Kuta Software - Infinite Algebra 2

5.1 HW

Name_____

Vertex Form of Parabolas

Date_____ Period____

Use the information provided to write the vertex form equation of each parabola.

1) $y = x^2 + 16x + 71$

2) $y = x^2 - 2x - 5$

3) $y = -x^2 - 14x - 59$

4) $y = 2x^2 + 36x + 170$

5) $y = x^2 - 12x + 46$

6) $y = x^2 + 4x$

7) $y = -\frac{1}{3}(x - 3)(x - 7)$

8) $y + 60x + 294 = -3x^2$

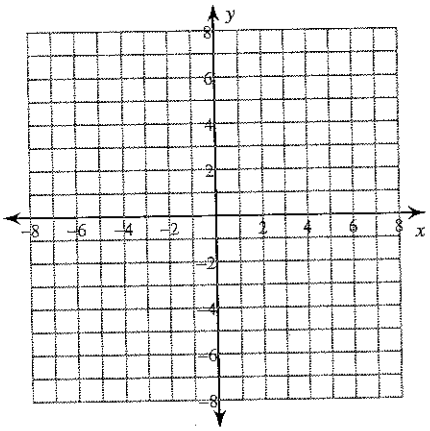
9) $-(y + 1) = (x - 4)^2$

10) $y = -2(x + 4)(x - 2)$

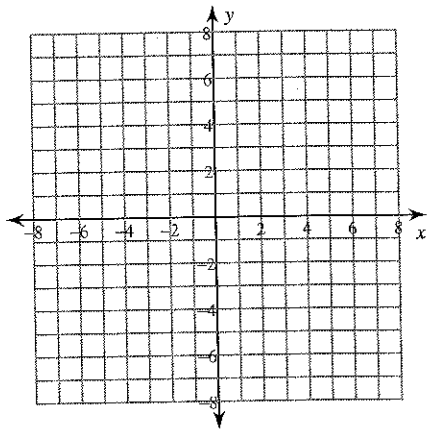
5.1 HW

Identify the vertex and axis of symmetry of each. Then sketch the graph.

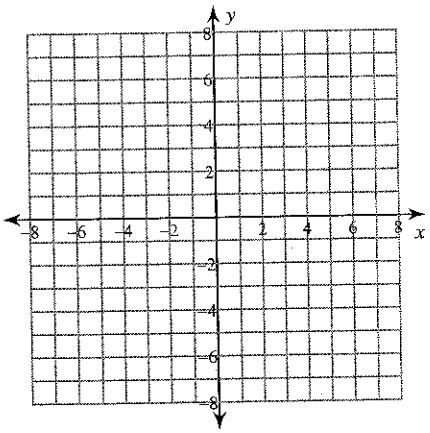
11) $f(x) = 2(x+4)^2 - 5$



12) $f(x) = -\frac{1}{4}(x+4)^2 - 5$



13) $f(x) = -(x-6)^2 + 2$



14) $f(x) = -(x-5)^2 - 1$