

Clarity for Learning**Standard KY.HS.A.19 (Algebra 1)** Solve quadratic equations in one variable.**Concepts (Nouns)**

square root
quadratic formula
factoring
zero product property

Skills (Verbs)

solve

Learning Progression:*Prerequisites:*

- Solve linear equations
- Graphing quadratic functions

Grade level skills:

- Solve quadratics using graphs and tables.
- Solve quadratics by factoring (using algebra tiles for visual model).
- Rewrite radical expressions in simplest form.
- Solve quadratics using square roots.
- Completing the square.
- Solve quadratics using the quadratic formula.

Clarifications:

Students will understand that the method for solving a quadratic will be determined by the structure of the equation. Although all methods are interrelated, some are more appropriate and efficient for a given form of the equation.

Learning Intentions (I am learning to...)	Success Criteria (I know I'm successful when...)
<p>Solve quadratic equations by taking square roots, using the quadratic formula, and factoring.</p>	<ul style="list-style-type: none">● I can use a graph to identify the x-intercepts as solutions of a quadratic equation.● I can use a graphing calculator to make a table of values to approximate or solve a quadratic equation.● I can use the Zero-Product Property and factoring to find the solutions of a quadratic equation.● I can apply factoring to solve real-world problems.● I can solve quadratic equations by finding square roots.● I can determine reasonable solutions for real-world problems.● I can solve quadratic equations in one variable by using the quadratic formula.