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

_____

_____

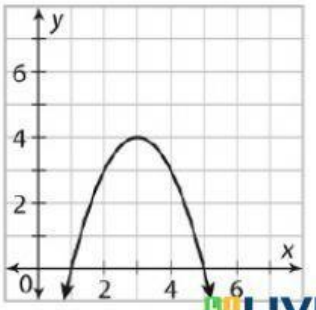
10. The vertex of the function is (–3, –2).

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 $f(x)$.



LIVEWORKSHEETS

Answers to Quadratics worksheet due Monday, Sept. 25

1. Quadratic
2. Not quadratic
3. Not quadratic
4. $y = x^2 + x + 2,\ x = -\frac{1}{2}$
5. $y = -x^2 + 2x - 1,\ x = 1$
6. $y = -5x^2 + 2x - 2,\ x = \frac{1}{5}$
7. $y = 2x^2 + 12x + 12$
8. $y = 3x^2 - 30x + 79$
9. $y = 5(x-1)^2 - 3$

   $y = 5x^2 - 10x + 2$
10. $y = 4(x+3)^2 - 2$

    $y = 4x^2 + 24x + 34$
11. $y = -(x-3)^2 + 4$

LIVEWORKSHEETS

LIVEWORKSHEETS