

Name: _____ Date: _____

HW: Graphing Quadratics in Vertex Form

1) Determine the vertex of each of the following

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

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

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

d. $f(x) = 3x^2 - 4$

2) Match the graph with the equation

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

$f(x) = (x + 3)^2 + 1$ _____

$f(x) = (x - 3)^2 - 1$ _____

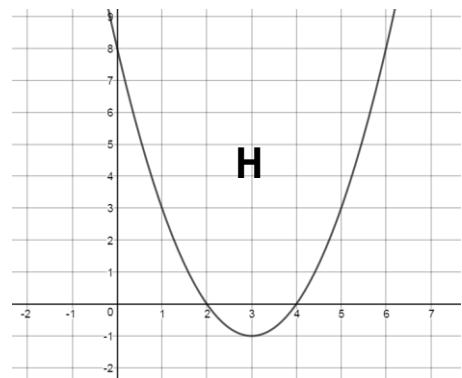
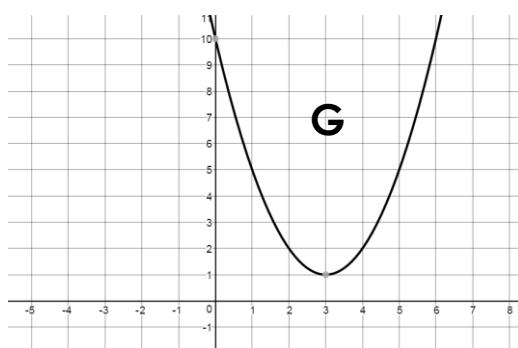
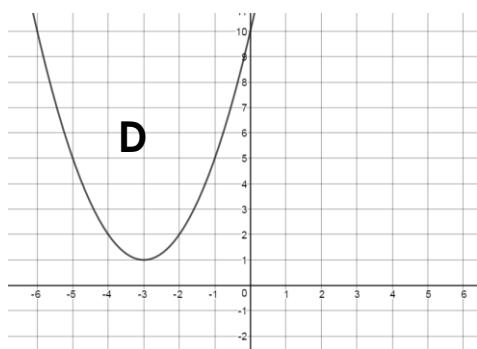
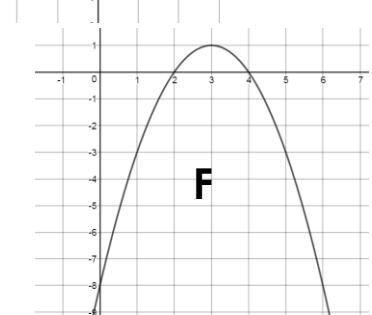
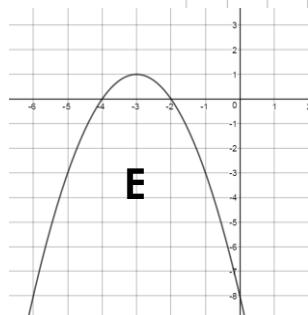
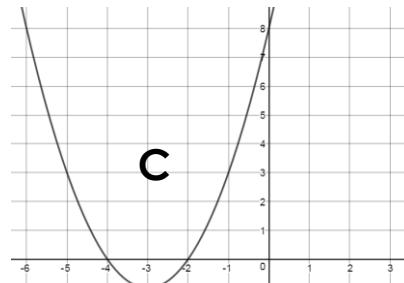
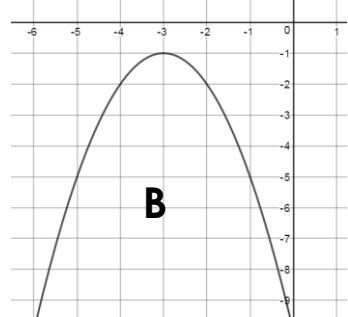
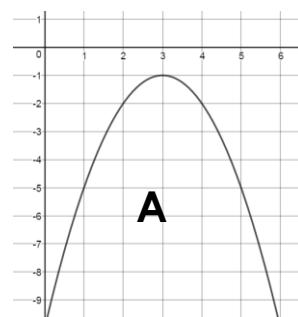
$f(x) = (x + 3)^2 - 1$ _____

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

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

$f(x) = -(x - 3)^2 - 1$ _____

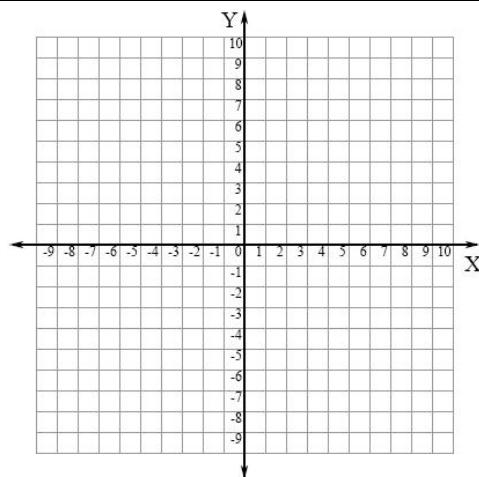
$f(x) = -(x + 3)^2 - 1$ _____



3) Graph each of the following quadratic functions

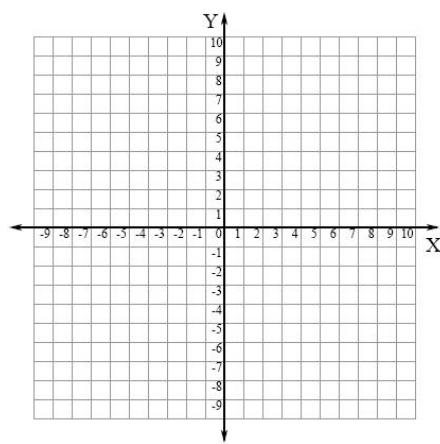
a. $f(x) = -(x + 2)^2 + 1$

x	y



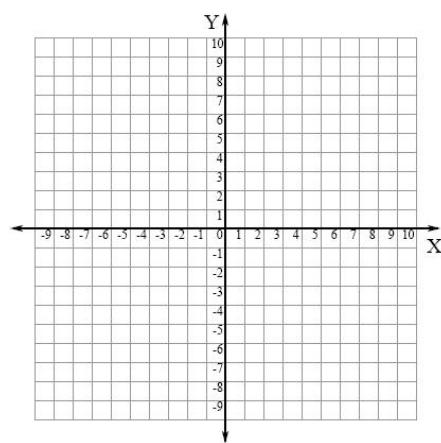
b. $f(x) = -x^2 - 4x - 3$

x	y



c. $f(x) = 2(x - 1)^2 - 2$

x	y



d. $f(x) = 2x^2 - 4x$

x	y

