

## Absolute Value Extra Practice

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation.**

1)  $|2 - 10x| - 8 = 30$

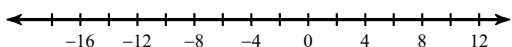
2)  $-7|-x + 4| = -35$

3)  $2|n - 3| - 2 = 20$

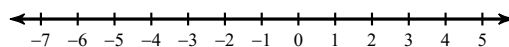
4)  $2 + 3|-4x| = 110$

**Solve each inequality and graph its solution.**

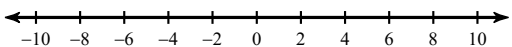
5)  $|2b + 7| + 5 > 30$



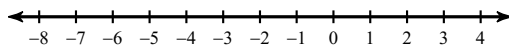
6)  $-8|6 - 6a| \leq -48$



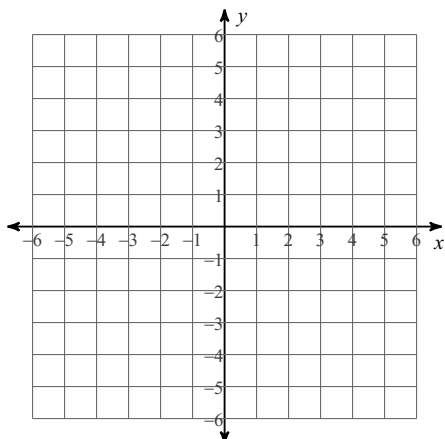
7)  $6\left|\frac{b}{7}\right| - 5 \leq 1$



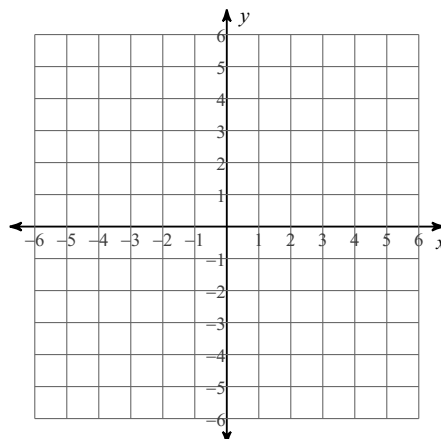
8)  $1 + 8|-8n| < 65$

**Sketch the graph of each linear inequality.**

9)  $y < 3x - 4$

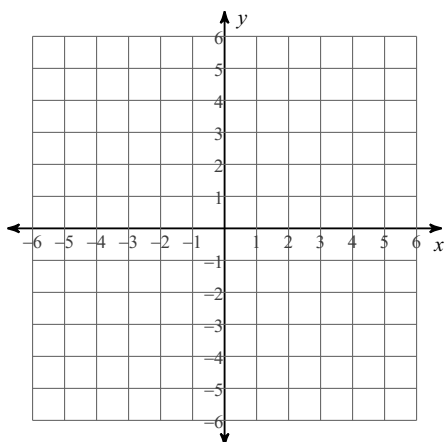


10)  $x - y \leq -3$

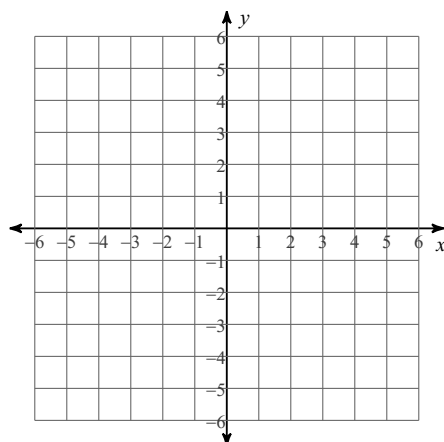


Graph each equation.

