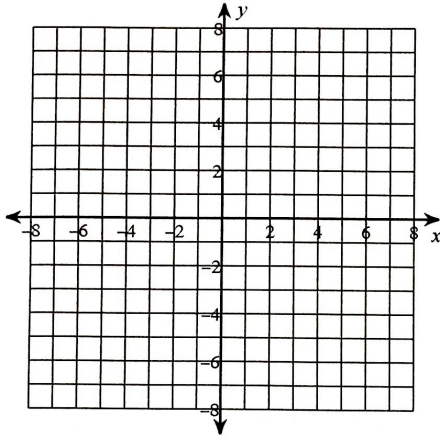


Graphing Parabolas in Vertex Form

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

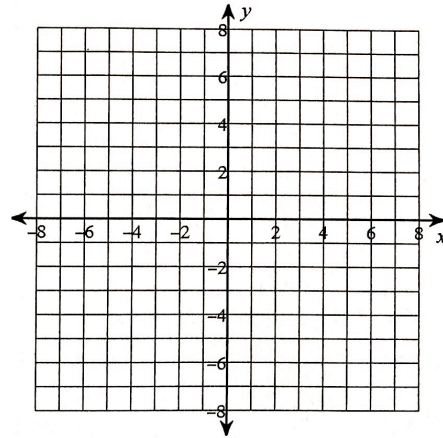
$$1) f(x) = \frac{3}{7}(x - 4)^2 + 1$$



VERTEX:

AXIS OF SYMMETRY:

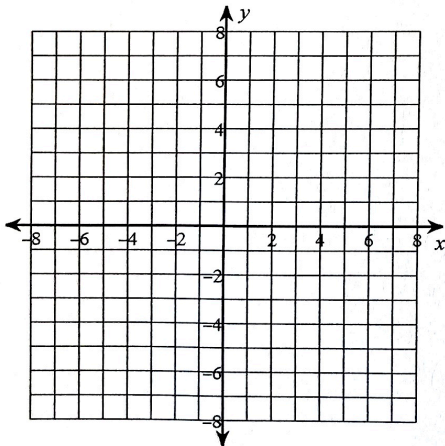
$$2) f(x) = (x + 5)^2 + 4$$



VERTEX:

AXIS OF SYMMETRY:

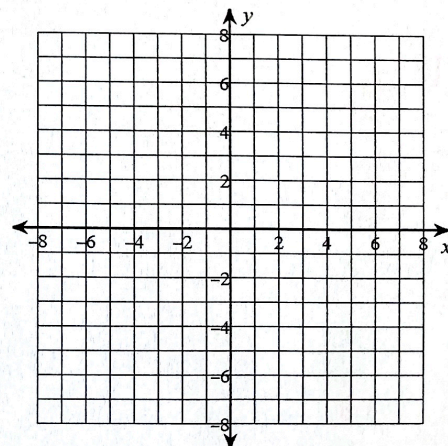
$$3) f(x) = -(x + 1)^2 - 3$$



VERTEX:

AXIS OF SYMMETRY:

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



VERTEX:

AXIS OF SYMMETRY: