Unit 4 Student Self-Assessment

After completing Unit 4, 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 4.1: Describing and Graphing Situations			
Explain when a relationship between two quantities is a function.			
Identify independent and dependent variables in a function, and use words and graphs to represent the function.			
Explain what descriptions and graphs of functions tell us about situations.			
Lesson 4.2: Function Notation			
Use function notation to express functions that have specific inputs and outputs.			
Explain what function notation is and why it exists.			
Explain a statement written in function notation in terms of a situation.			
Lesson 4.3: Interpreting & Using Function Notation			
Describe the connections between a statement in function notation and the graph of the function.			
Use function notation to efficiently represent a relationship between two quantities in a situation.			
Use statements in function notation to sketch a graph of a function.			

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I can...	I can	Almost	Not yet
Lesson 4.4: Using Function Notation to Describe Rules, Part 1			
Explain rules of functions when they are written in function notation and create tables and graphs to represent the functions.			
Write equations that represent the rules of functions.			
Lesson 4.5: Using Function Notation to Describe Rules, Part 2			
Use technology to graph a function given in function notation, and use the graph to find the values of the function.			
Identify if a graph represents a function through the vertical line test.			
Explain different ways to find the value of a function and to solve equations written in function notation.			
Explain what makes a function a linear function.			
Lesson 4.6: Features of Graphs			
Identify important features of graphs of functions and explain what they mean in the situations represented.			
Explain and apply the terms “horizontal intercept,” “vertical intercept,” “maximum,” and “minimum” when talking about functions and their graphs.			
Identify important features of linear functions.			
Lesson 4.7: Finding Slope			
Write the slope of a line.			
Write the equation of a line in different forms.			

I can...	I can	Almost	Not yet
Lesson 4.8: Using Graphs to Find Average Rate of Change			
Explain the meaning of the term “average rate of change.”			
Estimate or calculate the average rate of change between two points from the graph of a function.			
Lesson 4.9: Interpreting and Creating Graphs			
Explain the average rate of change of a function in terms of a situation.			
Describe important features of a graph and explain what they mean in a situation.			
Sketch a graph that shows important features of the situation, given a description or a visual representation of a situation.			
Lesson 4.10: Comparing Graphs			
Compare the features of graphs of functions and explain what they mean in the situations represented.			
Make sense of an equation of the form $f(x)=g(x)$ in terms of a situation and a graph, and I know how to find the solutions.			
Explain statements about two or more functions when they are written in function notation.			
Lesson 4.11: Graphing a Function Using Transformations			
Use slope-intercept form and transformations to graph linear functions.			
Recognize the shifts made to a parent linear function to form another linear function.			

I can...	I can	Almost	Not yet
Lesson 4.12: Domain and Range, Part 1			
Describe the “domain” and “range” of a function.			
Lesson 4.13: Domain and Range, Part 2			
Determine a reasonable domain and range for the function when given a description of a function in a situation.			
Determine a reasonable domain and range for the function when given a description of a function in a situation.			
Lesson 4.14: Sequences			
Give examples of a sequence.			
Explain the meaning of the term “sequence.”			
Explain the meaning of the term “term,” as it is used in a mathematical sequence.			
Lesson 4.15: Introducing Geometric Sequences			
Find missing terms in a geometric sequence.			
Lesson 4.16: Different Types of Sequences			
Explain what it means for a sequence to be arithmetic or geometric.			
Lesson 4.17: Sequences are Functions			
Define arithmetic and geometric sequences recursively using function notation.			
Represent a sequence in different ways.			

I can...	I can	Almost	Not yet
Ask questions to get the information needed to represent a sequence in different ways.			
Lesson 4.18: The nth Term of an Arithmetic Sequence			
Describe the nth term.			
Find terms of sequences directly.			
Explain why different equations can represent the same sequence.			