Mathematics: Algebra II, Level 3 - *Modified from [Unit D - Functions](#)*

Targeted Goals from Stage 1: Desired Results

Content Knowledge: The focus of Unit D is for students to learn what is a mathematical function and its importance in problem solving. Students will also explore and learn to use the concept of function notation. Even though function notation is awkward to learn and seems more cumbersome, it is a great tool that allows mathematicians to communicate more clearly. Students will learn to work flexibly between all representations of a relation or function (table, list, equation, graph, and mapping diagram).

Vocabulary: Functions, Input, Output, Domain, Range, Compose

Skills: Interpret Graphs in the coordinate plane, Understand and Interpret Function Notation, Perform Operations on Polynomials, Describe sets of numbers using Set Builder Notation, Simplifying Polynomials by Combining Like Terms

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Composition of Functions	Khan Academy Video: Intro to Function Compositions Khan Academy Notes and Practice: Composition of Functions	Worksheet: Function Composition with Values Questions 1 - 6
Tuesday: Composition of Functions	YouTube Video: Composition of Functions to create a new function	Textbook: Algebra II An Integrated Approach Page 294, Exercises 21 - 26
Wednesday: Domain and Range	YouTube Video: Domain and Range of a Function	Worksheet: Domain and Range from Tables, Sets and Graphs

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Thursday: Domain Restrictions	Khan Academy Video: The Domain of a Function Khan Academy Video: The Range of a Function	Khan Academy: Four Question Practice on Domain of a Function
Friday: Domain and Range Graphically	YouTube Video: Find Domain and Range from a Graph	Worksheet: Find Domain and Range from a Graph Khan Academy: Practice Finding Domain and Range from a Graph

Week criteria for success (attach student checklists or rubrics):

1. Identifying the domain and range of a function from tables, sets and graphs

2. Recognizing when a domain may have a restriction

3. Finding the composition of two functions

Supportive resources and tutorials for the week (plans for re-teaching): Khan Academy, Kuta Software worksheets, office hours

remediation material for Domain and Range and Domain Restrictions