Unit 7 Student Self-Assessment

After completing Unit 7, 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 7.1: Patterns of Change			
Create drawings, tables, and graphs that represent the area of a garden.			
Recognize a situation represented by a graph that increases and then decreases.			
Lesson 7.2: Introduction to Quadratic Relationships			
Describe how a pattern is growing.			
Tell whether a pattern is growing linearly, exponentially, or quadratically.			
Explain that an expression with a squared term is called quadratic.			
Lesson 7.3: Building Quadratic Functions from Geometric Patterns			
Recognize quadratic functions written in different ways.			
Use information from a pattern of shapes to write a quadratic function.			
Understand that, in a pattern of shapes, the step number is the input and the number of squares is the output.			
Lesson 7.4: Comparing Quadratic and Exponential Functions			
Explain using graphs, tables, or calculations how exponential functions eventually grow faster than quadratic functions.			

I can...	I can	Almost	Not yet
Lesson 7.5: Building Quadratic Functions to Describe Situations, Part 1			
Explain the meaning of the terms in a quadratic expression that represents the height of a falling object.			
Use tables, graphs, and equations to represent the height of a falling object.			
Lesson 7.6: Building Quadratic Functions to Describe Situations, Part 2			
Create quadratic functions and graphs that represent a situation.			
Relate the vertex of a graph and the zeros of a function to a situation.			
Explain how the situation that a function represents can influence its domain.			
Lesson 7.7: Domain, Range, Vertex, and Zeros of Quadratic Functions			
Choose a domain that makes sense in a revenue situation.			
Model revenue with quadratic functions and graphs.			
Relate the vertex of a graph and the zeros of a function to a revenue situation.			
Lesson 7.8: Equivalent Quadratic Expressions			
Rewrite quadratic expressions in different forms by using an area diagram or the distributive property.			
Lesson 7.9: Standard Form and Factored Form			
Rewrite quadratic expressions given in factored form in standard form using either the distributive property or a diagram.			

I can...	I can	Almost	Not yet
Explain the difference between “factored form” and “standard form.”			
Lesson 7.10: Graphs of Functions in Standard and Factored Forms			
Explain the meaning of the intercepts on a graph of a quadratic function in terms of the situation it represents.			
Explain how the numbers in the factored form of a quadratic expression relate to the intercepts of its graph.			
Lesson 7.11: Graphing from the Factored Form			
Graph a quadratic function given in factored form.			
Find the vertex and y-intercept of the graph of a quadratic function in factored form without graphing it first.			
Lesson 7.12: Graphing the Standard Form, Part 1			
Explain how the a and c in ax^2+bx+c affect the graph of the equation.			
Explain how graphs, tables, and equations that represent the same quadratic function are related.			
Lesson 7.13: Graphing the Standard Form, Part 2			
Explain how the b in ax^2+bx+c affects the graph of the equation.			
Match equations given in standard and factored form with their graph.			
Lesson 7.14: Graphs That Represent Situations			
Explain how a quadratic equation and its graph relate to a situation.			

I can...	I can	Almost	Not yet
Lesson 7.15: Vertex Form			
Recognize the "vertex form" of a quadratic equation.			
Relate the numbers in the vertex form of a quadratic equation to its graph.			
Lesson 7.16: Graphing from the Vertex Form			
Graph a quadratic function given in vertex form, showing the maximum or minimum and the y-intercept.			
Find the maximum or the minimum of a quadratic function given in vertex form without first graphing it.			
Lesson 7.17: Changing the Vertex			
Describe how changing a number in the vertex form of a quadratic function affects its graph.			