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

#### **RRGSD Remote Instruction Learning Plan**

Dates: October 12, 2020 - October 16, 2020

## Statement of Goals and Objectives: (Learning Targets in Student & Parent-Friendly Language)

- Students will be able to solve problems involving indirect measurement that can be modeled as parts of a right triangle.
- Students will be able to use relationships in right triangles, such as trigonometric ratios, angles of elevation and depression, and the Pythagorean Theorem to solve problems.
- Students will be able to use the relationships in the special right Students will use the roots and/or factors of a polynomial to write a quadratic in standard form.
- Students will solve a quadratic equation by factoring (GCF) or extracting the roots.
- Students will solve a quadratic equation by factoring (binomial factors - difference of square, trinomials with and without leading coefficient).
- Students will **create** a quadratic equation or inequality from a given scenario.
- Students will **understand** the relationship between factors and roots, solutions, x-intercepts, and zeros.

# Topic(s)/Concept & NC Standard Course of Study:

Topic(s)/Concept and the correlating content standards addressed)

- NC.M2.G.SRT.4: (second bullet) Use similarity to prove theorems about triangles. Use theorems about triangles to prove relationships in geometric figures.
  - Use the Pythagorean Theorem.
- NC.M2.G-SRT.12: Define trigonometric ratios and solve problems involving right triangles. Develop properties of special right triangles (45-45-90 and 30-60-90) and use them to solve problems.
- NC.M2.G.SRT.8: Use trigonometric ratios and the Pythagorean Theorem to solve problems involving right triangles in terms of a context.
- NC.M2.G.SRT.6: Verify experimentally that the side ratios in similar right triangles are properties of the angle measures in the triangle, due to the preservation of angle measure in similarity. Use this discovery to develop definitions of the trigonometric ratios for acute Angles.

## Review of Math I (Factoring Trinomials/Quadratic Equations)

- NC.M1.A-SSE.3: Write an equivalent form of a quadratic expression by factoring, where a is an integer of the quadratic expression,  $ax^2 + bx + c$ , to reveal the solutions of the equation or the zeros of the function the expression defines.
- NC.M1.A-REI.4: Solve for the real solutions of quadratic equations in one variable by taking square roots and factoring.

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		C.M1.A-APR.3: Understand the relationship between zeros and ctors of polynomials. Understand the relationships among the ctors of a quadratic expression, the solutions of a quadratic quation, and the zeros of a quadratic function.
Social-Emotional	Focus	

**Daily Agenda:** Including assignments and due dates Check GOOGLE CLASSROOM for due dates!

Date:	Virtual/Remote	Check-In Times for Virtual:
Monday	Trig Functions/Trig Word Problems Finish study guide with practice problems	<ul> <li>OFFICE HOURS         <ul> <li>10-12pm</li> </ul> </li> <li>PD 1 GOOGLE         <ul> <li>LIVE MEET at 9am</li> </ul> </li> </ul>
Tuesday	Trig Functions/Trig Word Problems Right Triangle Trigonometry Word Problems - Angles of Elevation & Depression Live GOOGLE MEET @ 9:00	<ul> <li>OFFICE HOURS 10-12pm</li> <li>PD 3 LIVE (9am)</li> </ul>
Wednesday	Trig Functions/Trig Word Problems/Angle of Elevation & Depression Unit Test	• OFFICE HOURS 10-12pm
Thursday	Unit 3-QUADRATIC FUNCTIONS Review Math I standards for factoring trinomials, solving quadratic equations, finding the zeros of the function. Identifying solutions to the quadratic equation.	<ul> <li>OFFICE HOURS 10-12pm</li> <li>PD 1 LIVE (1pm)</li> </ul>
Friday	Unit 3-QUADRATIC EQUATIONS LIVE GOOGLE MEET @ 1:00Q & A ReviewFactoring	<ul> <li>OFFICE HOURS 10-12pm</li> <li>Live Meet PD 3 (1pm)</li> </ul>

### **Assessment:**

How will I be assessing my students throughout this week?

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

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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 able to tell mastery/non mastery	d practice that were assigned I will be

### **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
	Khan Academy Symbaloo (on google classroom under resources) Teacher recorded videos on google classroom Math Hacks (youtube)