DAILY LESSON LOG OF M9GE-IIIf-1 (Day One)

School		**Grade Level**	Grade 9
Teacher		**Learning Area**	Mathematics
Teaching Date and Time		**Quarter**	Third
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 key concepts of parallelograms and triangle similarity.		
B. Performance Standards	The learner is able to investigate, analyze, and solve problems involving parallelograms and triangle similarity through appropriate and accurate representation.		
C. Learning Competencies/ Objectives	Learning Competency: Applies the fundamental theorems of proportionality to solve problems involving proportions. **(M9GE-IIIf-1)** Learning Objectives: 1. Recall the different properties of proportion. 2. Solve problems involving proportion. 3. Display cooperation in the given activity on proportions.		
II. CONTENT	Applying the Fundamental Theorems of Proportionality to solve problems involving Proportions		
III. LEARNING RESOURCES			
A. References			
1. Teacher's Guide	????		
2. Learner's Materials	Pages 362-368		
3. Textbook pages			
4. Additional Materials from Learning Resource (LR) portal			
B. Other Learning Resources			
IV. PROCEDURES	*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.*		
A. Review previous lesson or presenting the new lesson	The teacher lets the students, in pairs, do the activity on recalling the different properties of proportion. Which of the following is/are equivalent form(s) of the proportion $\frac{x}{y} = \frac{z}{w}$? Draw a smiling face if it is. Otherwise, draw a frowning face. *1. wx = yz* 2. $\frac{x}{z} = \frac{y}{w}$ 3. $\frac{w}{y} = \frac{z}{x}$		

	4. $\frac{x+y}{y} = \frac{z+w}{w}$ 5. $\frac{x}{w} = \frac{z}{y}$ Answer Key: 1. 🙂 2. 🙂 3. 😌 4. 🙂 5. 🙂
B. Establishing a purpose for the lesson	The teacher lets the students realize that familiarizing the properties of proportion is essential in solving problems involving proportions.
C. Presenting examples/ instances of the new lesson	The teacher lets the students, in groups of four, do Activity 5 (Solving Problems Involving Proportion) found on page 362 of the Learner's Module. They will only answer item 1.
D. Discussing new concepts and practicing new skills #1	The teacher discusses with the students the process of arriving at the answer to the activity. Solution: Find $\frac{y}{s}$ if *5y-2s:10 = 3y-s:7* $\frac{5y-2s}{10} = \frac{3y-s}{7}$ $35y - 14s = 30y - 10s$ $35y - 30y = -10s + 14s$ $\frac{5y}{5} = \frac{4s}{5}$ $y = \frac{4s}{5}$ Therefore, $\frac{y}{s} = \frac{\frac{4s}{5}}{s} = \frac{4s}{5} \bullet \frac{1}{s} = \frac{4}{5}$
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 item 2 of Activity 5 (Solving Problems Involving Proportion) found on page 362 of the Learner's Module. Solution: Solve for the ratio *u:v* if $u^2 + 3uv - 10v^2 = 0$. $u^2 + 3uv - 10v^2 = 0$ (u + 5v) (u – 2v) = 0 (u + 5v) = 0 or (u – 2v) = 0 u + 5v = 0 u – 2v = 0 u = -5v u = 2v $\frac{u}{v} = \frac{-5v}{v}$ $\frac{u}{v} = \frac{2v}{v}$

	$\frac{u}{v} = -5$ $\frac{u}{v} = 2$ Hence, u:v = -5:1 or 2:1
G. Finding practical applications of concepts and skills in daily living	
H. Making generalizations and abstractions about the lesson	The teacher summarizes the mathematical skills or principles used to solve problems involving proportions by asking the following questions: 1. What did you do to arrive at the answer? 2. What mathematical skills or principles were applied to determine the answer? Answers: 1. Familiarizing the different properties of proportion was essential in answering the activity. 2. The different properties of proportion like the cross-multiplication property and the alternation property were needed to solve for what is asked.
I. Evaluating Learning	The teacher lets the students individually answer the formative assessment found on Activity 5 (Solving Problems Involving Proportion) number 4 on page 363 of LM. Find the value of m if: $\frac{e}{1} = \frac{f}{2} = \frac{g}{3} = \frac{5e-6f-2g}{m} = k$ Solution: $e = k$, $f = 2k$, $g = 3k$ and $5e - 6f - 2g = km$ $5(k) - 6(2k) - 2(3k) = km$ $5k - 12k - 6k = km$ $-13k = km$ $m = -13$
J. Additional activities or remediation	
V. REMARKS	
VI. REFLECTION	*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.*
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	

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