DAILY LESSON LOG OF M9GE-IVf-g1 (Day 7)

Sch	ool		Grade Level	Grade 9	
Teacher			Learning Area	Mathematics	
Tea	ching Date and Time		Quarter	Fourth	
	I. OBJECTIVES			•	
A.	Content Standards	The learner demonstrates unde	rstanding of the b	pasic concepts of	
		trigonometry.			
В.	Performance Standards	The learner is able to apply the formulate and solve real-life probler			
C.	Learning Competencies/				
C.	Objectives	Learning Competency: Illustrates laws of sines and cosines. (M9GE-IVf-g1) Learning Objectives: 1. State the Law of Cosine. 2. Solve for the unknown parts of the triangle using the Law of Cosine. 3. Carefully listen to any volunteer and to the teacher during the day's lesson.			
	II. CONTENT	Law of Cosine			
	III. LEARNING RESOURCES				
	A. References				
	Teacher's Guide	Page 41			
\vdash	Learner's Materials	Page 497- 505			
	Textbook pages				
	Additional Materials from Learning Resource (LR) portal				
	B. Other Learning Resources				
	IV. PROCEDURES				
A.	Review previous lesson or presenting the new lesson	The teacher will tell the students th following situation: Three sides are known	at the Law of Cosines	can be used in the	
В.	Establishing a purpose for the lesson	The teacher will let the students realize that if three sides of a triangle are known, then we can use the Law of Cosine.			
C.	Presenting examples/ instances of the new lesson	b=10 80° a= 15 A c=20 B	The teacher will sho figure and let the st realize its unknown	udents	
D.	Discussing new concepts and practicing new skills #1	The teacher will discuss the solution	of the sample figure.		
	practicing new skins #1	Given: three sides			
		a = 15			
		b = 10			
		c = 20			
		Solution:			
		$a^2 = b^2 + c^2 - 2bc \cos A$			
		$b^2 = a^2 + c^2 - 2ac \cos B$			
		$c^2 = a^2 + b^2 - 2ab \cos C$			
		Let's solve for the measure of <a.< td=""><td></td><td></td></a.<>			
		$a^2 = b^2 + c^2 - 2bc \cos A$			
		$15^2 = 10^2 + 20^2 - 2(10)(20)(\cos A)$			
		225 = 100 + 400 - 400 (cos A)			
		-275 = - 400 (cos A)			
		$\frac{-275}{-400} = \frac{-400 (c0s A)}{-400}$			
		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			
	Using the formula $b^2 = a^2 + c^2 - 2ac$ (c0s B) and following the steps use				
		above, let's find the measure of <b. $b^2 = a^2 + c^2 - 2ac (cos B)$</b. 			
		$10^2 = 15^2 + 20^2 - 2(15)(20)(\cos B)$)		
		100 225 + 400 - 600 (cos B)	,		
	-525 = -600 (cos B)				

		$\frac{-525}{-600} = \frac{-600(\cos\cos 8)}{-600}$	
		0.8750 = cos b	
		$B = 28.96^{\circ}$	
		2 20130	
		Since the two angles are already known, substitute their values in the	
		equation	
		$\angle A + \angle B + \angle C = 180^{\circ}$ to solve for $\angle C$	
		$46.57^{\circ} + 28.96^{\circ} + C = 180^{\circ}$	
		75.53 + C = 180 ⁰	
		C = 180 ⁰ -	
		75.53°	
		$C = 104.47^{\circ}$	
 -	Discussing your consents and	C = 104.47°	
E.	Discussing new concepts and		
-	practicing new skills # 2		
F.	Developing mastery (Leads to	_ · ·	
	formative assessment3)	two students to show their answers on the board.	
		Solve each triangles(If answers are not exact, round off to the nearest	
		hundredth).	
		a. A B	
		6	
		\ /	
		6 5 2. C	
		c 3 7 \	
		/ \ \	
		В 8 А	
		Answer Key:	
		1. $\angle C = 49.25^{\circ}$, $\angle A = 65.375^{\circ}$, $\angle B = 65.375^{\circ}$	
		$2. \angle A = 21.79^{\circ}, \angle B = 60^{\circ}, \angle C = 98.21^{\circ}$	
-	Finding practical applications of	2. Zn - Z1. 77 , ZD - 00 , ZC - 70. Z1	
١ ۵.	Finding practical applications of		
	concepts and skills in daily		
 	living	The Arest of the control of the cont	
H.	Making generalizations and	The teacher summarizes the mathematical skills or principles used in the	
	abstractions about the lesson	Law of Cosine through questions like:	
		1. Were you able to solve the given triangles?	
		2. In each of the given triangles, which part did you solve first and why?	
		Possible Answers:	
		1. Yes	
		2. Any of the unknown angles.	
T.	Evaluating Learning	The teacher lets the students answer individually the formative assessment.	
		Given three sides of the triangle, find the specified angle.	
		1. $a = 80$, $b = 78$, $c = 70$, find the largest angle.	
		2. $a = 19$, $b = 16$, $c = 26$, find the smallest angle.	
		Answer Key:	
		1. 65°	
		2. 38°	
J.	Additional activities or		
١,	remediation		
-	V.REMARKS		
<u></u>	VI.REFLECTION		
ı /\	No. of learners who earned		
A.	000/ afth 1	'	
A.	80% of the evaluation		

В.	No. of learners who require additional activities for remediation who scored below 80%	
C.	Did the remediation lesson	
	work? No. of learners who have	
	caught up with the lesson.	
D.	No. of learner 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 of localized	
	materials did I wish to share	
	with other reachers.	

Prepared by:

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