Teacher Name: Sierra Hearp-Jordan **Subject: Math III**

RRGSD Remote Instruction Learning Plan

Dates: 03/22//21- 03/26/21

Statement of Goals and Objectives: *(Learning Targets in Student & Parent-Friendly Language)*	• Create exponential and logarithmic functions from a contextual situation. • Create and solve exponential or logarithmic equations from a contextual situation. • Given an exponential function students will determine key features of a graph, table, or context. • Students should be able to compare features of two functions in different representations. • Students should be able to understand and interpret domain and range of an exponential/logarithmic function. • Understand inverse relationships of exponential and logarithmic functions. • Create an equation or inequality and interpret reasonable solutions in context. • Given a function create an equation from various representations and use them to solve problems. • Interpret structure of an exponential/logarithmic function and relationship with graph, table, and/or context. • Given two functions, solve and interpret equations graphically.

Topic(s)/Concept & NC Standard Course of Study: *Topic(s)/Concept and the correlating content standards addressed)*	• **NC.M3.A-CED.1**: Create equations and inequalities in one variable that represent absolute value, polynomial, exponential, and rational relationships and use them to solve problems algebraically and graphically.
	• **NC.M3.A-CED.2**: Create and graph equations in two variables to represent absolute value, polynomial, exponential and rational relationships between quantities.
	• **NC.M3.A-SSE.1a**: Interpret expressions that represent a quantity in terms of its context.
	  a. Identify and interpret parts of a piecewise, absolute value, polynomial, exponential and rational expressions including terms, factors, coefficients, and exponents.
	• **NC.M3.A-SSE.1b**: Interpret expressions that represent a quantity in terms of its context.
	  b. Interpret expressions composed of multiple parts by viewing one or more of their parts as a single entity to give meaning in terms of a context.
	• **NC.M3.A-SSE.2:** Use the structure of an expression to identify ways to write equivalent expressions.
	• **NC.M3.A-SSE.3:** Write an equivalent form of an exponential expression by using the properties of exponents to transform expressions to reveal rates based on different intervals of the domain.
	• **NC.M3.A-REI.1:** Justify a solution method for equations and explain each step of the solving process using mathematical reasoning

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	• NC.M3.F-BF.3: Extend an understanding of the effects on the graphical and tabular representations of a function when replacing $f(x)$ with $k \cdot f(x)$, $f(x) + k$, $f(x + k)$ to include $f(k \cdot x)$ for specific values of k (both positive and negative) • NC.M3.F-IF.7: Analyze piecewise, absolute value, polynomials, exponential, rational, and trigonometric functions (sine and cosine) using different representations to show key features of the graph, by hand in simple cases and using technology for more complicated cases, including: domain and range; intercepts; intervals where the function is increasing, decreasing, positive, or negative; rate of change; relative maximums and minimums; symmetries; end behavior; period; and discontinuities. • NC.M3.F-IF.9: Compare key features of two functions using different representations by comparing properties of two different functions, each with a different representation (symbolically, graphically, numerically in tables, or by verbal descriptions). • NC.M3.F-LE.4: Use logarithms to express the solution to $ab^{ct} = d$ where a, b, c, and d are numbers and evaluate the logarithm using technology
Social-Emotional Focus	The teacher will be available daily from 1:30-2:45 for live one on one sessions as needed. Student can sign up on google calendar located under resources tab on google classroom

Daily Agenda: Including assignments and due dates

Date:	Virtual/Remote Agenda	JacketTime Opportunity Agenda
Monday	Solving Logarithms and Exponential Equations	8:30-9:15 Planning 1st Period
Tuesday	Students will meet with teacher to discuss topics below: Finance including compound interest and log applications Exponential/ Log test	2:00-3:00pm Period 2 Jacket Time
Wednesday	Benchmarks	2:00-3:30pm Period 3 Jacket Time
Thursday	Students will meet with teacher to discuss topics below: • Intro to Modeling with Geometry • Area of Plane Figures/ Regular Polygons	2:00-3:30pm Period 4 Jacket Time
Friday	Students will meet with teacher to discuss topics below: • Area of Sectors	2:00-3:30 Clubs and/or Tutorial

Assessment:

How will I be assessing my students throughout this week?

Formative Assessment(s)	Quizzes, LiveWorksheets,Mastery Connect
Summative Assessment(s)	Masteryconnect Assessment

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How will I know my students have **mastered the content** from this week?	By reviewing the data from the quizzes and tests that were assigned I will be able to tell mastery/non mastery

Additional Resources:

If a student needs additional support, below are resources that will assist with the material being taught.

Topic/Concept	Website/Location resource can be found
Math III	Khan Academy Symbaloo (on google classroom under resources) Teacher recorded videos on google classroom