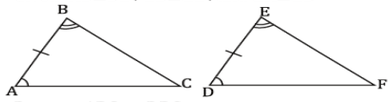
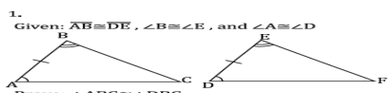
Daily Lesson Log of M8GE-IIIg-1 (Week-Seven-Day Four)

School		**Grade Level**	Grade 8
Teacher		**Learning Area**	Mathematics
Teaching Date and Time		**Quarter**	Third

I. OBJECTIVES	
A. Content Standards	Demonstrates understanding of key concepts of logic and reasoning.
B. Performance Standards	1. Is able to formulate an organized plan to handle a real-life situation. 2. Is able to communicate mathematical thinking with conference and clarity in formulating, investigating, analyzing, and solving real-life problems involving congruent triangles using appropriate and accurate representations.
C. Learning Competencies/ Objectives	Learning Competency: Proves two triangles are congruent. **(M8GE-IIIg-1)** Learning Objectives: 1. Recall on the different properties, definition, and theorems needed in proving two triangles are congruent. 2. Prove two triangles are congruent. 3. Demonstrate appreciation on proving two triangles are congruent. (Affective)
II. CONTENT	
III. LEARNING RESOURCES	teacher's guide, learner's module, internet/google
A. References	
1. Teacher's Guide pages	
2. Learner's Materials pages	Pages 349-366
3. Textbook pages	
4. Additional Materials from Learning Resource (LR) portal	
B. Other Learning Resources	http://www.letspracticegeometry.com/wp-content/uploads/2011/11/proofs-involving-congruent-triangles.pdf
IV. PROCEDURES	
A. Review previous lesson or presenting the new lesson	***Review on proving two triangles are congruent by filling in the missing statement or reason in the two-column proof.*** 1. Given: $\overline{AB}\cong\overline{DE}$, $\angle B\cong\angle E$, and $\angle A\cong\angle D$  Prove: $\triangle ABC\cong\triangle DBC$ Statements | Reasons 1. $\overline{AB}\cong\overline{DE}$ | 1. Given 2. | 2.Given 3. $\angle A\cong\angle D$ | 3. 4. $\triangle ABC\cong\triangle DEF$ | 4. $\Delta ABC \cong \Delta DEF$  Prove: $\triangle ABC\cong\triangle DBC$ Statements | Reasons 1. $\overline{AB}\cong\overline{DE}$ | 1. Given 2. | 2.Given 3. $\angle A\cong\angle D$ | 3. 4. $\triangle ABC\cong\triangle DEF$ | 4. **Answer:** Statements | Reasons 1. | 1. 2. $\angle B \cong \angle E$ | 2. 3. | 3. Given 4. | 4. ASA
B. Establishing a purpose for the lesson	The teacher lets the students realize that the skill on filling in the missing statement or reason in the two-column proof is important in creating a two-column proof.

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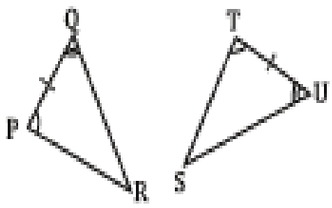
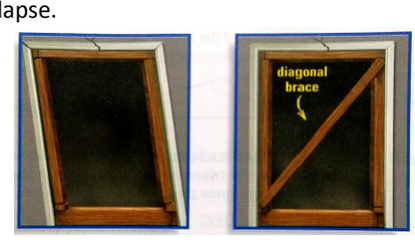
<tr><td>C. Presenting examples/ instances of the new lesson</td><td>The teacher lets the students, by pair, do exercise 5 found on page 358 of the Learner's Module.</td></tr>
<tr><td>D. Discussing new concepts and practicing new skills #1</td><td>The teacher discusses with the students the process of arriving to the proof of exercise 5.</td></tr>
<tr><td>E. Discussing new concepts and practicing new skills #2</td><td></td></tr>
<tr><td>F. Developing mastery (leads to formative assessment 3)</td><td>The teacher will let the students work in pairs to do the task presented below.

