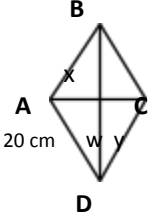
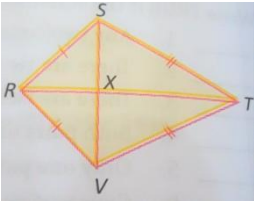


DAILY LESSON LOG OF M9GE-IIIe-1(Day Four)

|                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |               |             |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------|
| School                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Grade Level   | Grade 9     |
| Teacher                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Learning Area | Mathematics |
| Teaching Date and Time                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Quarter       | Third       |
| 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                       | Learning Competency: Solves problems involving parallelograms, trapezoid, and kites(M9GE-IIIe-1)<br>Learning Objectives:<br>1. State the properties and theorems of a kite<br>2. Solve problems involving kites<br>3. Show critical thinking skills in solving problems involving kites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |               |             |
| II. CONTENT                                                | Solving Problems Involving Kites                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |             |
| III. LEARNING RESOURCES                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |               |             |
| A. References                                              | Teacher’s guide, Learner’s module<br>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. 414 – 420                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |             |
| 3. Textbook pages                                          | Grade 9 Mathematics Patterns and Practicalities: pp. 414-420                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |             |
| 4. Additional Materials from Learning Resource (LR) portal |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |               |             |
| B. Other Learning Resources /Materials                     | Activity sheets, instructional materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |             |
| 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 and identify the properties and theorems on kites by answering the activity below with a partner.<br><br><b>Directions:</b> Complete the following statements.<br>1. A kite is a quadrilateral with two distinct pairs of consecutive sides that are _____.<br>2. The diagonals of a kite are _____.<br>3. A kite has exactly _____ pair of opposite angles that are congruent.<br>4. A _____ of a kite bisect each of the noncongruent angles and the other diagonal.<br>5. In a kite, the perpendicular bisector of at least one diagonal is the other _____.<br>6. The area of a kite is half the _____ of the lengths of the diagonals.<br><i>Answer Key:</i><br>1. congruent<br>2. perpendicular<br>3. one<br>4.diagonal<br>5. diagonal<br>6. product |               |             |

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|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>B. Establishing a purpose for the lesson</b></p>                | <p>The teacher lets the students realize that there are several objects and structures in real life that is shaped like a kite. Thus, to be able to understand/solve real-life situations/problems, one must memorize/familiarize the different properties of a kite and the steps of in solving problems.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <p><b>C. Presenting examples/ instances of the new lesson</b></p>     | <p>The teacher reviews the steps in solving problems involving trapezoids. He/she lets the students recall the following steps:</p> <ol style="list-style-type: none"> <li>1. Read and understand the problem/situation given.</li> <li>2. Identify the property/theorem to be used base on the parallelogram given.</li> <li>3. Formulate the equation.</li> <li>4. Solve the equation.</li> <li>5. Check your solution/s.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>D. Discussing new concepts and practicing new skills #1</b></p> | <p>The teacher explains and illustrates how to solve the following:</p> <p><b>Illustrative example 1:</b> Quadrilateral ABCD is a kite with diagonals <math>\overline{BD}</math> and <math>\overline{AC}</math>. If <math>AD = 20</math> cm and <math>\angle ADC = 50^\circ</math>. Find the value of <math>x</math>, <math>y</math>, <math>z</math>, and <math>w</math>.</p>  <p><b>Solutions:</b><br/> <math>x = 90^\circ</math> since diagonals of a kite are perpendicular.<br/> <math>y = 20</math> cm<br/> Perimeter= <math>2z + 2y</math><br/> <math>56 = 2z + 2(20)</math><br/> <math>z = 8</math> cm<br/> <math>w = \frac{50^\circ}{2} = 25^\circ</math></p> <p><b>Illustrative example 2:</b> Given RSTV is a kite. Find the indicated measure.</p>  <p>a. IF <math>RS = 8</math> and <math>ST = 12</math> then <math>RV = \underline{\hspace{2cm}}</math>.<br/> <math>VT = \underline{\hspace{2cm}}</math> and the perimeter = <math>\underline{\hspace{2cm}}</math>.<br/> Answer: 8; 12; 40</p> <p>b. <math>m\angle SXT = \underline{\hspace{2cm}}</math><br/> Answer: <math>90^\circ</math></p> <p>c. If <math>m\angle STX = 30^\circ</math> and <math>m\angle SRV = 80^\circ</math> then <math>m\angle VTX = \underline{\hspace{2cm}}</math>, <math>m\angle RST = \underline{\hspace{2cm}}</math> and <math>m\angle SRX = \underline{\hspace{2cm}}</math>.</p> <p>c.1. <i>Solution:</i> A diagonal of a kite bisect each of the noncongruent angles and the other diagonal. Thus,<br/> <math>m\angle VTX = 30^\circ</math></p> <p>c.2. <i>Solution:</i> A kite has exactly one pair of opposite angles that are congruent. Thus,<br/> <math>80 + 60 + m\angle RST + m\angle RVT = 360</math><br/> <math>80 + 60 + x + x = 360</math><br/> <math>x = 110</math><br/> <math>m\angle RST = 110^\circ</math></p> <p>c.3. <math>m\angle SRX = 40^\circ</math></p> |
| <p><b>E. Discussing new concepts and practicing new skills #2</b></p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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| 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                               | <p>The lets the students summarize the lesson by asking the following questions:</p> <p>1. What are the steps in solving problems involving kites?</p> <ul style="list-style-type: none"> <li>• <i>Read and understand the problem/situation given.</i></li> <li>• <i>Identify the property/theorem to be used base on the parallelogram given.</i></li> <li>• <i>Formulate the equation.</i></li> <li>• <i>Solve the equation.</i></li> <li>• <i>Check your solution/s.</i></li> </ul> <p>2. What are the properties/theorems of a kite?</p> <ul style="list-style-type: none"> <li>• A kite is a quadrilateral with two distinct pairs of consecutive sides that are congruent.</li> <li>• The diagonals of a kite are perpendicular.</li> <li>• A kite has exactly one pair of opposite angles that are congruent.</li> <li>• A diagonal of a kite bisect each of the noncongruent angles and the other diagonal.</li> <li>• The area of a kite is half the <b>product</b> of the lengths of the diagonals.</li> </ul> |
| I. Evaluating Learning                                                                    | <p>The teacher lets the students answer individually Activity 17: Play a Kite which is found on pages 337-338 of the learner’s module.</p> <p><b>Answer Key:</b></p> <p>1. Area = 36 cm<sup>2</sup></p> <p>2. PA = 30 cm</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 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                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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| which I wish to share with<br>other teachers |  |
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Prepared by:

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