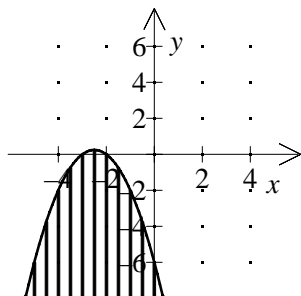


NAME: _____

P.I. A2.A.4: Solve quadratic inequalities in one and two variables, algebraically and graphically

1. Which quadratic inequality is graphed below?



- [A] $y < x^2 + 5x - 6$ [B] $y > -x^2 - 5x + 6$
[C] $y \geq -x^2 - 5x - 6$ [D] $y \leq -x^2 - 5x - 6$
[E] $y \geq x^2 - 5x - 6$

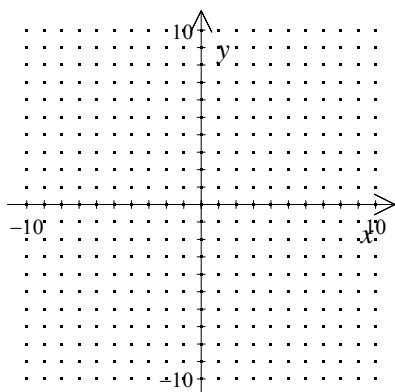
[1] _____

2. Solve the inequality and give the solution in set builder notation. $x^2 + x - 42 < 0$

- [A] $\{x \mid x < -7 \text{ or } x > 6\}$
[B] $\{x \mid -7 < x < 6\}$
[C] $\{x \mid x < -6 \text{ or } x > 7\}$
[D] $\{x \mid -6 < x < 7\}$

