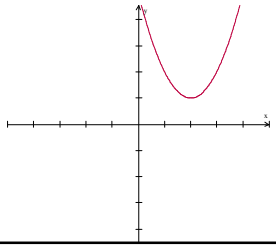
Quadratic Functions

1. The graph of a quadratic function is given. Choose which function would give you this graph:

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

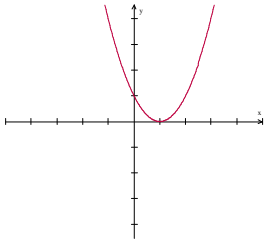
$h(x)=(x-2)^2-1$ $\quad j(x)=(x-2)^2+1$



2. The graph of a quadratic function is given. Choose which function would give you this graph:

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

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



3. Find the coordinates of the vertex for the parabola defined by the given quadratic function:

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

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

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

5. Find the coordinates of the vertex for the parabola defined by the given quadratic function:

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

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

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

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

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