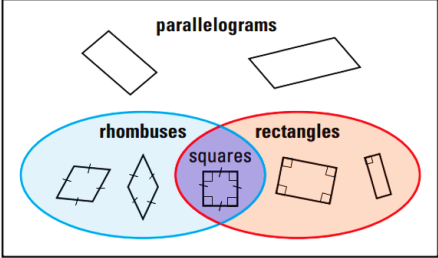
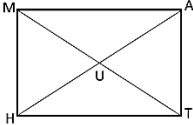
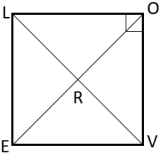


DAILY LESSON LOG OF M9GE-IIIc-1 (Day 4)

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 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	<i>Learning Competency:</i> Proves theorems on the different kinds of parallelogram (rectangle, rhombus, square). (M9GE-IIIc-1) <i>Learning Objectives:</i> 1. Identify the theorems that are related to a rectangle, to a rhombus, and to a square 2. Find unknown quantities of a rectangle, rhombus, or square 3. Demonstrate the value of cooperation in doing the activities																																														
II. CONTENT	Theorems on the Different Kinds of Parallelogram																																														
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 lets the students recall the theorems on a rectangle, rhombus and square by letting them do the exercise below. Put a check (✓) mark to indicate which property is TRUE to the following parallelograms. <table><tr><th>Property</th><th>Rectangle</th><th>Rhombus</th><th>Square</th></tr><tr><td>1. Opposite sides are parallel.</td><td></td><td></td><td></td></tr><tr><td>2. Opposite sides are congruent.</td><td></td><td></td><td></td></tr><tr><td>3. Opposite angles are congruent.</td><td></td><td></td><td></td></tr><tr><td>4. Consecutive angles are supplementary.</td><td></td><td></td><td></td></tr><tr><td>5. Diagonals bisect each other.</td><td></td><td></td><td></td></tr><tr><td>6. All angles are right angles.</td><td></td><td></td><td></td></tr><tr><td>7. Diagonals are congruent.</td><td></td><td></td><td></td></tr><tr><td>8. All sides are congruent.</td><td></td><td></td><td></td></tr><tr><td>9. Diagonals bisect opposite angles.</td><td></td><td></td><td></td></tr><tr><td>10. Diagonals are perpendicular to each other.</td><td></td><td></td><td></td></tr></table>			Property	Rectangle	Rhombus	Square	1. Opposite sides are parallel.				2. Opposite sides are congruent.				3. Opposite angles are congruent.				4. Consecutive angles are supplementary.				5. Diagonals bisect each other.				6. All angles are right angles.				7. Diagonals are congruent.				8. All sides are congruent.				9. Diagonals bisect opposite angles.				10. Diagonals are perpendicular to each other.			
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B. Establishing a purpose for the lesson	The teacher lets the students realize that the connections between a parallelogram, a rectangle, a rhombus and a square with each other are important principles needed in finding their unknown quantities.																																																			
C. Presenting examples/ instances of the new lesson																																																				
D. Discussing new concepts and practicing new skills #1																																																				
E. Discussing new concepts and practicing new skills #2																																																				
F. Developing mastery (leads to formative assessment 3)	The teacher lets the students, in groups of three, answer Activity 1 attached herewith. Answer: I. 1. Rectangle, Square 2. Rhombus, Square 3. Rhombus, Square 4. Rectangle, Square 5. Square 6. Rhombus, Square II. A. 1. $BD = AC$ $BD = 12\text{ cm}$ 2. $AC = BD$ $3x - 12 = 15$ $3x = 15 + 12$ $3x = 27$ $x = 9$ B. 1. $P = 4(YZ)$ $P = 4(5)$ $P = 20\text{ cm}$ 2. $\angle YXR = \frac{1}{2}(\angle YXW)$ $\angle YXR = \frac{1}{2}(48^\circ)$ $\angle YXR = 24^\circ$ 3. $\angle YRZ = 90^\circ$ $2x - 20 = 90$ $2x = 90 + 20$																																																			

	$2x = 110$ $x = 55^{\circ}$
C. Finding practical applications of concepts and skills in daily living	The teacher asks the students: “Mang Dannny has a square garden that has a perimeter of 12 m. What is the area of the garden?” <i>Answer:</i> 16 sq. meters
D. Making generalizations and abstractions about the lesson	The teacher summarizes the correlation of the theorems related to a rectangle, to a rhombus and to a square thru the Venn diagram. 
E. Evaluating Learning	The teacher lets students answer individually the exercise below. I. Complete each statement. Use the words <i>rectangle</i>, <i>rhombus</i>, or <i>square</i>. - A parallelogram with congruent diagonals is a _____ or a _____. - Every square is a _____ and a _____. - A parallelogram has a right angle, then it has four right angles and the parallelogram is a _____. - The diagonals of a _____ or a _____ are perpendicular bisectors of each other. - A parallelogram that is equilateral and equiangular is a _____. II. Solve the following. Show your solution. A. MATH is a rectangle with diagonals MT and AH intersecting at U. If HU = 2.5 cm, - how long is HA? - how about MT?  B. LOVE is a square with diagonals LV and OE intersecting at R. If LV = (x + 2) cm and OE = (2x – 1) cm, - what is the value of x? - how long is LV? - how long is RE? - what is the measure of ∠ERV?  <i>Answer Key:</i> I. - rectangle, square - rectangle, rhombus - rectangle - rhombus, square - square II. A1. HA = 2HU = 2(2.5) = 5 cm B1. LV = OE $x + 2 = 2x - 1$ $2 + 1 = 2x - x$ $3 = x$ A2. MT = HA = 5 cm B2. LV = x + 2 LV = 3 + 2 LV = 5 cm

	B3. RE = $\frac{1}{2}$ (OE) , OE = LV = 5 cm B4. $\angleERV = 90^0$ RE = $\frac{1}{2}$ (5) RE = 2.5 cm
F. Additional activities or remediation	The teacher groups the student with four members each. He/She assigns them to bring the following: • 4 short bondpapers • 1 pencil • 1 ruler • Adhesive tape • Protractor • A pair of scissors
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>
I. No. of learners who earned 80% of the evaluation	
I. No. of learners who require additional activities for remediation who scored below 80%	
I. Did the remedial lesson work? No. of learners who have caught up with the lesson.	
V. No. of learners who continue to require remediation	
V. Which of my teaching strategies worked well? Why did these work?	
I. What difficulties did I encounter which my principal or supervisor can help me solve?	
I. What innovation or localized materials did I use/ discover which I wish to share with other teachers	garden

Prepared by:

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Activity 1

I. List which of the following parallelograms for which the statement is **ALWAYS TRUE**.

RECTANGLE RHOMBUS SQUARE

1. All its angles are right.
2. The diagonals bisect opposite angles.

3. It is equilateral.
4. The diagonals are congruent.
5. It is equiangular and equilateral.
6. The diagonals are perpendicular bisectors of each other.

II. Solve the following. Show your solution.

A. ABCD is a rectangle with diagonals AC and BD intersecting at P.

1. If $AC = 12$ cm, how long is BD?
2. If $AC = 3x - 12$ and $BD = 15$, what is the value of x ?

B. WXYZ is a rhombus with diagonals XZ and WY intersecting at R.

1. If $YZ = 5$ cm, what is the perimeter of the rhombus?
2. If $\angle YXW = 48^\circ$, what is the measure of $\angle YXR$?
3. If $\angle YRZ = (2x - 20)^\circ$, what is the value of x ?

