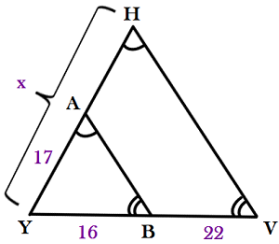
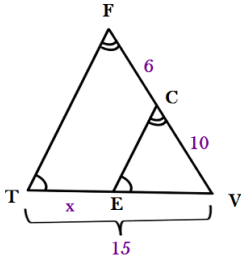
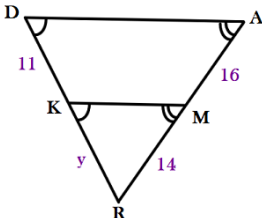
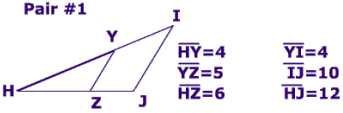
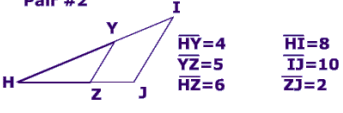
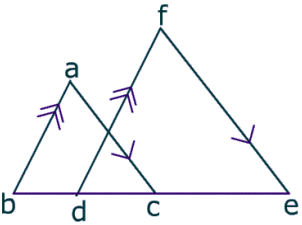
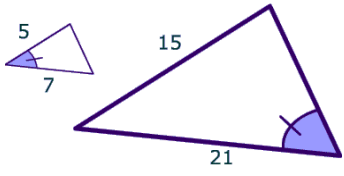
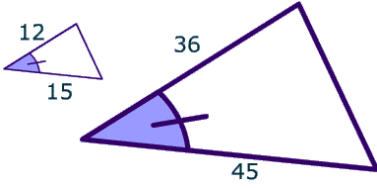


DAILY LESSON LOG OF M9GE–IIIi–1 (Day 1)

School		Grade Level	Grade 9
Teacher		Learning Area	Mathematics
Teaching Date and Time		Quarter	Third
I. OBJECTIVES			
A. Content Standards	The learner demonstrates understanding of key concepts of parallelograms and triangle similarity.		
B. Performance Standards	The learner is able to investigate, analyse, and solve problems involving parallelograms and triangle similarity through appropriate and accurate representation.		
C. Learning Competencies/ Objectives	Learning Competency: Applies theorems to show that given triangles are similar (M9GE – IIIi – 1) Learning Objectives: 1. State the SSS, SAS Theorems and the AA postulate. 2. Apply the theorems to show that triangles are similar. 3. Display respect for others in doing the day’s tasks.		
II. CONTENT	Triangle Similarity Postulates and Theorems		
III. LEARNING RESOURCES			
A. References			
1. Teacher’s Guide			
2. Learner’s Materials	Pages 369-374		
3. Textbook pages			
4. Additional Materials from Learning Resource (LR) portal			
B. Other Learning Resources	https://www.mathwarehouse.com/geometry/similar/triangles/similar-triangle-theorems.php		
IV. PROCEDURES			
A. Review previous lesson or presenting the new lesson	The teacher reviews the “Similarity Postulates and Theorems” 1. Angle-Angle (AA) Similarity Postulate - If two angles of one triangle are congruent to two angles of another, then the triangles must be similar. 2. Side-Side-Side (SSS) Similarity Theorem - If the lengths of the corresponding sides of two triangles are proportional, then the triangles must be similar. (This is like SSS congruency) 3. Side-Angle-Side (SAS) Similarity Theorem - If an angle of one triangle is congruent to an angle of a second triangle and the lengths of the sides including these angles are proportional, then the triangles must be similar. (This is like SAS congruency)		
B. Establishing a purpose for the lesson	The teacher lets the students realize that given the theorems are very important in determining the similarity of triangles.		
C. Presenting examples/ instances of the new lesson	The teacher may use the following activity to apply the theorem that shows the similarity of triangles. “Tell me the height, please” Using the theorem, answer the following question: Do you know how to find the height of your school flagpole without directly measuring it?		
D. Discussing new concepts and practicing new skills #1	The teacher discusses with the students the answer of the previous activity. Answer Key: $\frac{\text{height of a flagpole}}{\text{lenght of the shadow cast by the flagpole}} = \frac{\text{height of the student}}{\text{lenght of the shadow cast by the student}}$ Example: Length of the shadow cast by the flagpole = 15ft. Height of the student = 5ft. Length of the shadow cast by the student = 3ft.		

	Solution: $\frac{x}{15} = \frac{5}{3}$ $3x = 75$ $x = 25$
E. Discussing new concepts and practicing new skills # 2	
F. Developing mastery (Leads to formative assessment3)	Working in pairs, the teacher lets the students answer the following exercise. Solve for the unknown. 1. Triangle HYV and triangle AYB are similar by the AA similarity theorem. What is the value of x?  2. Study the diagram. Find the value of x, the distance between T and E.  3. Given triangle DAR and KMR. What is the value of y?  Answer Key: 1. 40.375 2. 5.625 3. 9.625
G. Finding practical applications of concepts and skills in daily living	
H. Making generalizations and abstractions about the lesson	The teacher summarizes with the students the theorems that show the similarity of triangles. 1. Angle-Angle (AA) Similarity Postulate - If two angles of one triangle are congruent to two angles of another, then the triangles must be similar. 2. Side-Side-Side (SSS) Similarity Theorem - If the lengths of the corresponding sides of two triangles are proportional, then the triangles must be similar. (This is like SSS congruency) 3. Side-Angle-Side (SAS) Similarity Theorem - If an angle of one triangle is congruent to an angle of a second triangle and the lengths of the sides including these angles are proportional, then the triangles must be similar. (This is like SAS congruency).
I. Evaluating Learning	The teacher lets the students answer individually the following problems.

	Problem 1: Two different version of triangles HYZ and HIJ. (Assume scale is not consistent). Use the SSS theorem to determine which pair is similar. Pair #1  Pair #2  Problem 2: Prove that the triangles are similar using any of the triangle similarity theorems. a.  b.  c.  Answer Key: - Pair 1 The SSS theorem requires that 3 pairs of sides that are proportional. In pair 1, all 3 sides have ration of $\frac{1}{3}$ so the triangles are similar In pair 2, two pairs of sides have a ratio of $\frac{1}{2}$, but the ratio of $\frac{HZ}{HJ}$ is the problem. A. Yes, the parallel lines give you two pairs of corresponding congruent angles so you can use the AA Theorem. b. No, although the included angle is equal, the sides do not have a constant ratio $\frac{6}{15}$ and $\frac{7}{20}$. c. Yes, since two corresponding sides have a $\frac{1}{3}$ ratio and the included angle is congruent, these two triangles are similar by the Side Angle Side theorem.
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 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 teachers.	

Prepared by:
FATIMA G. CARBONILLA
Labogon NHS