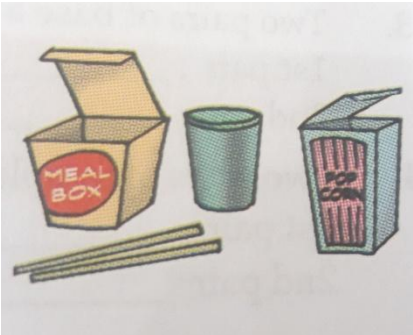


DAILY LESSON LOG OF M9GE-IIIe-1(Day Three)

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: Solves problems involving parallelograms, trapezoid, and kites(M9GE-IIIe-1) Learning Objectives: 1. State the properties and theorems of a trapezoid 2. Solve problems involving trapezoid 3. Show critical thinking skills in solving problems involving trapezoids		
II. CONTENT	Solving Problems Involving Trapezoids		
III. LEARNING RESOURCES			
A. References	Teacher’s guide, Learner’s module Nivera, G., et. al. (2013). Grade 9 Mathematics Patterns and Practicalities. Don Bosco Press, Inc. Makati City.		
1. Teacher’s Guide pages			
2. Learner’s Materials pages	pp. 330-334		
3. Textbook pages	Grade 9 Mathematics Patterns and Practicalities: pp. 398-413		
4. Additional Materials from Learning Resource (LR) portal			
B. Other Learning Resources /Materials	Activity sheets, instructional materials		
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 posts pictures of objects that shaped like an isosceles trapezoid.  Guide questions: The front face of this carton is shaped like an isosceles trapezoid. What makes isosceles trapezoid faces perfect for popcorn and rice meal cartons? Answer: The students answer varies.		

B. Establishing a purpose for the lesson	The teacher lets the students realize that there are several objects and structures in real life that is shaped like a trapezoid. Thus, to be able to understand/solve real-life situations/problems, one must memorize/familiarize the different properties of a trapezoid and the steps of in solving problems.
C. Presenting examples/ instances of the new lesson	
D. Discussing new concepts and practicing new skills #1	The teacher lets the students answer Activity 1 (Complete Me!) orally. Activity 1: Complete Me! 1. A trapezoid is a quadrilateral with only _____ pair/s of parallel sides. 2. The parallel sides of a trapezoid are called the _____. 3. The nonparallel sides of a trapezoid are call the _____. 4. The angles on both ends of each base are called _____. 5. The line segment joining the midpoints of the legs of the trapezoid is called the _____ of a trapezoid. 6. The median of a trapezoid is parallel to the bases and has a length equal to half the _____ of the lengths of the bases. 7. If a pair of base angles of a trapezoid is congruent, then the trapezoid is _____. 8. The diagonals of an isosceles trapezoid are _____. 9. Opposite angles of an isosceles trapezoid are _____. 10. An isosceles trapezoid is a trapezoid with _____ legs. <i>Answer Key:</i> 1. <i>one</i> 2. <i>bases</i> 3. <i>legs</i> 4. <i>base angles</i> 5. <i>median</i> 6. <i>sum</i> 7. <i>isosceles</i> 8. <i>congruent</i> 9. <i>supplementary</i> 10. <i>congruent</i>
E. Discussing new concepts and practicing new skills #2	The teacher explains and illustrates how to solve problems involving trapezoid. He/she explains the following steps: 1. <i>Read and understand the problem/situation given.</i> 2. <i>Identify the property/theorem to be used base on the parallelogram given.</i> 3. <i>Formulate the equation.</i> 4. <i>Solve the equation.</i> 5. <i>Check your solution/s.</i> Illustrative example 1: The diagonals of an isosceles trapezoid are represented by $4x-47$ and $2x + 31$. What is the value of x? <i>Solution: The diagonal of an isosceles trapezoid are congruent. Therefore,</i> $4x - 47 = 2x + 31$ $x = 39$ Illustrative example 2: A cross section of a water trough is in the shape of a trapezoid with bases measuring 2m and 6m. What is the length of the median of the trapezoid? <i>Solution: The median of a trapezoid is parallel to the bases and has a length equal to half the sum of the lengths of the bases. Therefore,</i> $\text{Median} = \frac{1}{2} (b_1 + b_2)$ $= \frac{1}{2} (2 + 6)$ $= 4$ Illustrative example 3: If the perimeter of an isosceles trapezoid is 312 cm and the bases are 94 cm and 52 cm, how long is the leg? <i>Solution: An isosceles trapezoid is a trapezoid with congruent legs Therefore,</i> $\text{Perimeter} = b_1 + b_2 + l_1 + l_2$ $312 = 94 + 52 + x + x$ $312 - 146 = 2x$ $x = 83$ Thus, each leg measures 83 cm. Illustrative example 4: Trapezoid FINE is an isosceles trapezoid with legs $\overline{FI}$ and $\overline{EN}$. If $FI = (7x + 14)$ cm and $EN = (5x + 34)$ cm. Find the length of the legs of the trapezoid.

	<i>Solution:</i> An isosceles trapezoid is a trapezoid with congruent legs <i>Therefore,</i> $FI = EN$ $7x + 14 = 5x + 34$ $x = 10$ Thus, each leg measures 84 cm.
F. Developing mastery (leads to formative assessment 3)	
G. Finding practical applications of concepts and skills in daily living	
H. Making generalizations and abstractions about the lesson	The teacher lets the students summarize the lesson by asking the following questions: 1. What are the steps in solving problems involving trapezoids? • <i>Read and understand the problem/situation given.</i> • <i>Identify the property/theorem to be used base on the parallelogram given.</i> • <i>Formulate the equation.</i> • <i>Solve the equation.</i> • <i>Check your solution/s.</i> 2. What are the properties/theorems of a trapezoid? • A trapezoid is a quadrilateral with only one pair/s of parallel sides. • The median of a trapezoid is parallel to the bases and has a length equal to half the sum of the lengths of the bases. • The diagonals of an isosceles trapezoid are congruent. • Opposite angles of an isosceles trapezoid are supplementary. • An isosceles trapezoid is a trapezoid with congruent legs.
I. Evaluating Learning	Let the students answer Activity 15: You Can Do It! which is found on pages 334-335 of the learner’s module. Answer Key: 1. $y = 3$; $MA = 7$; $HT = 10$ 2. $m\angle TAM = 115$ 3. $x = 35$; $m\angle MHT = 115$; $m\angle MAT$ 4. $y = 4$
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:

VIRNA MARIE C. PORIO
Paknaan National HS