Algebra II Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Review *Quadratic Functions Worksheet*

Find the equation of the axis of symmetry and the coordinates of the vertex of the graph of each function.

AOS:\_\_\_\_\_\_\_\_

Vertex:\_\_\_\_\_\_\_\_

AOS:\_\_\_\_\_\_\_\_

Vertex:\_\_\_\_\_\_\_\_

1. y = 2x2 + 4 2) f(x) = 2x2 + 4x – 5

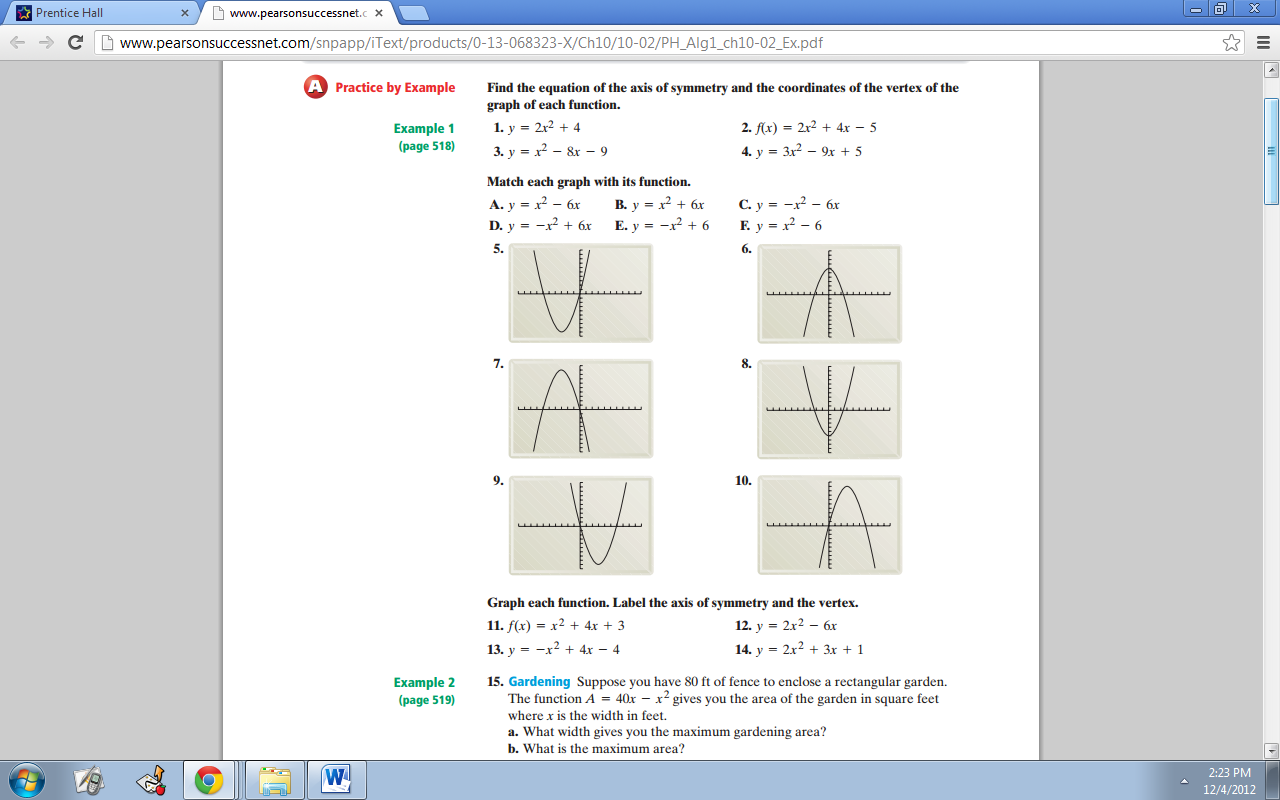
AOS:\_\_\_\_\_\_\_\_

Vertex:\_\_\_\_\_\_\_\_

AOS:\_\_\_\_\_\_\_\_

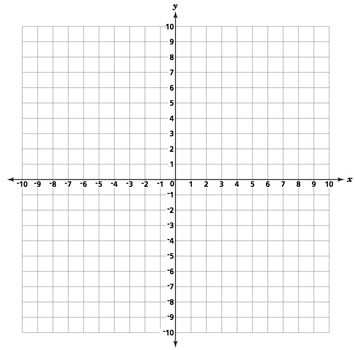
Vertex:\_\_\_\_\_\_\_\_

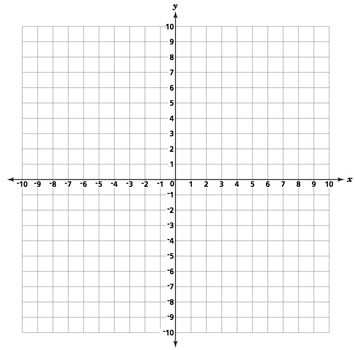
3) y = x2 – 8x – 9 4) y = 3x2 – 9x + 5

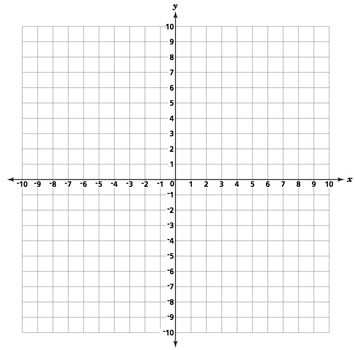


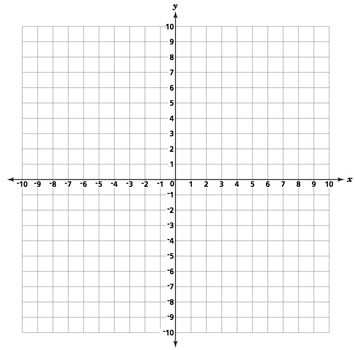
Graph each functionon without a calculator. On the graph, label the axis of symmetry and the vertex.

(FIND THE VERTEX BY HAND, NO GRAPHING CALCULATOR)

11) f(x) = x2 + 4x + 4 12) y = 2x2 – 6x





13) y = -x2 + 4x – 4 14) f(x) = 2x2 + 3x + 1

15) A ball is thrown in the air with an upward velocity of 40ft/s. Its height in feet after t seconds is given by the function h = -16t2 + 40t + 6.

1. In how may seconds does the ball reach its maximum height?
2. What is the ball’s maximum height?