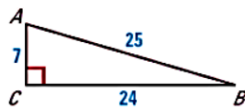
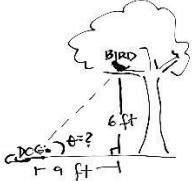
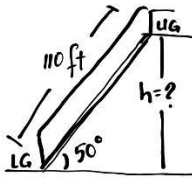
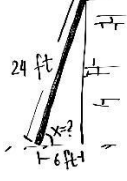
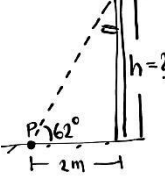
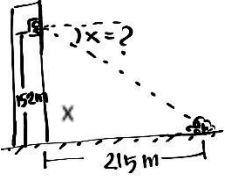


DAILY LESSON LOG OF M9AL-Ig-f-1 (Day 3)

School		Grade Level	Grade 9
Teacher		Learning Area	Mathematics
Teaching Date and Time		Quarter	First
I. OBJECTIVES	<i>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.</i>		
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	<i>Learning Competency:</i> Uses trigonometric ratios to solve real-life problems involving right triangles. (M9GE-IVe-1) <i>Learning Objectives:</i> 1. Illustrate problems involving right triangles 2. Apply the correct trigonometric ratios in solving problems involving right triangles 3. Demonstrate cooperation during group activities		
II. CONTENT	Solving Problems Involving Right Triangles Using Trigonometric Ratios		
III. LEARNING RESOURCES			
A. References			
1. Teacher’s Guide			
2. Learner’s Materials			
3. Textbook pages			
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 calls a representative from the class to give an answer for each item on the exercise below. A. Find the following ratios using the given right triangle. 1. Sin A = _____ 2. Cos A = _____ 3. Tan A = _____ 4. Sin B = _____ 5. Cos B = _____ 6. Tan B = _____  B. Illustrate the following situations. 1. A 12-ft ladder is leaning on a wall of a building and formed a 36° with the ground. How high up the wall did the ladder reach?		

	 TOA: $\tan \theta = \frac{6}{9}$ $\theta = \tan^{-1}\left(\frac{6}{9}\right)$ $\theta = 34^\circ$	 SOH: $\sin 50 = \frac{h}{110}$ $x = 110 \sin 50$ $x = 84 \text{ ft}$
	G3 and G8:  CAH: $\cos x = \frac{6}{24}$ $\theta = \cos^{-1}\left(\frac{6}{24}\right)$ $\theta = 76^\circ$	G4 and G9:  TOA: $\tan 62 = \frac{h}{2}$ $h = 2 \tan 62$ $h = 4 \text{ m}$
	G5 and G10:  TOA: $\tan x = \frac{152}{215}$ $\theta = \tan^{-1}\left(\frac{152}{215}\right)$ $\theta = 35^\circ$	
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 below. A 12-ft ladder is leaning on a wall of a building and formed a 36° with the ground. How high up the wall did the ladder reach? <i>Answer Key:</i> 7 ft	
G. Finding practical applications of concepts and skills in daily living		
H. Making generalizations and abstractions about the lesson	The teacher reiterates the importance of illustrating the problem to decide which trigonometric ratio to use in order to solve the unknown quantity. He/She reminds the students that: • Inverse trigonometric ratios will only be used if the unknown quantity is the angle. • an angle of elevation is the angle between the horizontal (eye level) to the line of sight to an object when looking <i>up</i> • an angle of depression is the angle between the horizontal (eye level) and the line of sight to an object when looking <i>down</i>.	
I. Evaluating Learning	The teacher will ask the students to solve the problem below. A building 50 feet high casts a shadow 68 feet long. What is the angle of elevation of the sun then? <i>Answer:</i> 36°	
J. Additional activities or remediation		
V. REMARKS		
VI. REFLECTION	<i>Reflect on your teaching and assess yourself as a teacher. Think about your students' progress. What works? What else needs to be done to help the pupils/students learn? Identify what help your instructional supervisors can provide for you so when you meet them, you can ask them relevant questions.</i>	

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	Dog, bird, tree, escalator, J-Centre Mall, lamp post, car, ladder, sun

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