

Grade 10

Distance Learning Module 2: Intro to Logarithm and the Properties of Logarithms

Week of: 4/6 - 4/10

Mathematics: Algebra 2 (Level 1) - Modified from [Unit 6 - Exponential and Logarithmic Functions](#)

Targeted Goals from Stage 1: Desired Results

Content Knowledge: The relationship between the laws of exponents and how they relate to the laws of logs, properties of logarithms, graphing logarithmic functions

Vocabulary: Logarithm, log base, common logarithm, natural logarithm (\ln)

Skills: Changing an equation from log form to exponential form and back using the laws of logs.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Intro to Logarithms Evaluating Logarithms	LIVE Instruction, Video Tutorial (Khan): Intro to Logarithms Video Tutorial (Khan): Evaluating Logarithms	Picture of student notes, Khan Practice
Tuesday: Properties of Logarithms, Common and Natural Logarithm	SmartNotes	Snapshot of Students Textbook Word Problem solutions (Page 397, Ex: 16, 22, 26, 28, 32)
Wednesday: Graphing Logarithmic Functions	Video Tutorial(Khan): Relationship between Exponentials and Logarithms SmartNotes (Page 8-11)	Snapshot of Students worksheet answers [Pages 398-99 #'s 38, 40-46(all)]
Thursday: Graphing Logarithmic Functions	LIVE Instruction Transformation Worksheet	Snapshot of Students Worksheet Solutions (Answer Key)

Friday: No School

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

By the end of this module, students will be able to

- evaluate basic logarithmic expressions without a calculator,
- simplify logarithmic expressions
- graph and transform logarithmic functions

Supportive resources and tutorials for the week (plans for re-teaching):

- Office hours,
- Textbook,
- Khan academy
- Module 2 - Google Slides