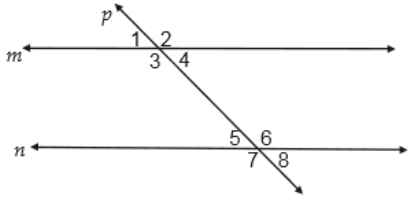
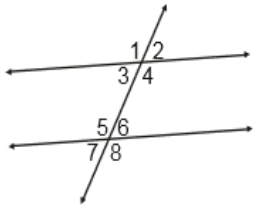
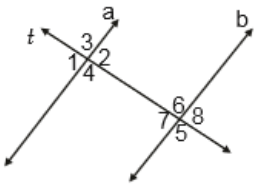
**DAILY LESSON LOG OF M8GE-IIg-2 (Week Seven-Day Three of Four)**

| | | | |
|---|---|---|---|
| **School** | | **Grade Level** | Grade 8 |
| **Teacher** | | **Learning Area** | Mathematics |
| **Teaching Date and Time** | | **Quarter** | Second |
| **I. OBJECTIVES** | | | |
| **A. Content Standards** | The learner demonstrates understanding of the key concepts of parallel and perpendicular lines. | | |
| **B. Performance Standards** | The learner is able to communicate mathematical thinking with coherence and clarity in solving real-life problems involving parallelism and perpendicularity using appropriate and accurate representations. | | |
| **C. Learning Competencies/ Objectives** | Determines and proves the conditions under which lines and segments are parallel or perpendicular.<br>● Determines the conditions under which lines and segments are parallel.<br>● Prove conditions under which lines and segments are parallel<br>● Demonstrate interest in proving this conditions. | | |
| **II. CONTENT** | | | |
| **III. LEARNING RESOURCES** | | | |
| **A. References** | | | |
| **1. Teacher's Guide** | Pp 488-489 | | |
| **2. Learner's Materials** | | | |
| **3. Textbook pages** | | | |
| **4. Additional Materials from Learning Resource (LR) portal** | | | |

<table>
<tr><td>B. Other Learning Resources</td><td>C. Abuzo, et al, Mathematics Learner's Material<br>D. Mathematics Grade 8 Curriculum Guide<br>Teacher's Guide</td></tr>
<tr><td>IV. PROCEDURES</td><td></td></tr>
<tr><td>A. Review previous lesson or presenting the new lesson</td><td>Name it a Recall.<br>We see parallel lines everywhere. Lines on a pad paper, railways, edges of a door or window, fence, etc. suggest parallel lines. Complete the table below using the given figure as your reference:<br> 

<table>
<tr><th>Corresponding Angles</th><th>Alternate Interior Angles</th><th>Alternate Exterior Angles</th><th>Same Side Interior Angles</th><th>Same Side Exterior Angles</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
</table>
This activity on investigating the relationship between the angles formed by parallel lines cut by a transversal will help the students answer the table.</td></tr>
<tr><td>B. Establishing a purpose for the lesson</td><td>The teacher lets the students realize the conditions under which lines and segments are parallel.</td></tr>
<tr><td>C. Presenting examples/ instances of the new lesson</td><td>The teacher helps the students analyze the process questions.<br><br>1. What pairs of angles are formed when two lines are cut by a transversal line?<br>2. What pairs of angles have equal measures? What pairs of angles are supplementary?<br>3. Can the measures of any pair of angles (supplementary or equal) guarantee the parallelism of lines? Support your answer.<br>4. How can the key concepts of parallel lines facilitate solving real-life problems using deductive reasoning?</td></tr>
<tr><td>D. Discussing new concepts and practicing new skills #1</td><td></td></tr>
<tr><td>E. Discussing new concepts and practicing new skills #2</td><td></td></tr>
<tr><td>F. Developing mastery (leads</td><td>Working in pairs, the students answer the activity.</td></tr>
</table>

| | |
|---|---|
| **to formative assessment 3)** | Two parallel lines when cut by a transversal form eight angles. This activity will lead you to investigate the relationship between and among angles formed.<br>Measure the eight angles using your protractor and list all inferences or observations in the activity.<br>  <br><br>$m\angle 1=$ _____<br>$m\angle 2=$ _____<br>$m\angle 3=$ _____<br>$m\angle 4=$ _____<br>$m\angle 5=$ _____<br>$m\angle 6=$ _____<br>$m\angle 7=$ _____<br>$m\angle 8=$ _____<br>OBSERVATIONS:<br>_____<br>_____<br>_____ |
| **G. Finding practical applications of concepts and skills in daily living** | |
| **H. Making generalizations and abstractions about the lesson** | The teacher summarizes the conditions under which lines and segments are parallel.<br>1. Two lines are parallel if and only if they are coplanar and they do not intersect. (m \|\| n) transversal<br>2. A line that intersects two or more lines at different points is called a transversal.<br>a. The angles formed by the transversal with the two other lines are called:<br>• exterior angles (∠1, ∠2, ∠7 and ∠8)<br>• interior angles (∠3, ∠4, ∠5 and ∠6). b. The pairs of angles formed by the transversal with the other two lines are called:<br>• corresponding angles (∠1 and ∠5, ∠2 and ∠6, ∠3 and ∠7, ∠4 and ∠8)<br>• alternate-interior angles (∠3 and ∠6, ∠4 and ∠5)<br>• alternate-exterior angles (∠1 and ∠8, ∠2 and ∠7)<br>• interior angles on the same side of the transversal (∠3 and ∠5, ∠4 and ∠6)<br>• exterior angles on the same side of the transversal (∠1 and ∠7, ∠2 and ∠8)<br>3. If two lines are cut by a transversal, then the two lines are parallel if:<br>a. corresponding angles are congruent.<br>b. alternate-interior angles are congruent.<br>c. alternate-exterior angles are congruent. |

| | |
|---|---|
| | d. interior angles on the same side of the transversal are supplementary.<br>e. exterior angles on the same side of the transversal are supplementary. |
| **I. Evaluating Learning** | The teacher lets the students individually answer the formative assessment.<br><br>I. Study the figure and answer the following questions as accurate as you can. The figure below shows $a \parallel b$ with $t$ as transversal.<br>  <br><br>Name:<br>1. 2 pairs of corresponding angles _____ _____<br>2. 2 pairs of alternate interior angles _____ _____<br>3. 2 pairs of alternate exterior angles _____ _____<br>4. 2 pairs of interior angles on the same side of the transversal _____ _____<br>5. 2 pairs of exterior angles on the same side of the transversal _____ _____ |
| **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 | |

Prepared by:

**GAYE MAUREEN B. BAJO**
STVS Math 8 Teacher