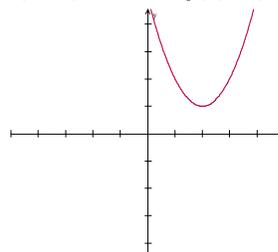


## Quadratic Functions

1. The graph of a quadratic function is given. Choose which function would give you this graph: (Similar to p.324 #1-4)

$$f(x) = (x+2)^2 - 1 \quad g(x) = (x+2)^2 + 1$$

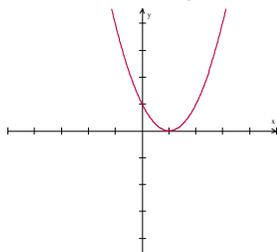
$$h(x) = (x-2)^2 - 1 \quad j(x) = (x-2)^2 + 1$$



2. The graph of a quadratic function is given. Choose which function would give you this graph: (Similar to p.324 #5-8)

$$f(x) = x^2 + 2x + 1 \quad g(x) = x^2 - 2x + 1$$

$$h(x) = x^2 - 1 \quad j(x) = -x^2 - 1$$



3. Find the coordinates of the vertex for the parabola defined by the given quadratic function: (Similar to p.324 #10)

$$f(x) = -5(x - 3)^2 + 7$$

4. Find the vertex, axis of symmetry, minimum or maximum point, and the graph: (Similar to p.324 #20)

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

5. Find the coordinates of the vertex for the parabola defined by the given quadratic function: (Similar to p.324 #16)

$$f(x) = -3x^2 + 12x - 1$$

6. Find the vertex, axis of symmetry, minimum or maximum point, and the graph:

(Similar to p.324 #30)

$$f(x) = 2x^2 - 5x + 1$$

7. Determine whether the graph has a minimum or maximum and then find it.

(Similar to p.324 #42)

$$f(x) = -2x^2 + 10x + 3$$