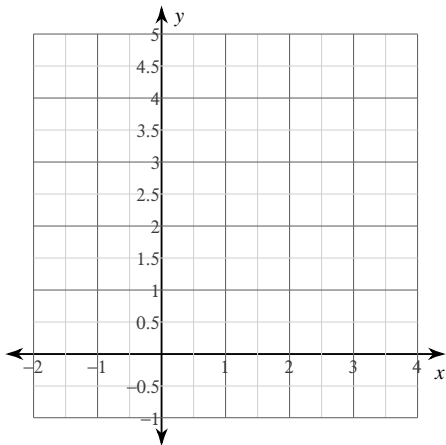


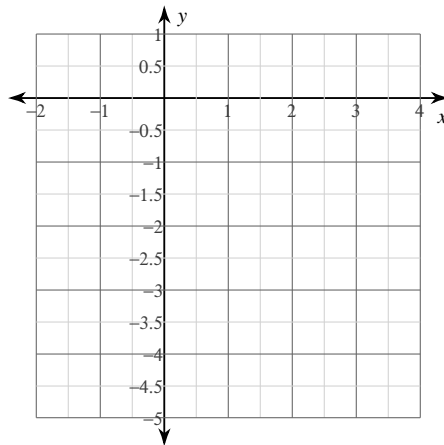
Graphing Quadratic Functions

Sketch the graph of each function.

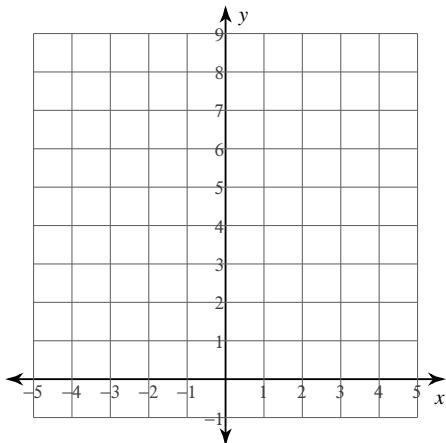
1) $y = x^2$



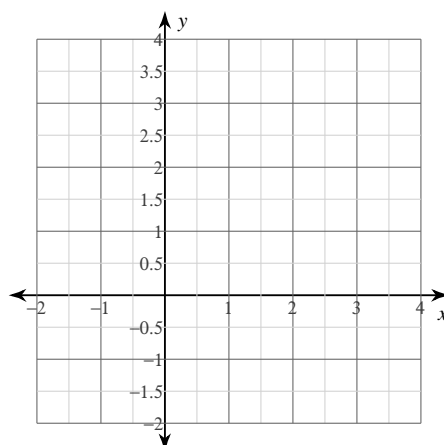
2) $y = -x^2$



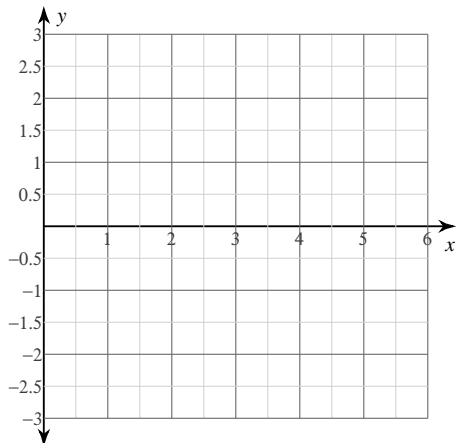
3) $y = 2x^2$



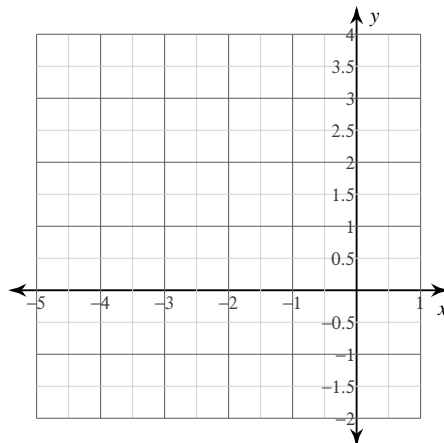
4) $y = \frac{1}{2}x^2$



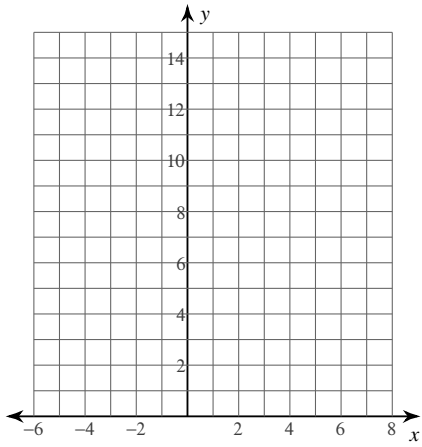
5) $y = (x - 2)^2 - 2$



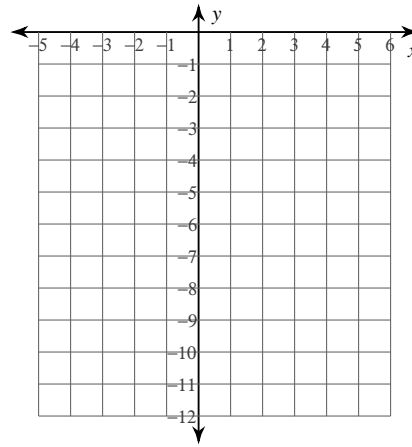
6) $y = -(x + 2)^2 + 3$



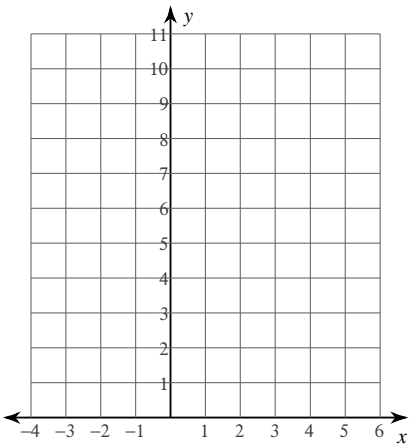
$$7) y = 3(x - 1)^2 + 2$$



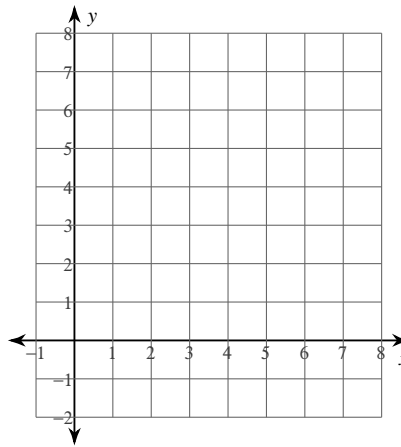
$$8) y = -2(x - 4)^2 - 3$$



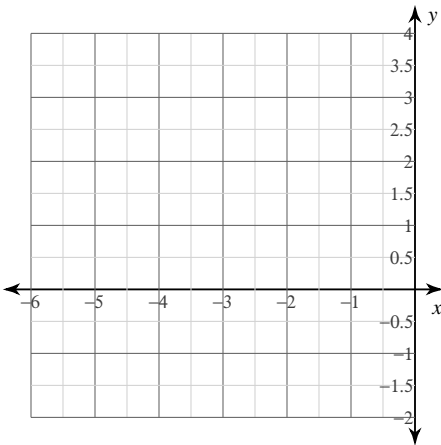
$$9) y = 2x^2 + 8x + 10$$



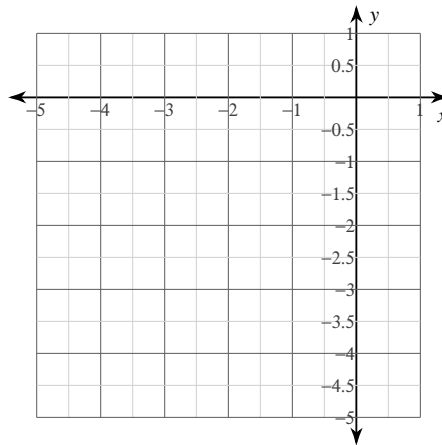
$$10) y = 2x^2 - 16x + 31$$



$$11) y = x^2 + 6x + 8$$

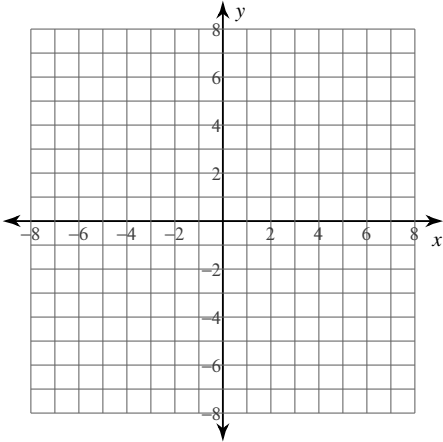


$$12) y = x^2 + 4x$$



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

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



14) $y = x^2 - 10x + 24$

