RAISE For Success + Equity
Rice Algebra Initiative

openstax™

Unit 8 Student Self-Assessment

After completing Unit 8, please mark how much you agree with the following statements.

If you want to brush up on any of these skills, refer to the lesson heading above it.

I can...	I can	Almost	Not yet
Lesson 8.1: Finding Unknown Inputs			
Explain the meaning of a solution to an equation in terms of a situation.			
Write a quadratic equation that represents a situation.			
Lesson 8.2: When and Why Do We Write Quadratic Equations?			
Recognize the factored form of a quadratic expression and know when it can be useful for solving problems.			
Use a graph to find the solutions to a quadratic equation but also know its limitations			
Lesson 8.3: Solving Quadratic Equations by Reasoning			
Find solutions to quadratic equations by reasoning about the values that make the equation true.			
Explain that quadratic equations may have one or two solutions.			
Implement the square root property.			
Lesson 8.4: Solving Quadratic Equations with the Zero Product Property			
Explain the meaning of the "zero product property."			
Find solutions to quadratic equations when one side is a product of factors and the other side is zero.			

I can...	I can	Almost	Not yet
Lesson 8.5: How Many Solutions?			
Explain why dividing by a variable to solve a quadratic equation is not a good strategy.			
Explain why quadratic equations can have no solutions and explain why there are none.			
Lesson 8.6: Rewriting Quadratic Expressions in Factored Form, Part 1			
Explain how the numbers in a quadratic expression in factored form relate to the numbers in an equivalent expression in standard form.			
Rewrite a quadratic expression in standard form when given the quadratic expression in factored form.			
Rewrite a quadratic expression in factored form when given the quadratic expression in the form of $x^2 + bx + c$.			
Lesson 8.7: Rewriting Quadratic Expressions in Factored Form, Part 2			
Explain how the numbers and signs in a quadratic expression in factored form relate to the numbers and signs in an equivalent expression in standard form.			
Write an equivalent expression in factored form, given a quadratic expression in standard form with a negative constant term.			
Lesson 8.8: Rewriting Quadratic Expressions in Factored Form, Part 3			
Explain why multiplying binomials that are a sum and a difference, $(x + m)(x - m)$, results in a quadratic expression with no linear term.			
Rewrite a quadratic expression of the form $x^2 - c$ into its factored form.			

I can...	I can	Almost	Not yet
Lesson 8.9: Solving Quadratic Equations by Using Factored Form			
Rearrange a quadratic equation to be written as an expression in factored form $= 0$ and find the solutions.			
Recognize quadratic equations that have zero, one, or two solutions when they are written in factored form.			
Lesson 8.10: Rewriting Quadratic Expressions in Factored Form, Part 4			
Use the factored form of a quadratic expression or a graph of a quadratic function to answer questions about a situation.			
Write equivalent expressions in factored form when given quadratic expressions of the form $ax^2 + bx + c$ and a is not 1.			
Lesson 8.11: Writing Quadratic Equations Given Real Solutions			
Find the standard form of a quadratic function given its zeros.			
Find the standard form of a quadratic function given its graph.			
Use the intercept form of a quadratic function to define a specific function given its zeros and a point.			
Lesson 8.12: Using Technology to Find the Quadratic Regression			
Graph a quadratic data set using technology.			
Find a regression curve, or curve of best fit, using a quadratic data set.			
Use a regression curve to create a quadratic model for making predictions.			

I can...	I can	Almost	Not yet
Make predictions about a real-world situation using a quadratic data set.			