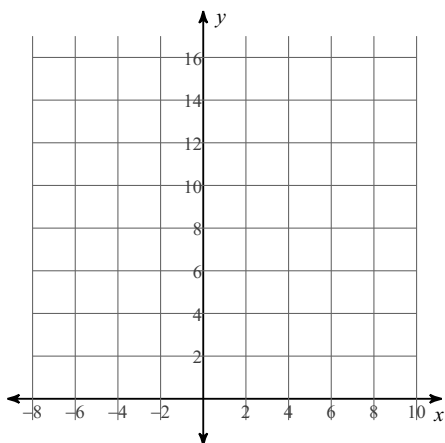


9-1 Identifying Quadratic Functions

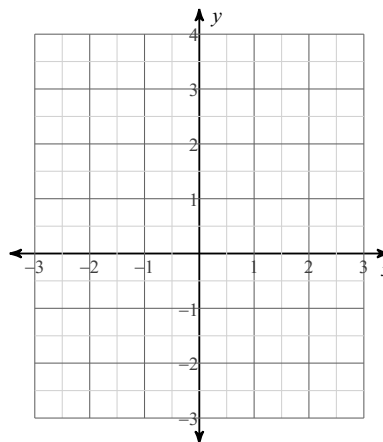
For each problem:

- a) Sketch the graph of each function.
- b) Label the axis of symmetry ($x=...$).
- c) Label the coordinate of the vertex (x, y).
- d) Tell whether the vertex is a minimum or a maximum.

