**Writing Quadratic Equations Day 1: Given a Vertex & a Point**   Name:_____Hr:_____

Write an equation for a quadratic function *in vertex form* given the following information.

1. Vertex: (2, 3) and a point (4, 5)   2. Vertex: (-5, -1) and a point (-6, 2)   3. Vertex: (2, -3) and y-intercept of -2

Write an equation for a quadratic function *in vertex form* given the following information. Then sketch a graph.
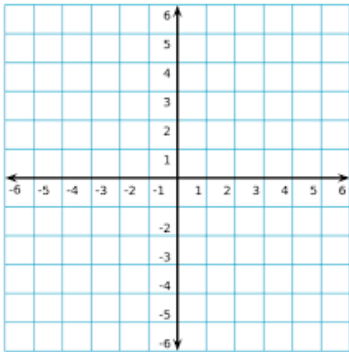
4. Vertex: (1, 4) and a point (2, 3)   5. Vertex: (3, 1) and a point (-1, 5)   6. Vertex: (1, 5) and a point (-1, -3)
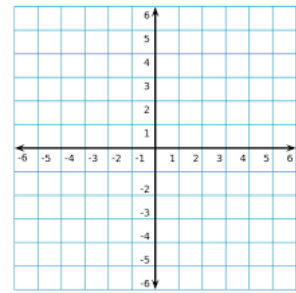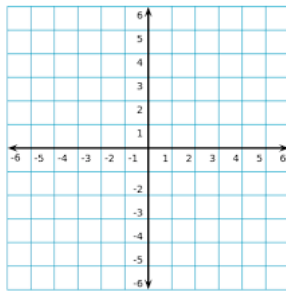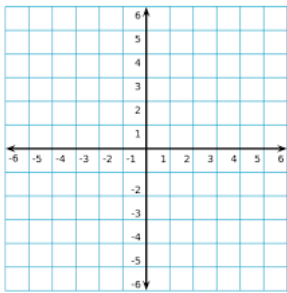
7. Use the information provided to find the following:

Vertex: (2, -4) and x-intercept of 1

A) The equation for the quadratic function in vertex form.
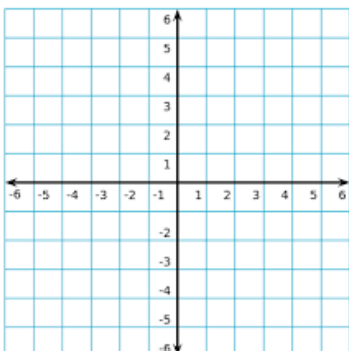
B) Sketch a graph.

C) State the domain and range

D) Determine if there is a max or min

E) Find f(1)

8. Use the information provided to find the following:

Vertex: (-3, 4) and a point (1, -4)

A) The equation for the quadratic function in vertex form.

B) Sketch a graph.

C) State the domain and range

D) Determine if there is a max or min

E) Find f(-5)