	Name
	ALGEBRA II JOURNAL Quadratic Functions
1.	(a) An equation is a quadratic equation if
	(b) Standard form of a quadratic equation is
	(c) The shape of the graph of any quadratic equation is a(n)
2.	 (a) The equation of the line of symmetry is always written as
	(ii) a narrow width (vertical stretch) if
	(iii) a wide width (vertical shrink) if
3.	Describe all the changes that occur in the graph of $y = x^2$ if it is changed to: $y = 7(x + 4)^2 + 2$
	$y = -\frac{4}{9}(x - 11)^2 - 3.$
4.	Write <i>an example</i> of how to make all of the following occur using the function $f(x) = x^2$: (a) Reflect across the <i>x</i> -axis (c) Narrow
	(b) Wide (d) Reflect across the <i>y</i> -axis
5.	(a) Four methods for <i>solving</i> a quadratic equation are
	(b) Before solving a quadratic equation by any of the above methods you must first change the equation to be
6.	(a) On a graph, the real zeros (solutions) of an equation are located
	(b) To find these with a graphing calculator, you must select Menu—
7.	Given the roots of a quadratic equation, the original equation can be found by
8.	The portion of the quadratic formula inside the radical is called
9.	(a) If a real world application of quadratic equations asks for a maximum or minimum value, you should find
	(b) If a projectile motion problem asks how long an object is in the air before it hits the ground, you should and solve by using
	(c) If a projectile motion problem asks for the maximum height of the object, you should

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- 10. Important Rules, Formulas, Etc.
 - a) Vertex form of a quadratic function and d) method for finding the vertex

b) Standard form of a quadratic function & b) method for finding the vertex

c) Intercept Form of a quadratic function & f) method for find the vertex.

d) Quadratic formula—Show the original equation & then the formula.

e) Formula for projectile motion—Label each variable in the formula with what it represents.

f) Two constants for the acceleration of gravity