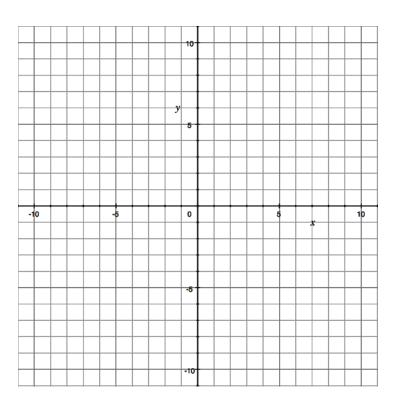
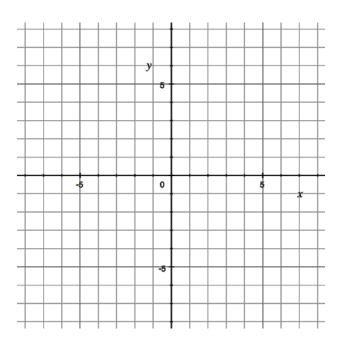
A quadratic function is

1. Sketch the graph of the quadratic function. Give the vertex, range, axis of symmetry and intercepts.

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



2. Rewrite the function in the form  $f(x) = a(x-h)^2 + k$ . Sketch the graph of the function. Give the vertex, range, axis of symmetry and intercepts.  $f(x) = -3x^2 - 18x - 25$ 



3. Rewrite the function in the form  $y = a(x-h)^2 + k$ . Sketch the graph of the function. Give the vertex, range, axis of symmetry and intercepts.

$$y = \frac{1}{4}x^2 + \frac{1}{2}x - 1$$

