$-\frac{1}{2}(x+0)(x-8)$

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

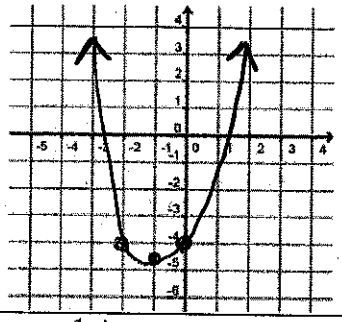
x-intercepts: (-4, 0) (2, 0)

Axis of Symmetry is x= -1

$\frac{-4+2}{2} = \frac{-2}{2}$

Vertex: (-1, -4.5)

y-intercept: (0, -4)



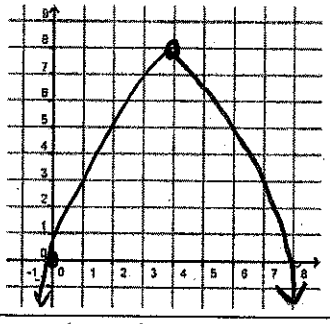
2] $y = -\frac{1}{2}x(x-8)$ $-\frac{1}{2}x=0$ $x-8=0$

x-intercepts: (0, 0) (8, 0)

Axis of Symmetry is x= 4

Vertex: (4, 8)

y-intercept: (0, 0)



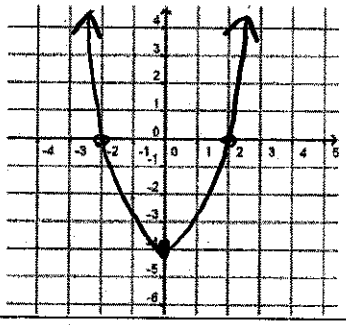
3] $y = (x+2)(x-2)$

x-intercepts: (2, 0) (-2, 0)

Axis of Symmetry is x= 0

Vertex: (0, -4)

y-intercept: (0, -4)



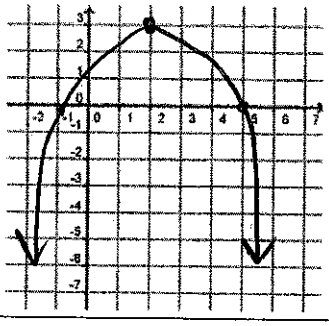
4] $y = -\frac{1}{3}(x+1)(x-5)$

x-intercepts: (-1, 0) (5, 0)

Axis of Symmetry is x= 2

Vertex: (2, 3)

y-intercept: (0, 1.7)



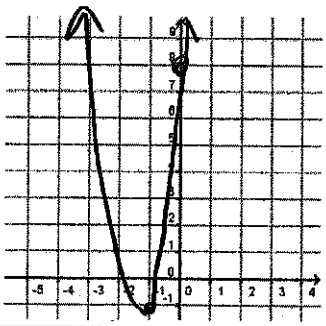
5] $y = 4(x+2)(x+1)$

x-intercepts: (-2, 0) (-1, 0)

Axis of Symmetry is x= $-3/2$

Vertex: ($-3/2$, -1)

y-intercept: (0, 8)



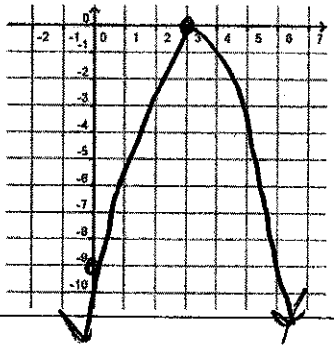
6] $y = -(x-3)(x-3)$

x-intercepts: (3, 0) (3, 0)

Axis of Symmetry is x= 3

Vertex: (3, 0)

y-intercept: (0, -9)



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