**Algebra 1**
**9.8 Homework**

# Graphing Quadratic Inequalities Worksheet

**Name**_____
**Date**_____

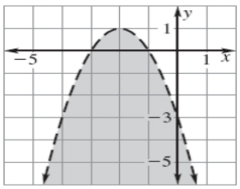
***Use substitution to decide whether the ordered pair is a solution of the inequality.***

1. $y < 3x^2 - 8x$; (2, -1)
2. $y \leq x^2 - 5x - 6$; (0, -10)
3. $y \geq -x^2 + 2x - 3$; (-3, 0)
4. $y > -8x^2 + 4x - 6$; (-1, -2)

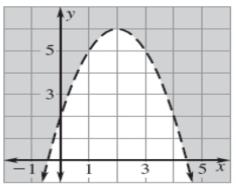
***Use the inequality symbols and shading to match the graph with its inequality.***

5. $y > -x^2 + 4x + 2$
6. $y \geq \frac{1}{2}x^2 - 5$
7. $y < -x^2 - 4x - 3$
8. $y \leq -x^2 - 2$
9. $y \geq x^2 - 3x + 1$
10. $y < 3x^2 + 9x - 1$

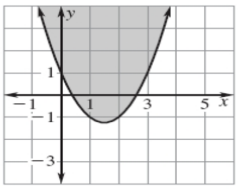
A.



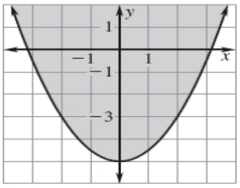

B.



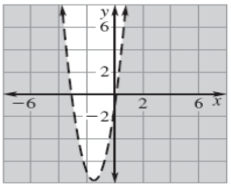

C.



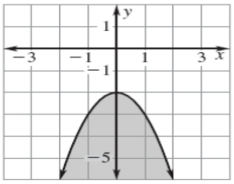

D.




E.

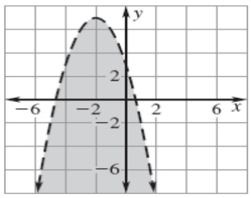



F.




***Use the following graphs to identify A) Two points that <u>are</u> solutions and B) Two points that <u>are not</u> solutions.***

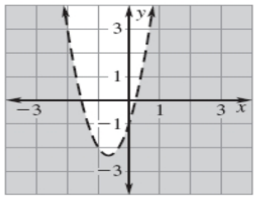
11.




<u>Solutions:</u>

<u>Not Solutions:</u>

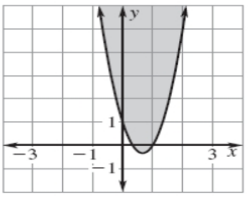
12.




<u>Solutions:</u>

<u>Not Solutions:</u>

13.




<u>Solutions:</u>

<u>Not Solutions:</u>