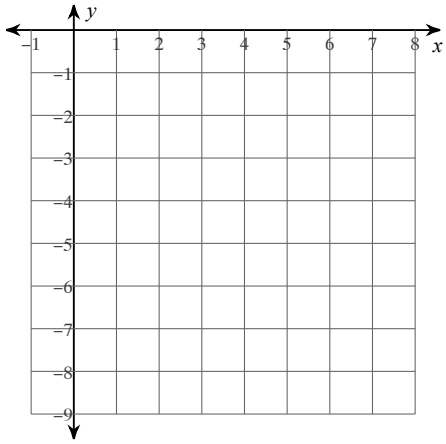
Algebra 2 Pre-AP Name_____

More Practice with Vertex Form

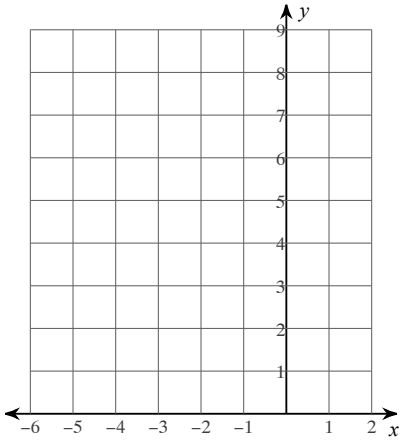
Date_____ Period____

Sketch the graph of each function.