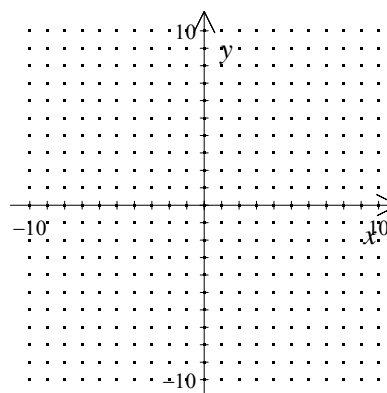
[2] _____

3. Graph: $y > x^2 - x - 6$



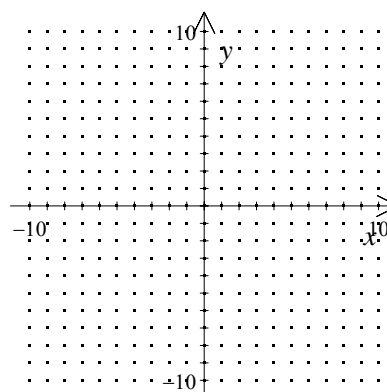
[3] _____

4. Graph: $y > x^2 - 1$



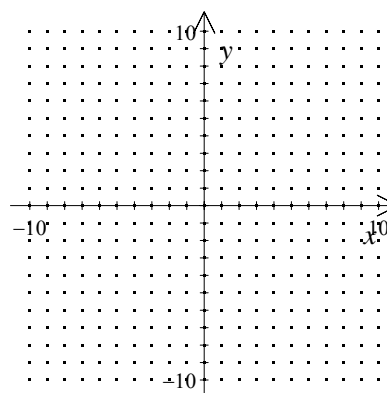
[4] _____

5. Graph: $y > x^2 - 2x - 3$



[5] _____

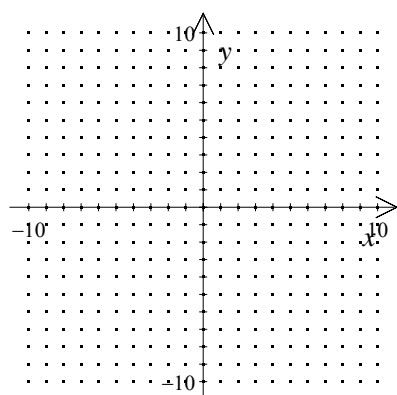
6. Graph: $y > -x^2 - 3x - 2$



[6] _____

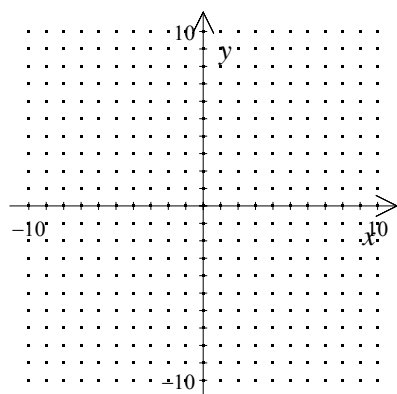
NAME: _____

7. Graph: $y > -x^2 - 4x - 4$



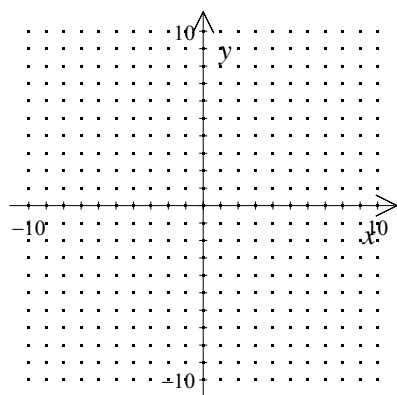
[7] _____

8. Graph: $y > x^2 + 2x + 1$



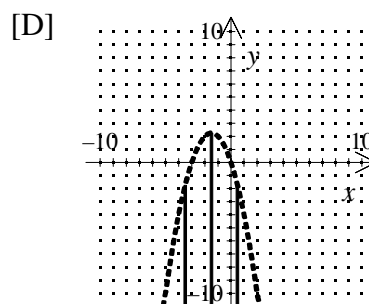
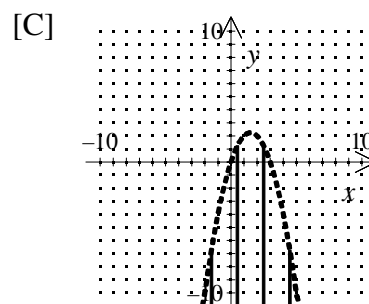
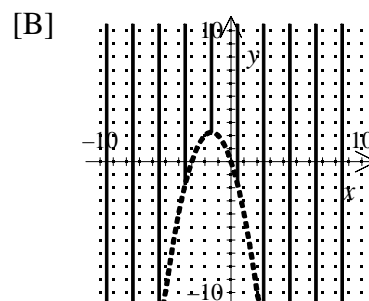
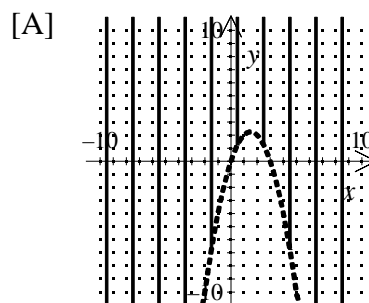
[8] _____

9. Graph: $y > x^2 + 4x + 3$



[9] _____

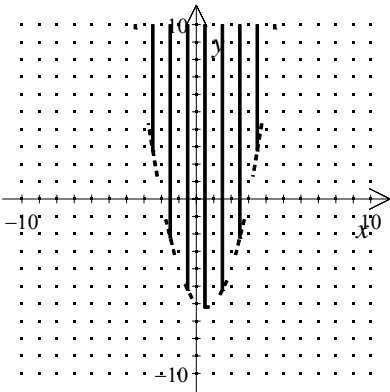
10. Graph: $y < -x^2 + 3x$



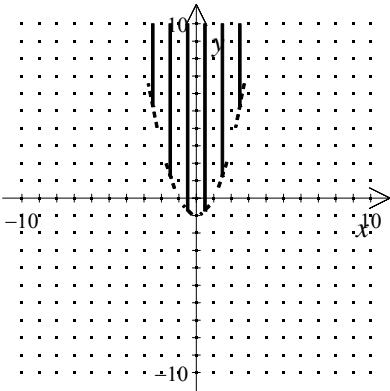
[10] _____

[1] D

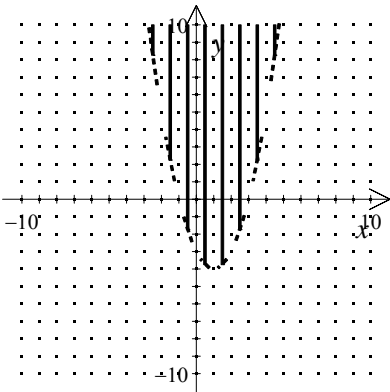
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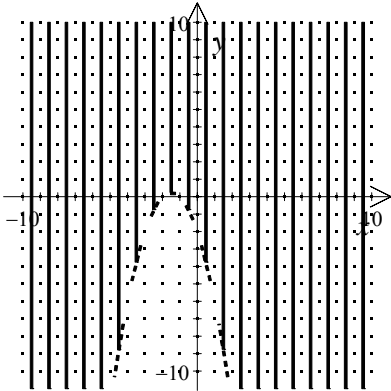
[3] _____



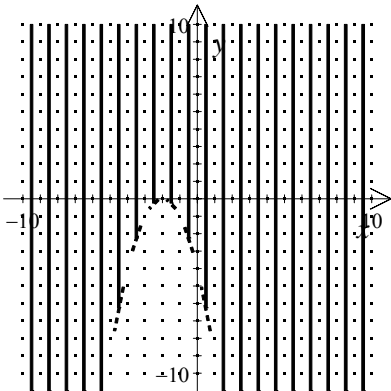
[4] _____



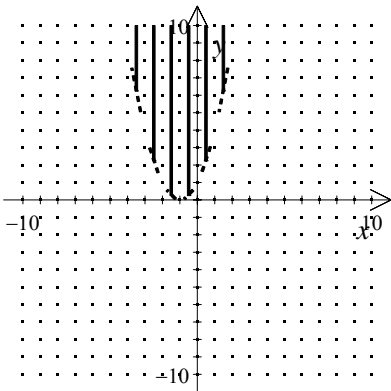
[5] _____



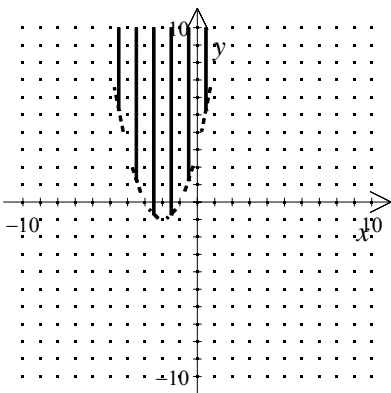
[6] _____



[7] _____



[8] _____



[9] _____

[10] C