Additional Problems: Quadratic Equations

**Features of Graphs of Quadratic Equations**

1. Determine the zeros of the quadratic function y = x^2 + 7x + 10. (When listing the smaller zero, remember that negative values are always smaller than positive values.)
2. Determine the zeros of the quadratic function y = x^2 - 4x - 5. (When listing the smaller zero, remember that negative values are always smaller than positive values.)
3. What point is symmetrical to (-2, 5) for the graph of y = x^2 + 6x + 9?
4. What point is symmetrical to (3, -4) for the graph of y = x^2 - 8x + 15?
5. Complete the square to identify the vertex of y = x^2 - 10x + 21.
	1. (5, -4)
	2. (5, 4)
	3. (5, -25)
	4. (5, 21)
6. Complete the square to identify the vertex of y = x^2 + 6x - 1.
	1. (-3, -10)
	2. (-3, 8)
	3. (-3, -1)
	4. (-3, 5)
7. Identify the vertex of y = -5(x - 8)^2 + 12.
	1. (-5, 8)
	2. (8, 12)
	3. (-8, 12)
	4. (8, -12)
8. Identify the vertex of y = 3(x + 4)^2 – 7.
	1. (-4, -7)
	2. (4, -7)
	3. (-4, 7)
	4. (4, 7)
9. What point is symmetrical to (2, -5) for the graph of y = -x^2 + 3?
	1. (-2, -5)
	2. (2, 5)
	3. (-2, 5)
	4. (5, -2)
10. What point is symmetrical to \((-3, 10)\) for the graph of y = x^2 – 4?
	1. (3, 10)
	2. (-10, -3)
	3. (3, -10)
	4. (-3, -10)