Directions: Show the proof of the following:
1.
Given: $\overline{PQ} \cong \overline{TU}$, $\angle P \cong \angle T$, and $\angle Q \cong \angle U$
 

Prove: $\triangle PQR \cong \triangle TUS$

Answers:
1.<table><tr><th>Statements</th><th>Reasons</th></tr><tr><td>1. $\overline{PQ} \cong \overline{TU}$</td><td>1. Given</td></tr><tr><td>2. $\angle P \cong \angle T$</td><td>2. Given</td></tr><tr><td>3. $\angle Q \cong \angle U$</td><td>3. Given</td></tr><tr><td>4. $\Delta PQR \cong \Delta TUS$</td><td>4. ASA</td></tr></table></td></tr>
<tr><td>G. Finding practical applications of concepts and skills in daily living</td><td>The teacher will present this real-life situation and lets the students brainstorm and give their own reasoning on the concept behind triangular frameworks.

STRUCTURAL SUPPORT (p. 215 of GEOMETRY by McDougal Littell)

To prevent a doorway from collapsing after an earthquake, you can reinforce it. Explain why the doorway with the diagonal brace is more stable, while the one without the brace can collapse.
 

Possible Answer: In the doorway with the diagonal brace, the wood forms triangles whose sides have fixed lengths.The SSS Congruence Postulate guarantees that these Triangles are rigid, because a triangle with given side lengths has only</td></tr>
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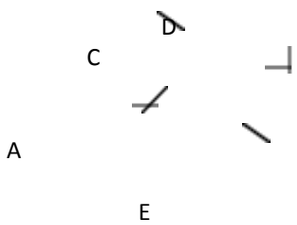
<table>
<tr><td></td><td>one possible size and shape. The doorway without the brace is unstable because there are many possible shapes for a four-sided figure with the given side lengths.</td></tr>
<tr><td>H. Making generalizations and abstractions about the lesson</td><td>The teacher summarizes the mathematical skills used to create a two-column proof on proving two triangles are congruent by asking questions like:
1. What mathematical skills are used to create a two-column proof?
2. How did you create the two-column proof?

Possible Answers:
1. Drawing a diagram, Identifying the known information, Choosing the correct theorem to prove congruency, setting up a two-column proof, writing down the given, ordering the proof logically
2. Set up a two-column proof, write down the given, put additional information derived from the given, and order the proof logically</td></tr>
<tr><td>I. Evaluating Learning</td><td>The teacher lets the students answer individually the formative assessment .

Directions: Show the proof of the following:

1. Given: $\overline{BC} \cong \overline{CE}$ and $\overline{AC} \cong \overline{CD}$
B
 

Prove : $\Delta ABC \cong DEC$

Answers:
1.
<table><tr><th>Statements</th><th>Reasons</th></tr><tr><td>1. $\overline{BC} \cong \overline{CE}$</td><td>1. Given</td></tr><tr><td>2. $\overline{AC} \cong \overline{CD}$</td><td>2. Given</td></tr><tr><td>3. $\angle ACB \cong \angle DCE$</td><td>3. Vertical Angles</td></tr><tr><td>4. $\Delta ABC \cong \Delta DEC$</td><td>4. SAS</td></tr></table></td></tr>
<tr><td>J. Additional activities or remediation</td><td></td></tr>
<tr><td>V. REMARKS</td><td></td></tr>
<tr><td>VI. REFLECTION</td><td>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.</td></tr>
<tr><td>A. No. of learners who earned 80% of the evaluation</td><td></td></tr>
<tr><td>B. No. of learners who require additional activities for remediation who scored below 80%</td><td></td></tr>
<tr><td>C. Did the remedial lesson work? No. of learners who have caught up with the lesson.</td><td></td></tr>
<tr><td>D. No. of learners who continue to require remediation</td><td></td></tr>
<tr><td>E. Which of my teaching strategies worked well? Why did these work?</td><td></td></tr>
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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	The teacher contextualized and localized the topic in finding practical application part of the DLL.