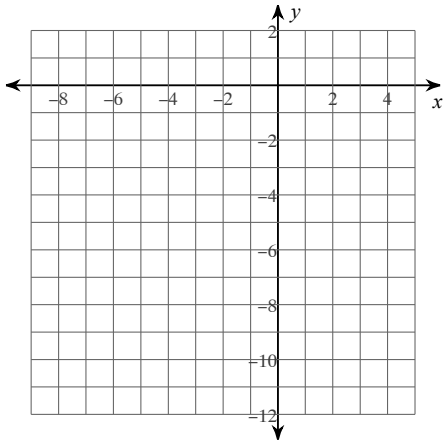
1) $y = -(x - 4)^2 - 4$



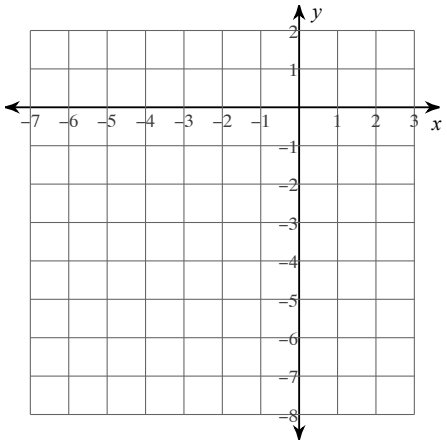
2) $y = (x + 1)^2 + 4$



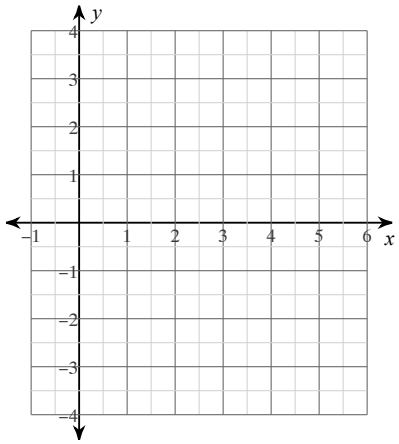
3) $y = -3(x + 2)^2 + 1$



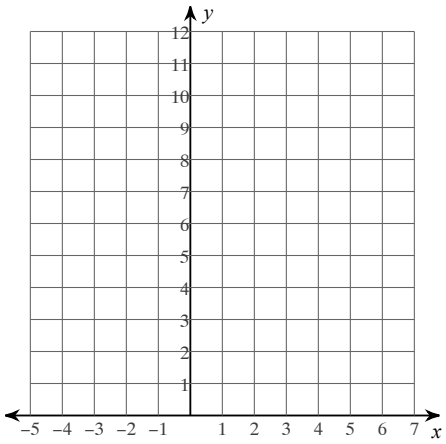
4) $y = -2(x + 3)^2 + 1$



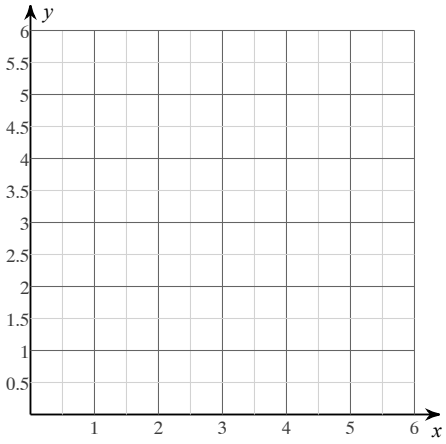
5) $y = -(x-4)^2 + 2$



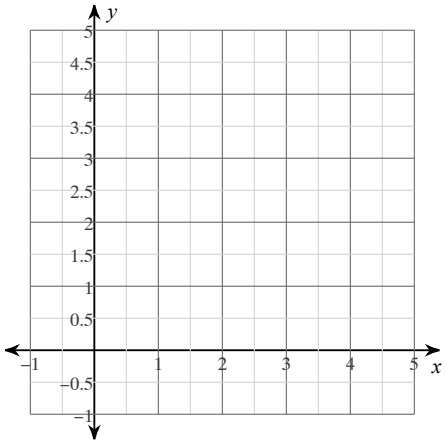
6) $y = 2(x+3)^2 + 3$



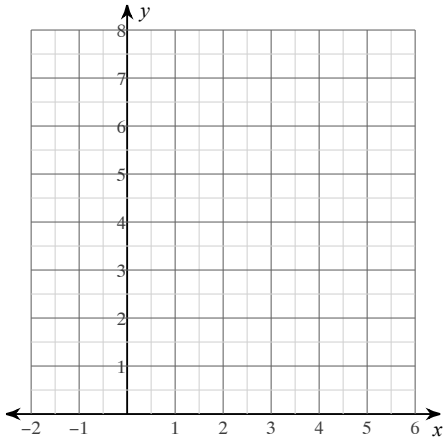
7) $y = (x-2)^2 + 1$



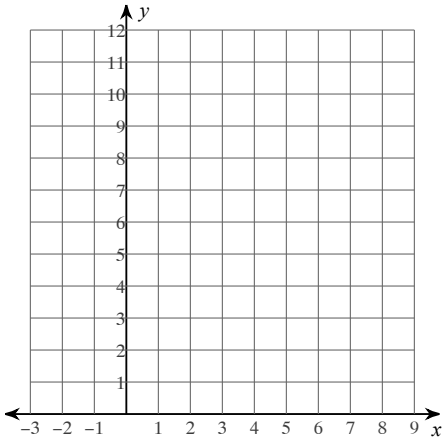
8) $y = -(x-2)^2 + 4$



9) $y = (x-1)^2 + 3$

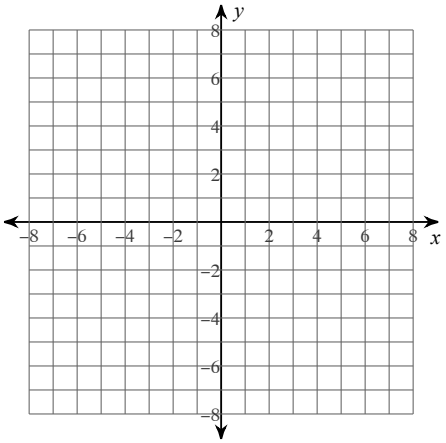


10) $y = 2(x-2)^2 + 3$

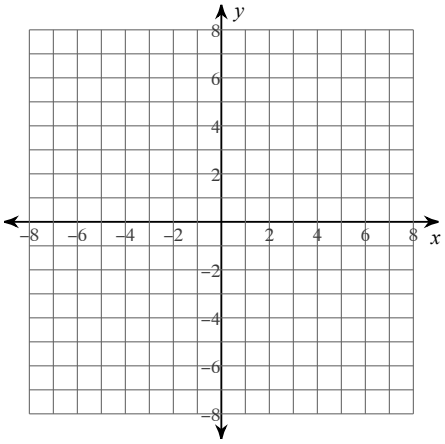


Identify the vertex, axis of symmetry, direction of opening, min/max value, y-intercept, and x-intercepts of each. Then sketch the graph.

