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 (In)
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 <br> (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

