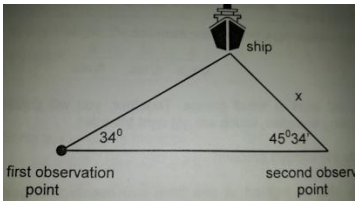
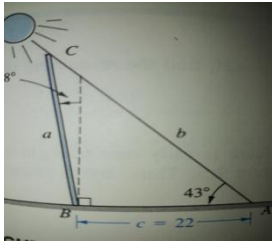
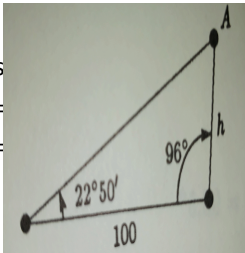


DAILY LESSON LOG OF M9GE-IV-j-1 (Day 5)

School		Grade Level	Grade 9
Teacher		Learning Area	Mathematics
Teaching Date and Time		Quarter	Fourth
I. OBJECTIVES	Objectives must be met over the week and connected to the curriculum standards. To meet the objectives, necessary procedures must be followed and if needed, additional lessons, exercises and remedial activities may be done for developing content knowledge and competencies. These are assessed using Formative Assessment Strategies. Valuing objectives support the learning of content and competencies and enable children to find significance and joy in learning the lessons. Weekly objectives shall be derived from the curriculum guides.		
A. Content Standards	The learner demonstrates understanding of the basic concepts of trigonometry.		
B. Performance Standards	The learner is able to apply the concepts of trigonometric ratios to formulate and solve real-life problems with precision and accuracy.		
C. Learning Competencies/ Objectives	Learning Competency: Solves problems involving oblique triangles(M9GE-IVh-j-1) Learning Objectives: 1. Determine problems involving oblique triangles. 2. Solve problems using the Law of Sine given two angles and a side. 3. Show perseverance in doing the day's tasks.		
II. CONTENT	Solving Oblique Triangles		
III. LEARNING RESOURCES	teacher's guide, learner's module,		
A. References			
1. Teacher's Guide			
2. Learner's Materials			
3. Textbook pages	Algebra and Trigonometry by Larson/Hostetler, pages 512-516		
4. Additional Materials from Learning Resource (LR) portal			
B. Other Learning Resources			
IV. PROCEDURES	<i>These steps should be done across the week. Spread out the activities appropriately so that pupils/students will learn well. Always be guided by demonstration of learning by the pupils/ students which you can infer from formative assessment activities. Sustain learning systematically by providing pupils/students with multiple ways to learn new things, practice the learning, question their learning processes, and draw conclusions about what they learned in relation to their life experiences and previous knowledge. Indicate the time allotment for each step.</i>		
A. Review previous lesson or presenting the new lesson	The teacher, with the students, reviews the previous lesson by letting the students find the missing parts of $\triangle ABC$ on the right. Given: two angles and one side. $\angle A = 42^\circ$ $\angle C = 70^\circ$ $a = 6$ Answer Key: $b = 8.31$		

	$c = 8.43$ $\angle B = 68^\circ$
B. Establishing a purpose for the lesson	The teacher lets the students realize that the law of sine is an important tool needed to solve problems involving oblique triangles.
C. Presenting examples/ instances of the new lesson	The teacher lets the students, in group of four, do the Activity. Solve. A ship is sighted at sea from two observation points on the coastline, which are 30 miles apart. The angle between the coastline and the line between the ship and the first observation point measures 34°. The angle between the coastline and the line between the ship and the second measures $45^\circ 34'$. How far is the ship from the second observation point?  Answer key: Using the Law of Sine to find x. $\frac{\sin 100^\circ 26'}{30} = \frac{\sin 34^\circ}{x}$ $x = \frac{30 \sin 34^\circ}{\sin 100^\circ 26'}$ $x = 17.06 \text{ miles}$
D. the Discussing new concepts and practicing new skills #1	The teacher discusses with the students the process of arriving at the answer of the activity.
E. Discussing new concepts and practicing new skills #2	
F. Developing mastery (leads to formative assessment 3)	Working in pairs, the teacher lets the students answer the problem using the law of sine. Solve. A pole tilts toward the sun at an 8° angle from vertical, and it casts a 22-foot shadow. The angle of elevation from the tip of the shadow to the top of the pole is 43°. How tall is the pole?  Answer Key: $C = 180^\circ - A - B = 180^\circ - 43^\circ - 98 = 39^\circ$

	By the Law of Sine, we have $\frac{a}{\sin 43^\circ} = \frac{c}{\sin 39^\circ}$
G. Finding practical applications of concepts and skills in daily living	Because $c = 22\text{feet}$, the length of the pole is $a = \frac{22}{\sin 39^\circ}(\sin 43^\circ) = 23.84\text{feet}$
H. Making generalizations and abstractions about the lesson	The teacher summarizes the mathematical skills or principle used in solving problems involving oblique triangles using the law of sine. "The Law of Sine can be used to solve a triangle when the measures of two angles and a side are given".
I. Evaluating Learning	The teacher lets the students answer individually the formative assessment. Solve. Because of prevailing winds, a tree grew so that it was leaning 6° from the vertical. At a point 100 feet from the tree, the angle of elevation to the top of the tree is $22^\circ 50'$ (see figure) Find the height h of the tree. Ans $A =$ $h =$  $6^\circ = 61^\circ 10'$ $= 44.3\text{ft}$
J. Additional activities or remediation	
V. REMARKS	
VI. REFLECTION	
A. No. of learners who earned 80% of the evaluation	
B. No. of learners who require additional activities for remediation who scored below 80%	
C. Did the remedial lesson work? No. of learners who have caught up with the lesson.	
D. No. of learners who continue to require remediation	

E. Which of my teaching strategies worked well? Why did these work?	
F. What difficulties did I encounter which my principal or supervisor can help me solve?	
G. What innovation or localized materials did I use/ discover which I wish to share with other teachers	

Prepared by:

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MCCNHS