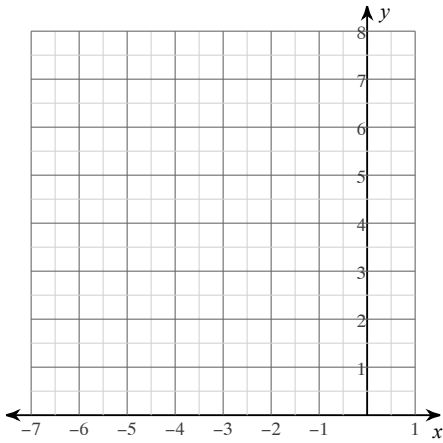


4.4 Completing the Square - Part 2

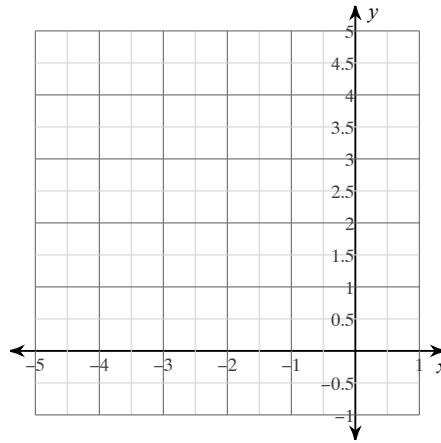
Date _____ Period _____

Sketch the graph of each function.

