	Topic/Objective: AGS 2 Module 3.5	**Name:**
		Period:
		Date:

Essential Question: How do you solve a quadratic equation using the quadratic formula?

Questions:	**Notes:**
	Remember that the standard form of a quadratic equation is:
	$y = ax^2 + bx + c$
	The solution(s) for a quadratic equation is called the root(s), the zero(s), or the solution(s) – it is also known as the x-intercept(s).
	Solve:
	1. $x^2 = 25$ 2. $x^2 = 100$
	3. $x^2 = 12$ 4. $x^2 = 32$
	5. $x^2 + 14 = 50$ 6. $x^2 - 14 = 10$
	***Notice how there are 2 solutions for all of the above.

When using the **quadratic formula**, you start by finding the value for
a =
b =
c =
You plug these values into:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Solve:

7. $x^2 + 9x + 14$

a =
b =
c =

8. $x^2 - 2x - 15$

a =
b =
c =

Summary: How do you solve a quadratic equation using the quadratic formula?