## **Practice:**

## **Quadratics in Intercept Form**

First Score: Score: Final corrections due:

For #1-6, label the x-intercepts, axis of symmetry, vertex, y-int, and at least one more point on the graph.

1] 
$$y = \frac{1}{2}(x+4)(x-2)$$

Vertex: (\_\_\_\_, \_\_\_)

y-intercept: (0,\_\_\_\_)

Extra point: (\_\_\_\_, \_\_\_)

x-intercepts: (\_\_\_\_\_, 0) (\_\_\_\_\_, 0)

Axis of Symmetry is x=\_\_\_\_\_

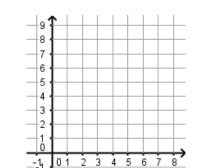
$$2] y = -\frac{1}{2}x(x-8)$$

x-intercepts: (\_\_\_\_\_, 0) (\_\_\_\_\_, 0)

Axis of Symmetry is  $x = \underline{\hspace{1cm}}$ 

Vertex: (\_\_\_\_, \_\_\_)

y-intercept: (0,\_\_\_\_) Extra point: (\_\_\_\_, \_\_\_)



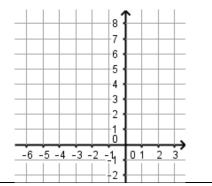
$$3] y = (x+3)(x+1)$$

x-intercepts: (\_\_\_\_\_, 0) (\_\_\_\_\_, 0)

Axis of Symmetry is x=

Vertex: (\_\_\_\_, \_\_\_)

y-intercept: (0,\_\_\_\_) Extra point: (\_\_\_\_, \_\_\_)



4] 
$$y = -\frac{1}{2}(x+1)(x-5)$$

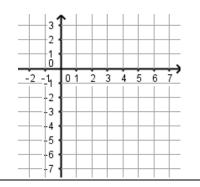
x-intercepts: (\_\_\_\_\_, 0) (\_\_\_\_\_, 0)

-5 -4 -3 -2 -1 01 2 3 4 2 . з.

Axis of Symmetry is  $x = \underline{\hspace{1cm}}$ 

Vertex: (\_\_\_\_, \_\_\_)

y-intercept: (0,\_\_\_\_) Extra point: (\_\_\_\_, \_\_\_ )



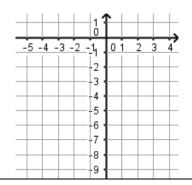
$$5] y = 2(x+2)(x-2)$$

x-intercepts: (\_\_\_\_\_, 0) (\_\_\_\_\_, 0)

Axis of Symmetry is  $x = \underline{\hspace{1cm}}$ 

Vertex: ( , )

y-intercept: (0,\_\_\_\_) Extra point: (\_\_\_\_, \_\_\_)



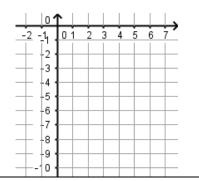
$$6] y = -(x-3)(x-3)$$

x-intercepts: (\_\_\_\_\_, 0) (\_\_\_\_\_, 0)

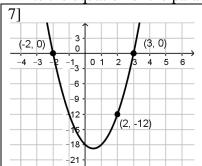
Axis of Symmetry is  $x = \underline{\hspace{1cm}}$ 

Vertex: ( , )

y-intercept: (0,\_\_\_\_) Extra point: (\_\_\_\_, \_\_\_)

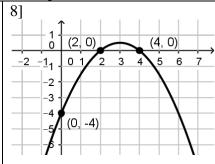


Write the equation of the parabola in intercept form. Show all work.



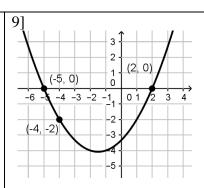
$$p = q = x = y =$$

Find a.



$$p = q = x = y =$$

Find a.



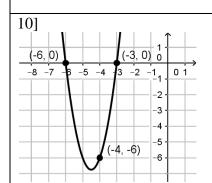
$$p = q = x = y =$$

Find a.

Write the equation.

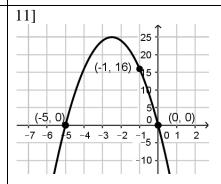
Write the equation.

Write the equation.



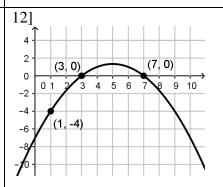
$$p = q = x = y =$$

Find a.



$$p = q = x = y =$$

Find a.



$$p = q = x = y =$$

Find a.

Write the equation.

Write the equation.

Write the equation.

Write the quadratic function in standard form. Show all work.

13] 
$$y = \frac{1}{2}(x+4)(x-2)$$

14] 
$$y = -(x-1)(x-1)$$

15] 
$$y = 3(x+3)(x+1)$$