Algebra 1 - Mr. Allen-Black & Mrs. Gulamali Name_____

Quadratic Equations/Inequalities from Standard Form Date_____ Period____

CLASS EXAMPLES: Find the vertex of each parabola, then write the equation in vertex form.

1) $y = x^2 - 6x + 7$

2) $y = 3x^2 - 24x + 51$

Find the vertex of each parabola, then write the equation in vertex form.

3) $y = -2x^2 + 4x - 6$

4) $y = x^2 + 6x + 6$

5) $y = -x^2 + 2x - 3$

6) $y = -3x^2 + 12x - 16$

7) $y = 2x^2 + 4x + 4$

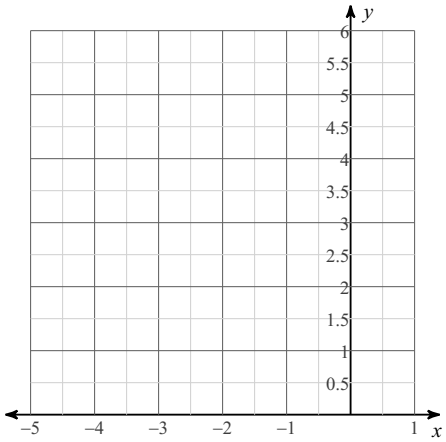
8) $y = x^2 - 8x + 13$

9) $y = 2x^2 - 16x + 33$

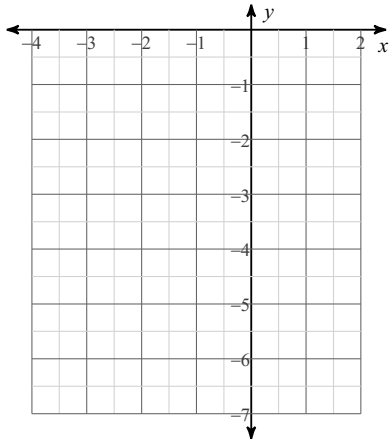
10) $y = x^2 - 2x + 4$

Sketch the graph of each function.

