Name _____ Date _____ Class_____

LESSON 6-3

Interpreting Vertex Form and Standard Form

Practice and Problem Solving: A/B

Determine if each function is a quadratic function.

1. $y = 2x^2 - 3x + 5$

2. $y = 2x - 4$

3. $y = 2^x + 3x - 4$

Write each quadratic function in standard form and write the equation for the line of symmetry.

4. $y = x + 2 + x^2$

5. $y = -1 + 2x - x^2$

6. $y = 2x - 5x^2 - 2$

Change the vertex form to standard quadratic form.

7. $y = 2(x + 3)^2 - 6$

8. $y = 3(x - 5)^2 + 4$

Use the values in the table to write a quadratic equation in vertex form, then write the function in standard form.

9. The vertex of the function is (1, −3).

x	y
−1	17
0	2
1	−3
2	2
3	17

10. The vertex of the function is (−3, −2).

x	y
−1	14
−2	2
−3	−2
−4	2
−5	14

11. The graph of a function in the form $f(x) = a(x - h)^2 + k$ is shown. Use the graph to find an equation for $f(x)$.