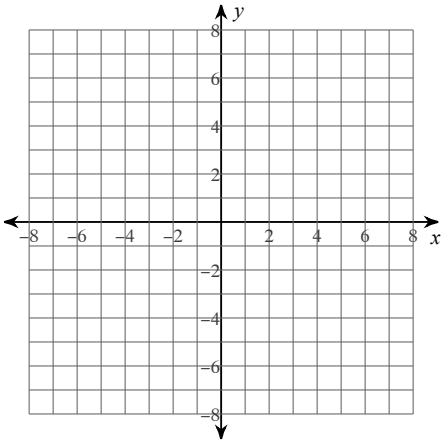
11) $y = (x + 1)^2 + 3$



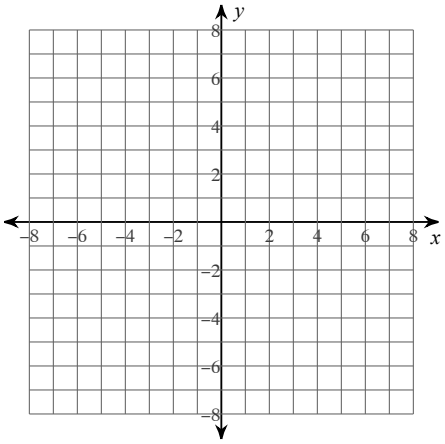
12) $y = x^2 - 1$



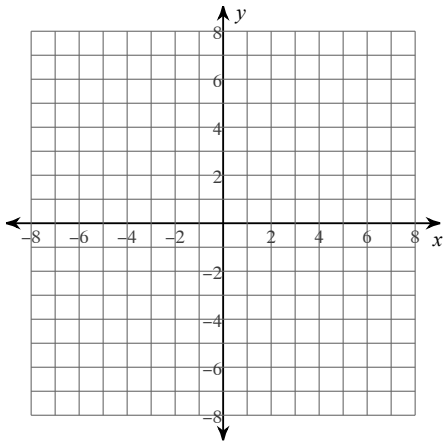
13) $y = -2(x + 1)^2 - 1$



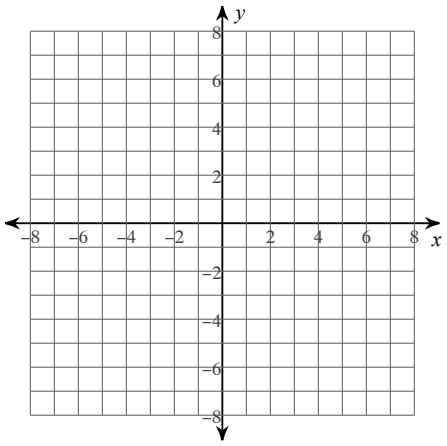
14) $y = (x + 5)^2 + 3$



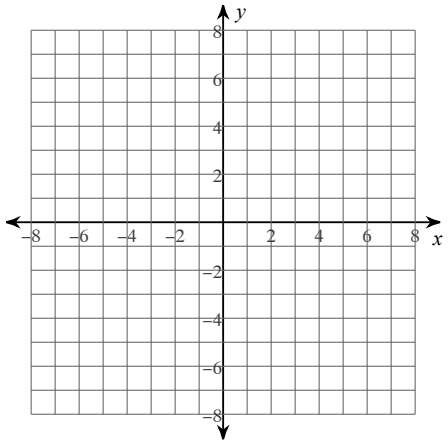
15) $y = -(x + 3)^2 + 4$



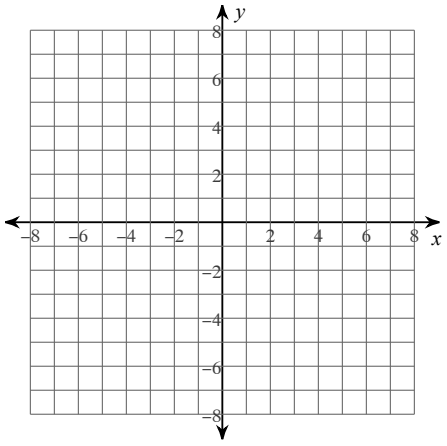
16) $y = -(x - 1)^2 + 1$



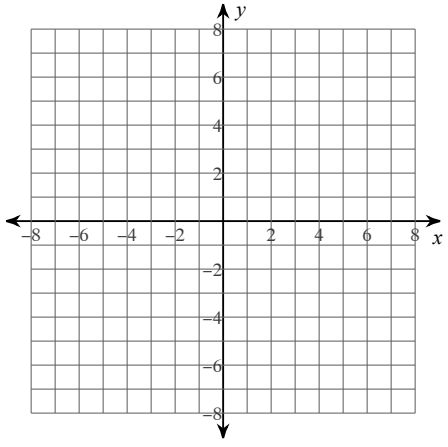
17) $y = 2(x + 4)^2 - 8$



18) $y = (x + 1)^2 - 1$



19) $y = -x^2$



20) $y = -(x + 5)^2 + 1$