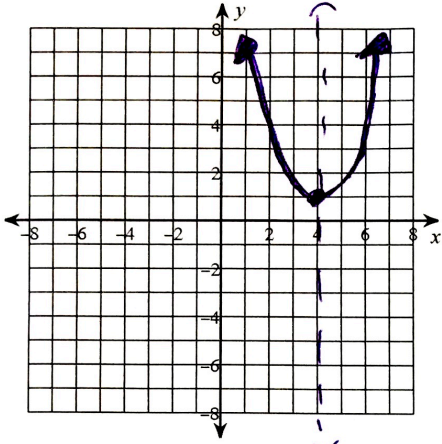


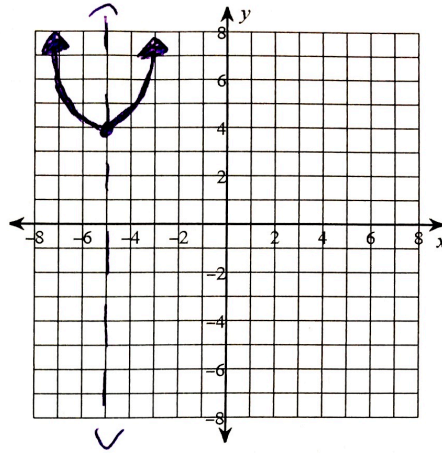
Graphing Parabolas in Vertex Form

Identify the vertex and axis of symmetry of each. Then sketch the graph.

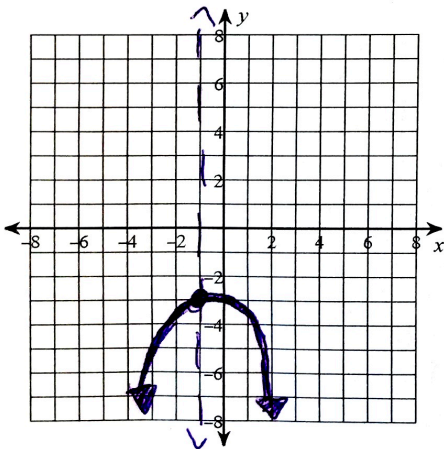
1) $f(x) = \frac{3}{7}(x - 4)^2 + 1$

VERTEX: $(4, 1)$ AXIS OF SYMMETRY: $x = 4$

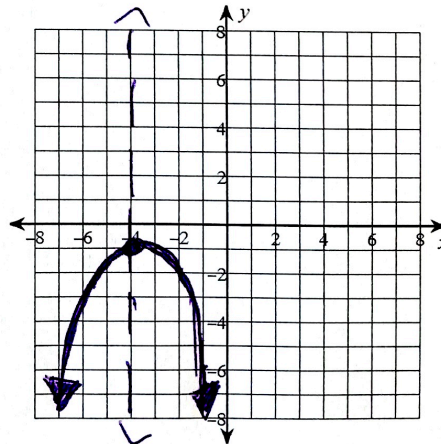
2) $f(x) = (x + 5)^2 + 4$

VERTEX: $(-5, 4)$ AXIS OF SYMMETRY: $x = -5$

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

VERTEX: $(-1, -3)$ AXIS OF SYMMETRY: $x = -1$

4) $f(x) = -2(x + 4)^2 - 1$

VERTEX: $(-4, -1)$ AXIS OF SYMMETRY: $x = -4$