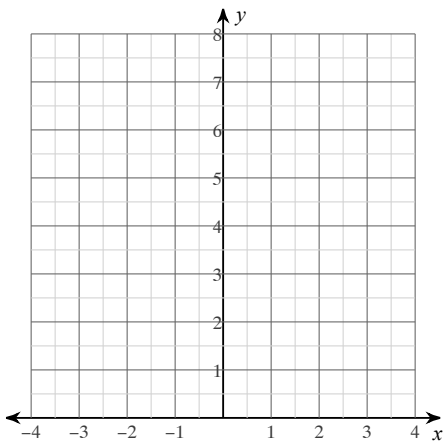
1) $y = x^2 + 6x + 12$



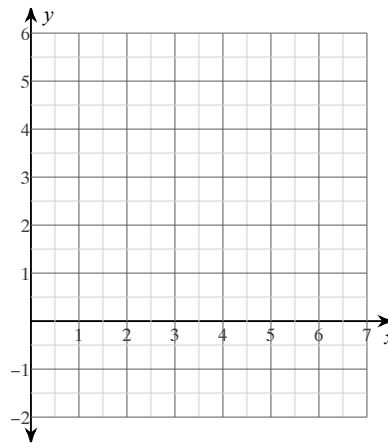
2) $y = -x^2 - 6x - 5$



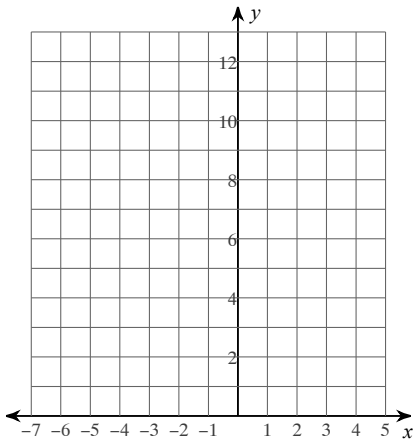
3) $y = x^2 + 2x + 4$



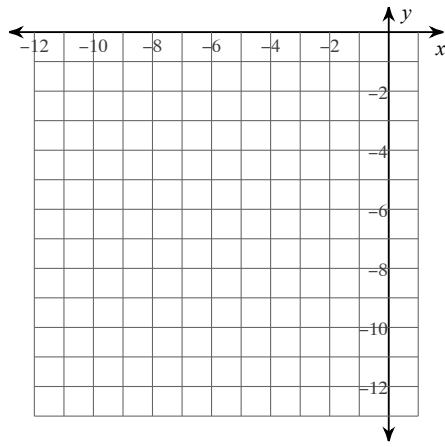
4) $y = -x^2 + 8x - 12$



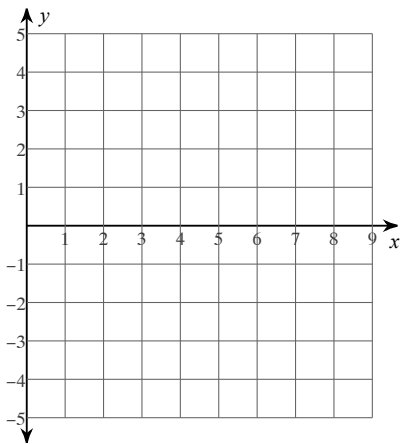
5) $y = 2x^2 - 8x + 12$



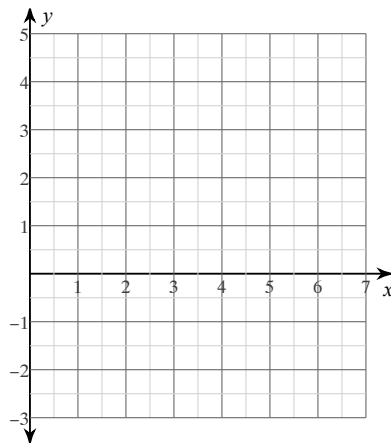
6) $y = -2x^2 - 16x - 36$



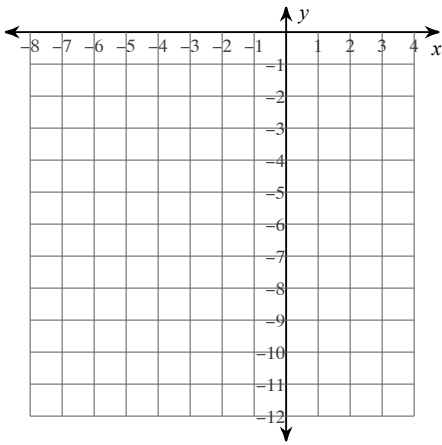
7) $y = 2x^2 - 16x + 28$



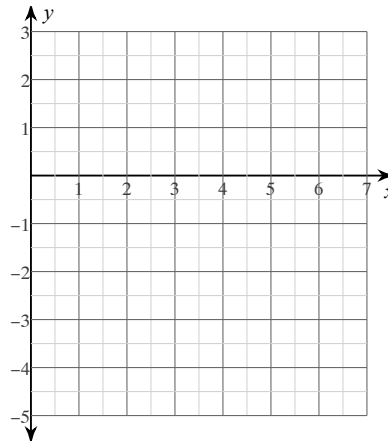
8) $y = -x^2 + 8x - 13$



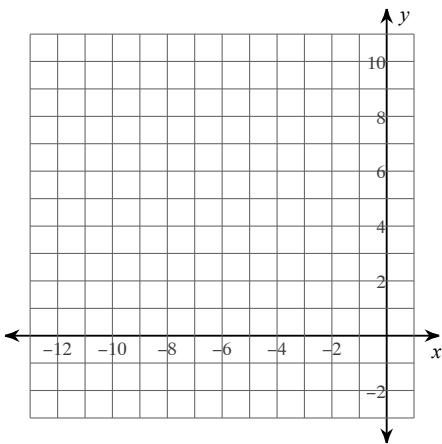
9) $y = -2x^2 - 8x - 11$



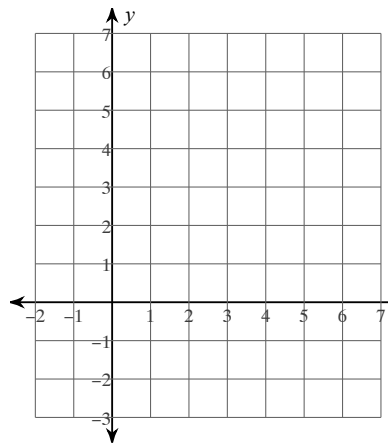
10) $y = x^2 - 8x + 13$



11) $y = 3x^2 + 18x + 25$

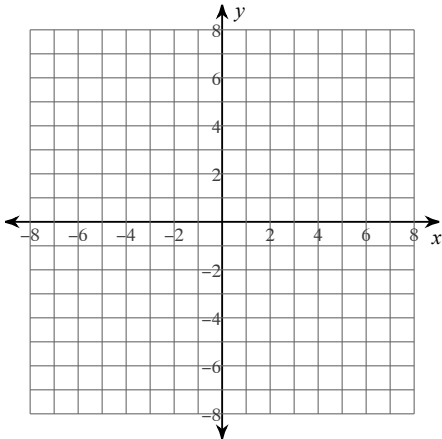


12) $y = 2x^2 - 16x + 30$

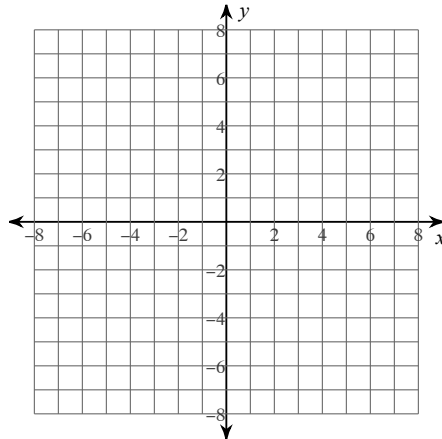


Identify the vertex, axis of symmetry, direction of opening, min/max value, y-intercept, and x-intercepts of each. Then sketch the graph.

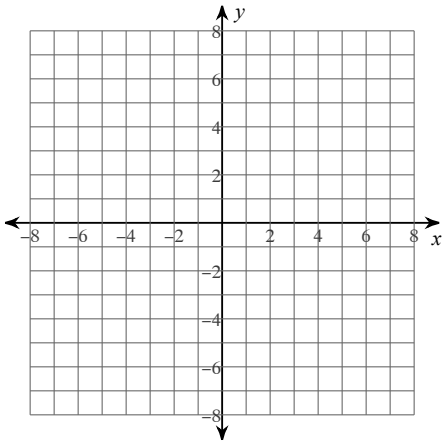
13) $y = -2x^2 - 16x - 33$



14) $y = x^2$



15) $y = -2x^2 + 20x - 50$



16) $y = 2x^2 + 8x + 6$