11)  $y = 2|x - 1| - 2$

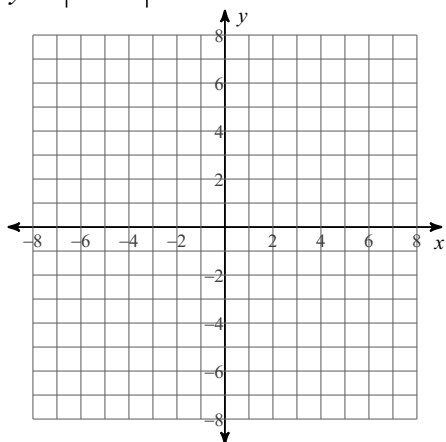


12)  $y = -3|x + 2| - 1$

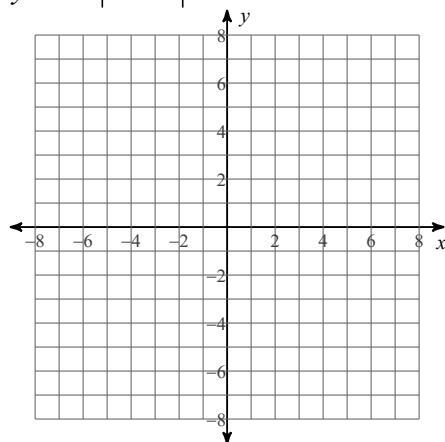


For each of the following a) list the transformations from the parent graph, b) state the vertex, and c) graph the inequality

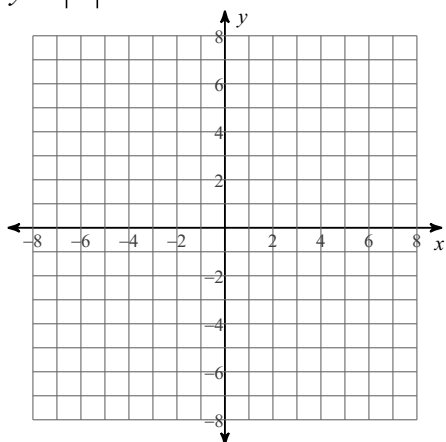
13)  $y \geq |x + 3| - 4$



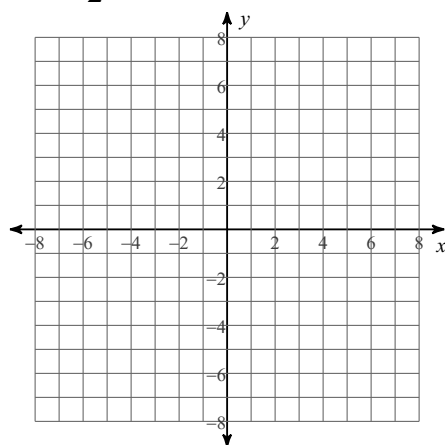
14)  $y < -2|x - 1| + 3$



15)  $y < |x| + 4$



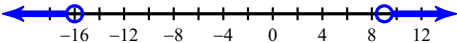
16)  $y \leq -\frac{1}{2} \cdot |x + 2| - 1$

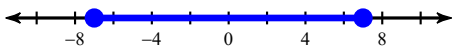


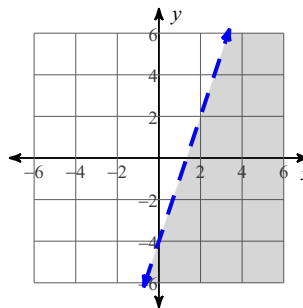
# Answers to Absolute Value Extra Practice (ID: 1)

1)  $\left\{-\frac{18}{5}, 4\right\}$

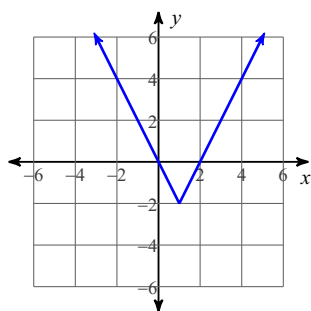
3)  $\{14, -8\}$

5)  $b > 9$  or  $b < -16$  : 

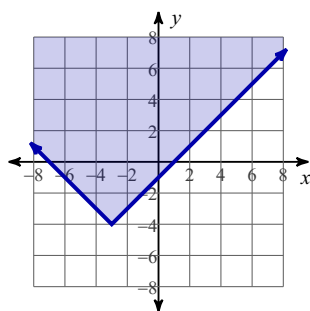
7)  $-7 \leq b \leq 7$  :  9)



11)



13)



15)