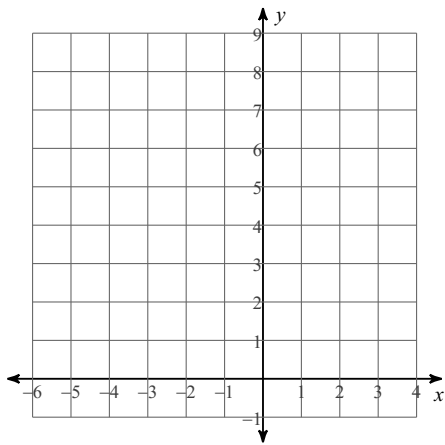
1) $y = 4x^2$



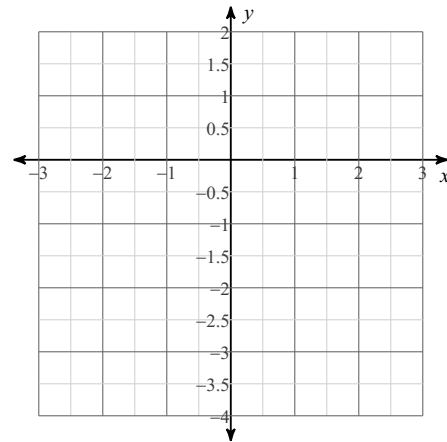
2) $y = \frac{1}{4}x^2$



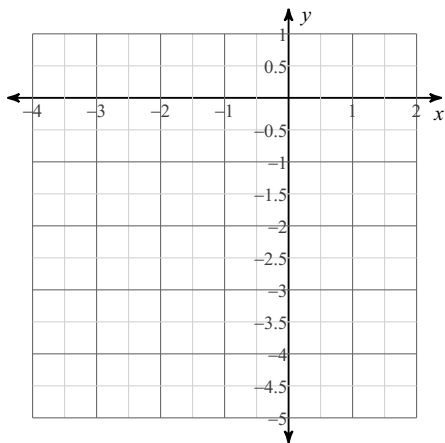
3) $y = 2x^2$



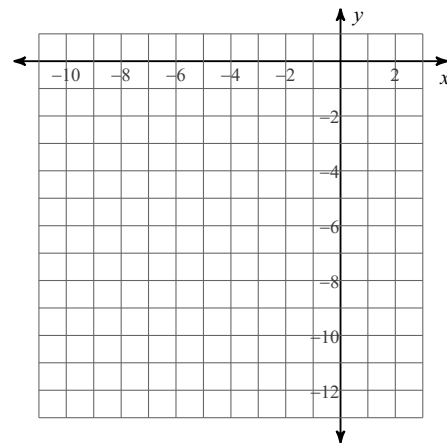
4) $y = -\frac{1}{2}x^2$



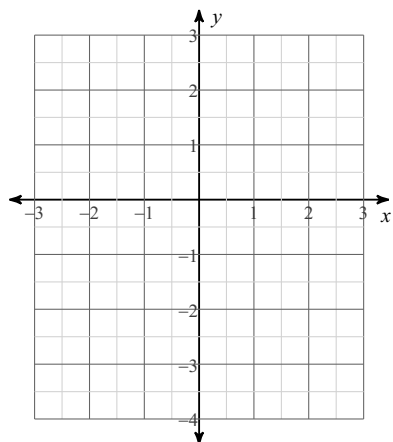
5) $y = -x^2$



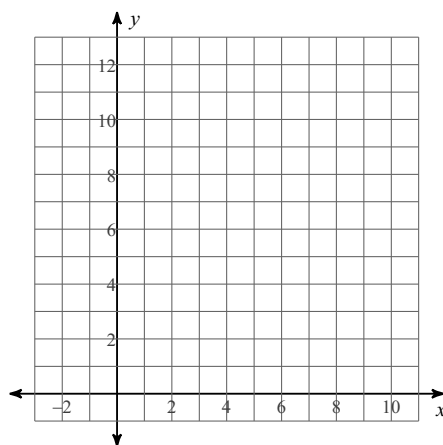
6) $y = -3x^2$



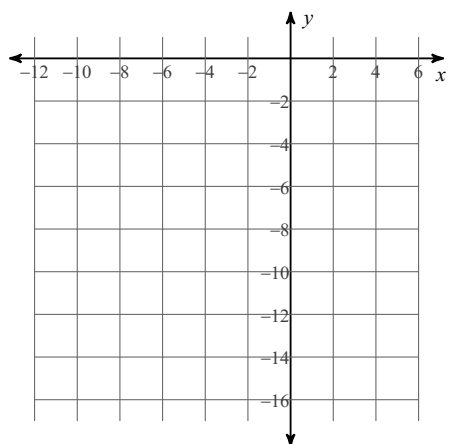
$$7) y = -\frac{1}{3}x^2$$



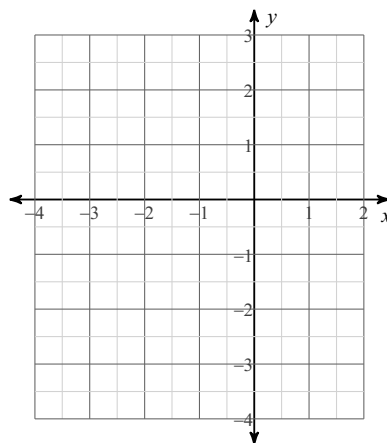
$$8) y = 3x^2$$



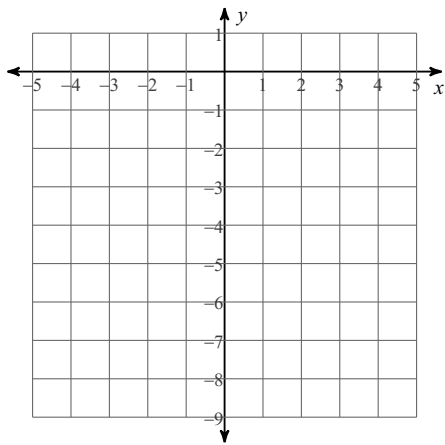
$$9) y = -4x^2$$



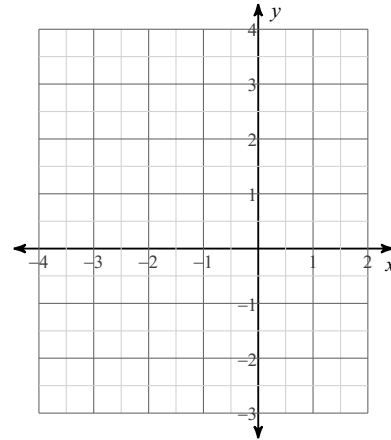
$$10) y = -\frac{1}{4}x^2$$



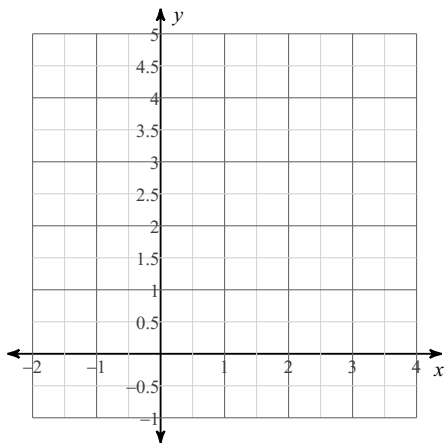
11) $y = -2x^2$



12) $y = \frac{1}{3}x^2$



13) $y = x^2$



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

