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Module 13 Solving Quadratic Equations
of One Variable**Lesson 5** Solving Quadratic Equations
by the Quadratic Formula**guided
notes****Lesson Objectives**

- Solve quadratic equations in one variable using the quadratic formula.
- Use the discriminant to determine the number of solutions of a quadratic equation in one variable.

The standard form of a quadratic equation is _____,

where $a \neq 0$.The quadratic formula is _____. This formula is used to
find the solution(s) to a quadratic equation.

- 1 Solve by using the quadratic formula. $3x^2 + 6x + 3 = 0$
- _____

The discriminant of a quadratic equation is used to determine how many
real-number solutions the quadratic equation has. The discriminant is the
_____ of the quadratic formula.

Discriminant

$b^2 - 4ac > 0$	2 real solutions
$b^2 - 4ac = 0$	1 real solution
$b^2 - 4ac < 0$	no real solution

- 2 Use the discriminant to determine the number of solutions to

$$x^2 - 7x - 10 = 0. \quad \underline{\hspace{10em}}$$

- 3 Solve by using the quadratic formula. $x^2 - 7x - 10 = 0$
- _____

