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| Teacher’s Name: Christopher West | Date: 3/12/18 |
| Course: GSE Geometry | Period (s): 3, 4 |

**R.L. Osborne High School**

Daily Lesson Plan

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| Standard(s): | |
| MGSE9-12.G.SRT.6 Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.  MGSE9-12.G.SRT.8 Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. | |
| Learning Target(s): | |
| Students will solve for missing sides and angles using trigonometric ratios. | |
| Language Objective(s): | |
| Students will learn when to use Trig Ratios for solving for sides and when to use Inverse Trig Ratios to solve for angles. | |
| Opening Session | |
| Warm Up: 3 Triangle Congruence Problems  Drill: Division of Integers | Activator: 1.) SOHCAHATOA STYLE !!!  <https://youtu.be/jwswKGw0DuM>  2.) Hand Out G.O. explaining what it is. |
| Other Activities: Discussion of Test Grades from Test 2B. | |
| Work Session | |
| 1. Episode 1: Students will complete a Graphic Organizer (TRIG Flip Book) through collaborative learning. The Flip Book will serve as both an introduction to Trig Ratios, SIN, COS, TAN, used to solve for missing sides of right triangles, and SIN-1, COS-1, TAN-1 used to solve for unknown angles of right triangles. 2. Episode 2: Once the Trig Flip Book G.O. section is complete, the students will stay in their groups to collaborate on part 2, where they will solve a mixed practice section – having to decide which Trig Functions to use to solve the problems. This will be timed, and the unfinished portion of the mixed practice will be completed for Home Work. 3. Episode 3: Students will be given a brief guided lesson that will define “Angle of Elevation” and “Angle of Depression.” 4. Episode 4: Students will collaborate on the Applications section where they will work to solve real world problems using the Trig Functions and Inverse Trig Functions. | |
| Closing Session | |
| Students will be asked to complete all unfinished problems from home work. Students will be informed that a completed Answer Key from Episode 1 will be on the teacher blog tonight in case they need those for reference to complete homework. | |
| Assessment Strategies | |
| Informal observation. Work produced during class will be evaluated by teacher in real time.  The G.O. completed in class and for home work will be taken a graded for accuracy. This will provide the teacher with both assessment of learning, and the opportunity for assessment of the effectiveness of the Trig Flip Book produce and instruction. | |
| Differentiation Plan | |
| Students will be grouped according to previous days success and TOTD.  L3 (Beginner) will be grouped homogeneously, and teacher will provide these students with written notes of each Trig Function. Teacher will maintain close contact through observation and questioning of L3 students providing support and individual re-teaching wherever teacher sees the need.  L2 (Middle) and L1 (High) will be grouped heterogeneously. These students will not receive the written notes, instead relying on the GO itself and previous days notes if needed. | |