Grade 10 - 12
Distance Learning Module 8: Week of: May 26th - May 29th

Algebra II, Level 3   *Modified from* [*Unit F - Exponential and Logarithmic Functions*](#)

Targeted Goals from Stage 1: Desired Results

Content Knowledge: The purpose of this unit is to expose students to ways of manipulating expressions using exponents. Students are expected to have a conceptual understanding of the rules around exponents and logarithms. They should explore the logic behind the development of negative exponents, zero as an exponent, and rational exponents versus memorizing rules.

Vocabulary: Base, Exponent, Index, Argument, Growth, Decay, Exponential

Skills:

1. Repeated Multiplication
2. Performing division as the inverse operation of multiplication
3. Performing operations on integers
4. Using parentheses within the proper order of operations
5. Identifying linear functions vs. nonlinear functions

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday:	**Memorial Day**	**NO SCHOOL**
Tuesday: Properties of Exponents	Khan Academy Video: Multiplying and Dividing with Powers	Khan Academy: Four Question Practice on Multiplying and Dividing with Powers
Wednesday: Properties of Exponents	Khan Academy Video: Powers of Products and Quotients	Khan Academy: Four Question Practice on Powers of Products and Quotients

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Thursday: What is the Exponential Function?	Khan Academy Video: Intro to the Exponential Function	Khan Academy: Four Question Practice on Exponential vs. Linear Modeling
Friday: Review Day/Assessment Day	Live Session for Review	Worksheet: Properties of Exponents Note: Teacher to choose exercises

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

Student will be able to:

1. Evaluate exponential expression with the understanding of repeated multiplication
2. Simplify exponential expressions using the properties of exponents
3. Describe and identify a real world scenario modelled by an exponential function
4. Determine if a function, whether real or abstract, is modelled by a linear function or exponential function

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

remediation material, Video An Introduction to Exponential Functions and Exponent Rules with Examples