Name: Date: Period:

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

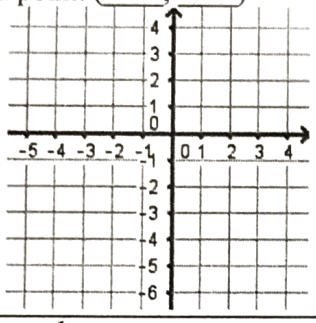
x-intercepts: (____, 0) (____, 0)

Axis of Symmetry is x=_____

Vertex: (____, ____)

y-intercept: (0,_____)

Extra point: (____, ____)



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

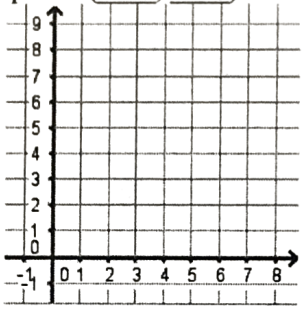
x-intercepts: (____, 0) (____, 0)

Axis of Symmetry is x=_____

Vertex: (____, ____)

y-intercept: (0,_____)

Extra point: (____, ____)



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

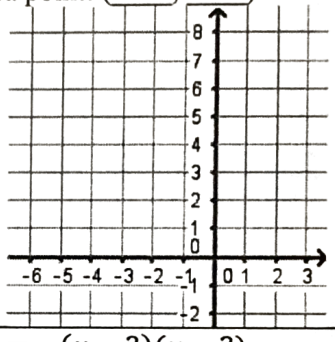
x-intercepts: (____, 0) (____, 0)

Axis of Symmetry is x=_____

Vertex: (____, ____)

y-intercept: (0,_____)

Extra point: (____, ____)



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

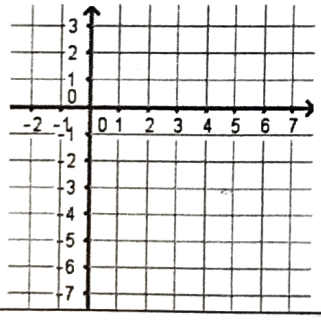
x-intercepts: (____, 0) (____, 0)

Axis of Symmetry is x=_____

Vertex: (____, ____)

y-intercept: (0,_____)

Extra point: (____, ____)



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

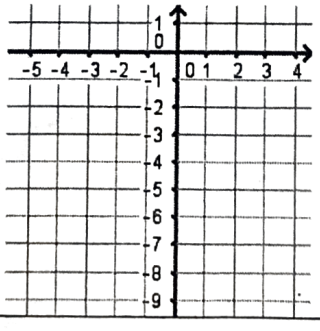
x-intercepts: (____, 0) (____, 0)

Axis of Symmetry is x=_____

Vertex: (____, ____)

y-intercept: (0,_____)

Extra point: (____, ____)



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

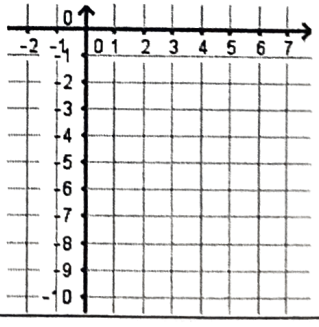
x-intercepts: (____, 0) (____, 0)

Axis of Symmetry is x=_____

Vertex: (____, ____)

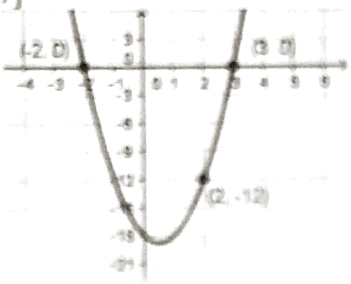
y-intercept: (0,_____)

Extra point: (____, ____)



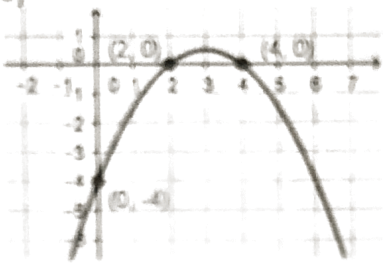
Write the equation of the parabola in intercept form. Show all work.

7]



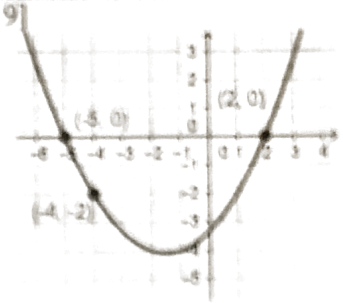
Write the equation.

8]



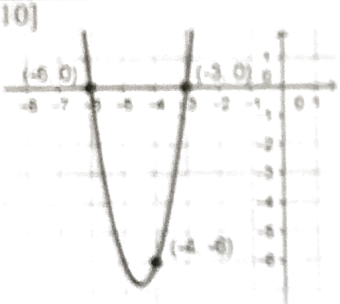
Write the equation.

9]



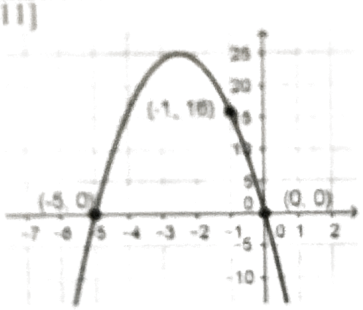
Write the equation.

10]



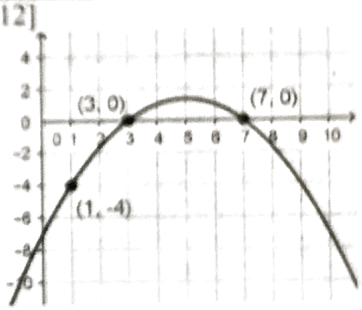
Write the equation.

11]



Write the equation.

12]



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