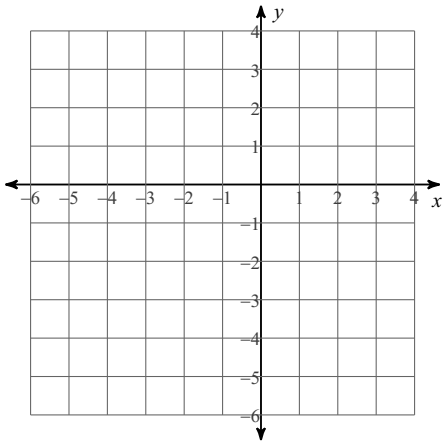
11) $y = x^2 + 6x + 10$



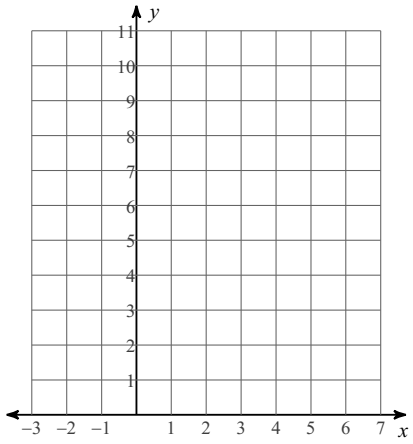
12) $y = -x^2 - 4x - 6$



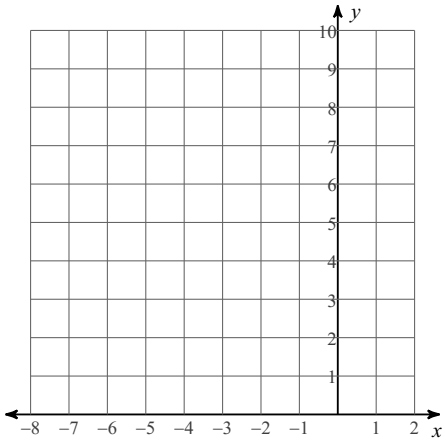
13) $y = -2x^2 + 8x - 5$



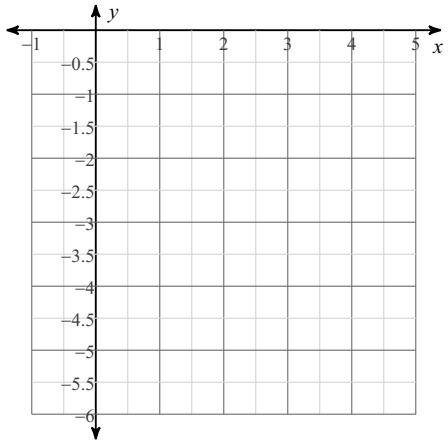
14) $y = 2x^2 - 8x + 10$



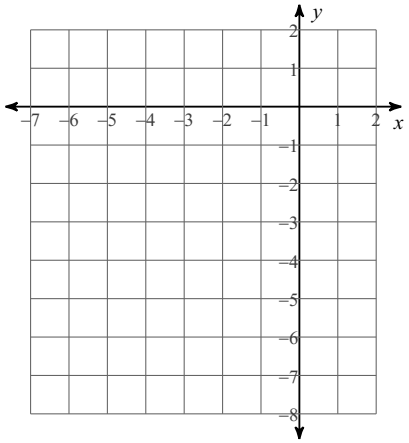
15) $y = 2x^2 + 12x + 19$



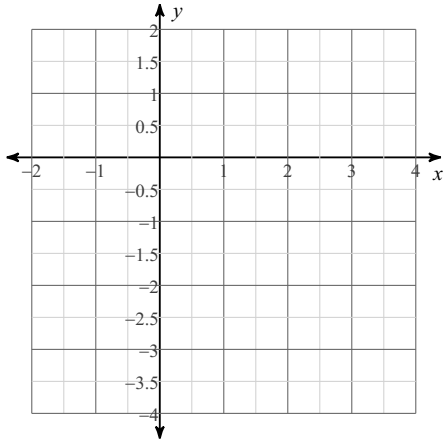
16) $y = -x^2 + 2x - 2$



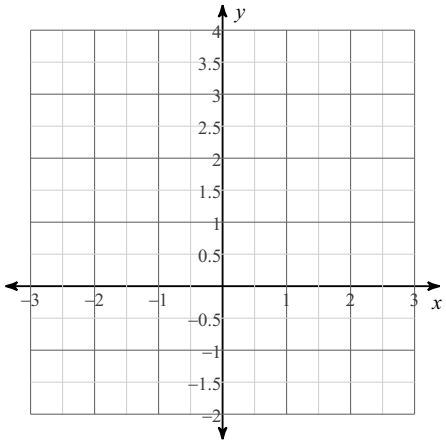
17) $y = -2x^2 - 16x - 31$



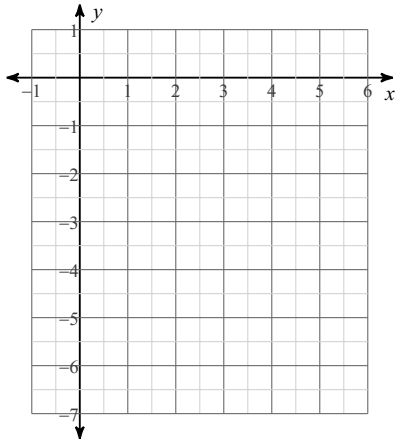
18) $y = x^2 - 2x - 2$



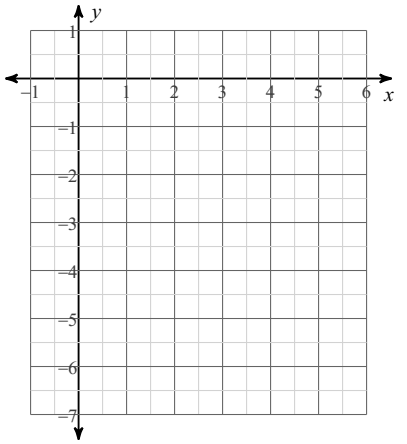
19) $y < -x^2 + 2x + 2$



20) $y \geq -x^2 + 8x - 17$



21) $y \leq -\frac{1}{2}x^2 + 4x - 11$



22) $y \geq x^2 - 6x + 6$