior height of 7 feet (84 inches). You have boxes in 12 inch and 15 inch heights, and want to stack them as high as possible to fit. Define your variables, then write an inequality that represents this situation.

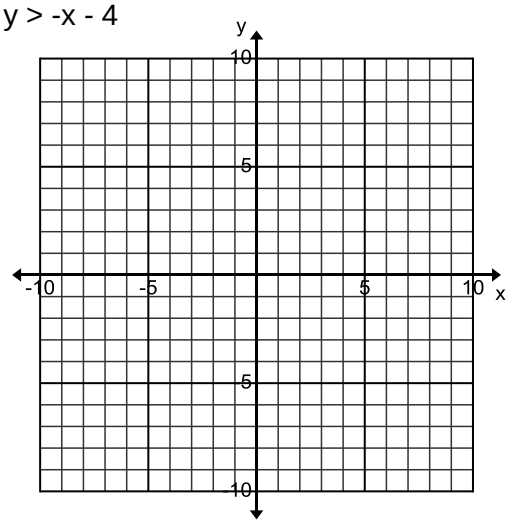
Graph each of the following inequalities. Don't forget to shade the correct section of the graph.

11. $y < \frac{1}{2}x - 4$



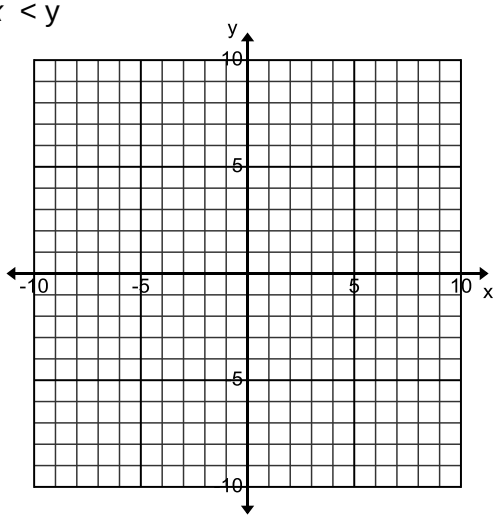
Two Solutions: _____

12. $y > -x - 4$

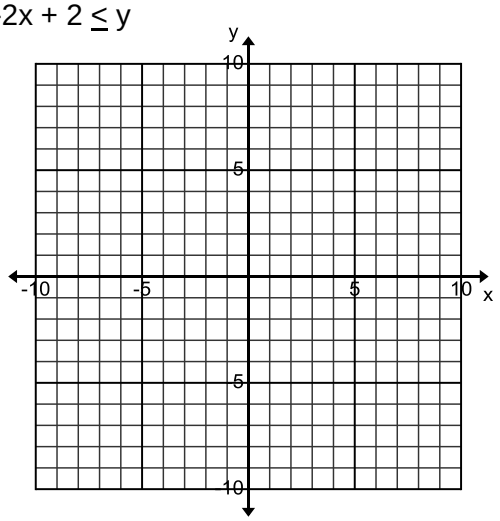


Two Solutions: _____

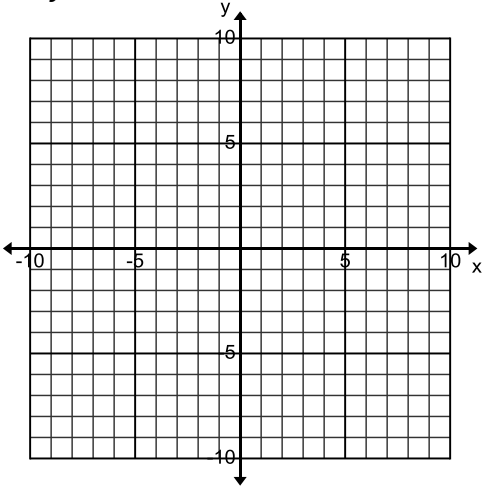
13. $x < y$



14. $-2x + 2 \leq y$



15. $2x - 5y < -10$



16. $3x + y < 1$