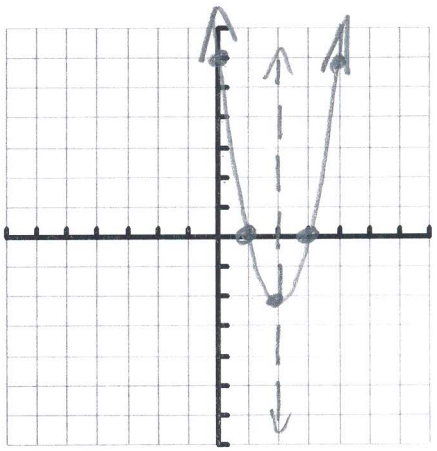
AC Math 1 Name Answer key

Graphing Quadratic Equations WS 2

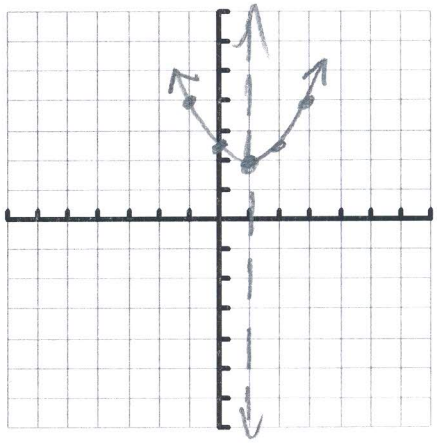
Graph each of the following quadratic functions. Identify the appropriate characteristics.

1. $f(x) = 2(x-1)(x-3)$ $f(2) = 2(1)(-1)$



1st → x-Intercept(s): (1, 0) (3, 0)
Vertex: (2, -2)
Axis of Symmetry: $x = 2$
y-intercept: (0, 6)

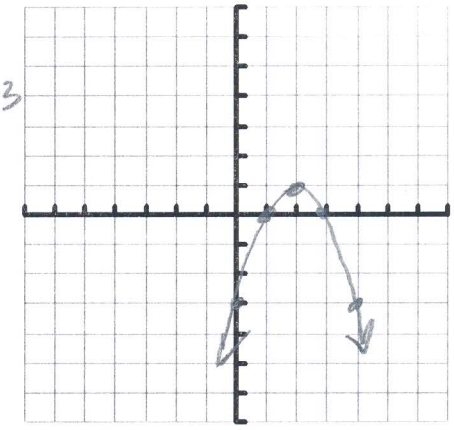
2. $g(x) = \frac{1}{2}(x-1)^2 + 2$



x-Intercept(s): none
1st → Vertex: (1, 2)
Axis of Symmetry: $x = 1$
y-intercept: (0, 2½)

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

$f(2) = -4 + 8 - 3$



x-Intercept(s): (1, 0) (3, 0)
Vertex: (2, 1)
1st → Axis of Symmetry: $x = 2$
y-intercept: (0, -3)