## Practice Worksheet: Graphing Quadratic Functions in Intercept Form

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

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

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

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

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

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

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

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

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

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

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

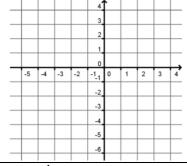
3] 
$$y = (x + 2)(x - 2)$$

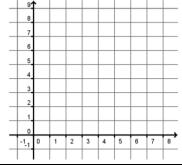
x-intercepts: (\_\_\_\_\_, 0) (\_\_\_\_\_, 0)

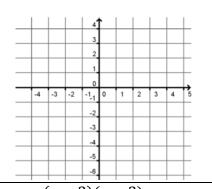
Axis of Symmetry is x=\_\_\_\_\_

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

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







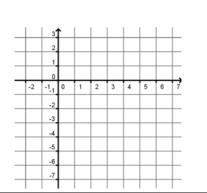
4] 
$$y = -\frac{1}{3}(x+1)(x-5)$$

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

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

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

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



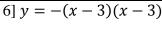
$$5] y = 4(x+2)(x+1)$$

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

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

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

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

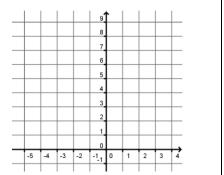


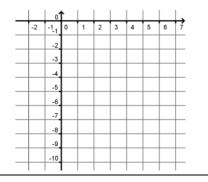
x-intercepts:  $(\underline{\hspace{1cm}},0)$   $(\underline{\hspace{1cm}},0)$ 

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

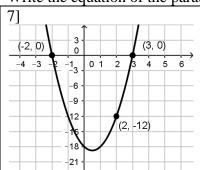
Vertex: (\_\_\_\_, \_\_\_)

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



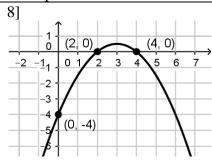


Write the equation of the parabola in intercept form.



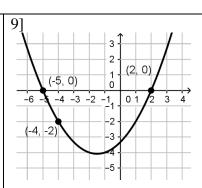
$$p = q = x = y =$$

Find a.



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

Find a.



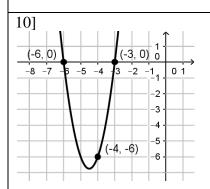
$$p = q = x = y =$$

Find a.

Write the equation.

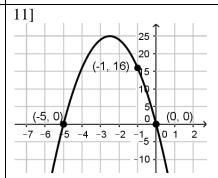
Write the equation.

Write the equation.



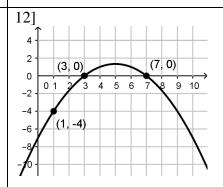
$$p = q = x = y =$$

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.

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

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

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