

Grade 10 - 12

Distance Learning Module 4: Week of: April 20 through April 24

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

Targeted Goals from Stage 1: Desired Result

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: Relation, Function, Input, Output, Mapping, Notation, Inverse, Domain, Range

Skills: Recognize a mathematical function versus a relation, Comprehend and interpret function notation, Evaluate equations given in function notation, perform adding, subtracting, multiplying and dividing operations on functions, understand the connection between inverse functions and compute inverse functions.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: What is a mathematical Function	YouTube Video Math Functions	Worksheet Questions 1 - 4
Tuesday: Function Notation and Domain and Range Restrictions	YouTube Video on Evaluating Functions and Restrictions	Worksheet on Evaluating Functions
Wednesday: Add and Subtract Functions	YouTube Video Adding/Subtracting Functions Notes on Adding/Subtracting Functions	Worksheet on Combining Functions Questions 7 - 14
Thursday: Multiply and Divide Functions	YouTube Video Multiplying/Dividing Functions Notes on Multiplying/Dividing Functions	Worksheet on Combining Functions Questions 15 - 22
Friday: Simple Inverse of Functions	Khan Academy Video Inverse Functions Smartboard Notes on Inverse Functions	Khan Academy Four Question Practice

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

Student will be able to:

1. Identifying the domain and range of a function
2. Identifying if a relation is a functions
3. Finding the value of $f(x)$ for a specific x value
4. Adding, subtracting, multiplying and dividing functions
5. Finding the inverse of a function

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