NAME _____ DATE _____ PERIOD _____

5-6 Practice

Graphing Inequalities in Two Variables

Determine which ordered pairs are part of the solution set for each inequality.

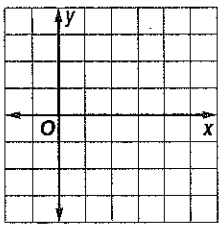
1. $3x + y \geq 6$, $\{(4, 3), (-2, 4), (-5, -3), (3, -3)\}$

2. $y \geq x + 3$, $\{(6, 3), (-3, 2), (3, -2), (4, 3)\}$

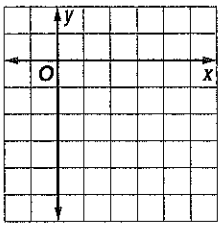
3. $3x - 2y < 5$, $\{(4, -4), (3, 5), (5, 2), (-3, 4)\}$

Graph each inequality.

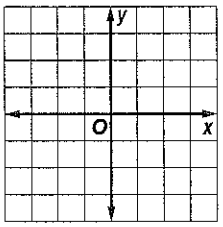
4. $2y - x < -4$



5. $2x - 2y \geq 8$

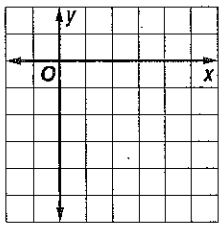


6. $3y > 2x - 3$

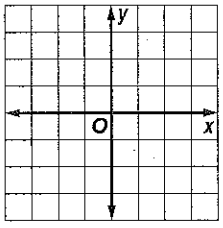


Use a graph to solve each inequality.

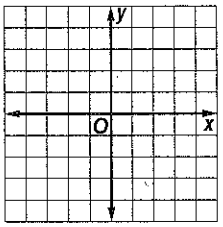
7. $-5 \leq x - 9$



8. $6 > \frac{2}{3}x + 5$



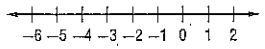
9. $\frac{1}{2} > -2x + \frac{7}{2}$

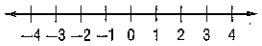


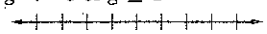
5-4 Practice

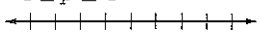
Solving Compound Inequalities

Graph the solution set of each compound inequality.

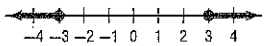
1. $-4 \le n \le 1$ 

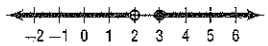
2. $x > 0$ or $x < 3$ 

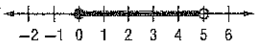
3. $g < -3$ or $g \ge 4$ 

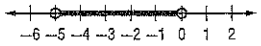
4. $-4 \le p \le 4$ 

Write a compound inequality for each graph.

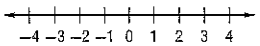
5. 

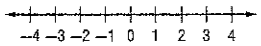
6. 

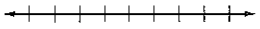
7. 

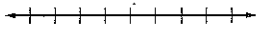
8. 

Solve each compound inequality. Then graph the solution set.

9. $k - 3 < -7$ or $k + 5 \ge 8$ 

10. $-n < 2$ or $2n - 3 > 5$ 

11. $5 < 3h + 2 \le 11$ 

12. $2c - 4 > -6$ and $3c + 1 < 13$ 

Define a variable, write an inequality, and solve each problem. Check your solution.

13. Two times a number plus one is greater than five and less than seven.

14. A number minus one is at most nine, or two times the number is at least twenty-four.

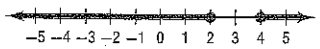
NAME _____ DATE _____ PERIOD _____

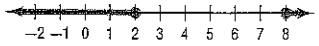
5-5 Practice

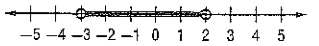
Inequalities Involving Absolute Value

Match each open sentence with the graph of its solution set.

1. $|x - 3| \ge 1$
2. $|2x + 1| < 5$
3. $|5 - x| \ge 3$

a. 

b. 

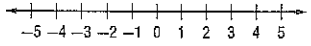
c. 

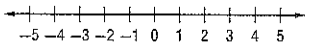
Express each statement using an inequality involving absolute value.

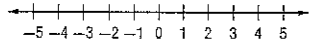
4. The height of the plant must be within 2 inches of the standard 13-inch show size.

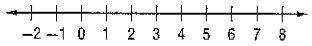
5. The majority of grades in Sean's English class are within 4 points of 85.

Solve each inequality. Then graph the solution set.

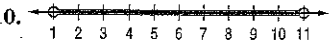
6. $|2z - 9| \le 1$ 

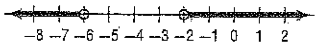
7. $|3 - 2r| > 7$ 

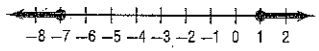
8. $|3t + 6| < 9$ 

9. $|2g - 5| \ge 9$ 

Write an open sentence involving absolute value for each graph.

10. 

11. 

12. 

13.