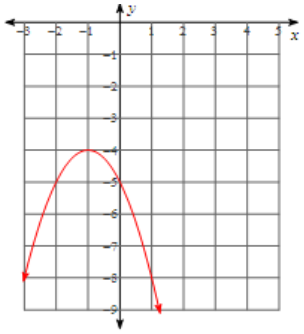
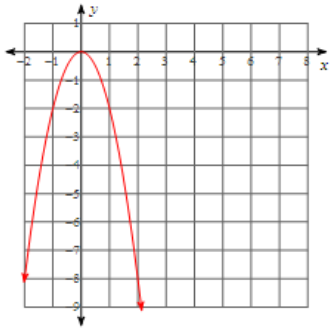
Algebra 1 – Homework Day 2 Name: _____
Graphing Quadratic Equations – Standard Form

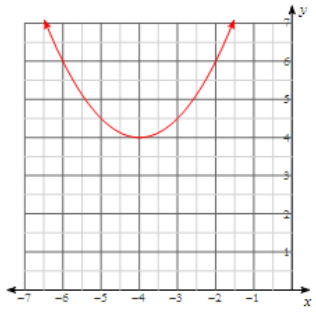
1. Match the equation with its correct graph.

a. $y = x^2 + 3x - 2$ b. $y = \frac{1}{2}x^2 + 4x + 12$ c. $y = -\frac{1}{2}x^2$

d. $y = -x^2 - 2x - 5$ e. $y = -2x^2$

i. 

ii. 

iii. 

2. What is the vertex of the function $f(x) = x^2 + 6x + 3$? 2. _____

3. What is the vertex of the function $f(x) = -2x^2 - 8x + 10$? 3. _____

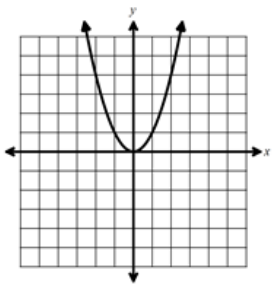
4. Given the graph of $y = x^2$, what are the zeros of the function after the transformation down one units and right two units?

a. $x = -2,\ x = 2$

b. $x = -3,\ x = -1$

c. $x = 1,\ x = 3$

d. $x = -3,\ x = 3$



5. What is the vertex form for $f(x) = -x^2 + 8x - 3$? 5. _____

6. What is the vertex form for $f(x) = 2x^2 - 4x - 5$? 6. _____