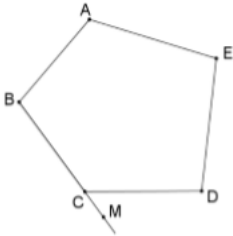


DAILY LESSON LOG OF M7GE-IIIf-1 (Week Six-Day 1)

School		Grade Level	Grade 7
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 geometry of shapes and sizes, and geometric relationships.		
B. Performance Standards	The learner is able to create models of plane figures and formulate and solve accurately authentic problems involving sides and angles of a polygon.		
C. Learning Competencies/ Objectives	Learning Competency: Derives inductively the relationships of exterior and interior angles of a convex polygon (M7GE-IIIf-1) Learning Objectives: 1. Derives inductively the relationships of exterior and interior angles of a convex polygon 2. Determine the sum of the measures of an interior angles of a convex polygon. 3. Demonstrate appreciation of geometric shapes and its relationships.		
II. CONTENT	Polygon		
III. LEARNING RESOURCES	teacher’s guide, learner’s module, protractor, pencil, paper		
A. References			
1. Teacher’s Guide	Pages 260-268		
2. Learner’s Materials	Pages 212 – 219		
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	Review previous lesson by letting the students answer the exercise. (3 minutes)		

	Consider the following sets of polygons: Set A  Set B  Can you state a difference between the polygons in Set A and in Set B?																								
B. Establishing a purpose for the lesson	The teacher let the students determine the difference between Set A and Set B. And define convex and non-convex polygon. Convex polygon is a polygon whose lines containing sides do not cross the interior of a polygon. Non-convex polygon is a polygon whose lines containing sides cross the interior of a polygon.																								
C. Presenting examples/ instances of the new lesson	The teacher present the example of a convex polygon and ask the students angles that are interior angles and exterior angles. (5 minutes) In the convex polygon ABCDE, $\angle A$, $\angle B$, $\angle BCD$, $\angle D$, and $\angle E$ are the interior angles, while $\angle MCD$ is an exterior angle.  The teacher may define interior angles and exterior angles Interior angles – is an angle on the inside of the polygon formed by each pair of adjacent sides. Exterior angles – is an angle formed by a side and an extension of an adjacent side or is an angle that is both supplement and adjacent to one of its interior angle.																								
D. Discussing new concepts and practicing new skills #1	The teacher let the students name the different types of polygon according to the number of sides. Since this was discuss already in the previous days Possible answers are: <table border="1"> <thead> <tr> <th><u>Name of Polygon</u></th><th><u>Number of sides</u></th></tr> </thead> <tbody> <tr> <td>Triangle</td><td>3</td></tr> <tr> <td>Quadrilateral</td><td>4</td></tr> <tr> <td>Pentagon</td><td>5</td></tr> <tr> <td>Hexagon</td><td>6</td></tr> <tr> <td>Heptagon</td><td>7</td></tr> <tr> <td>Octagon</td><td>8</td></tr> <tr> <td>Nonagon</td><td>9</td></tr> <tr> <td>Decagon</td><td>10</td></tr> <tr> <td>Undecagon</td><td>11</td></tr> <tr> <td>Dodecagon</td><td>12</td></tr> <tr> <td>n-gon</td><td>n-sides</td></tr> </tbody> </table>	<u>Name of Polygon</u>	<u>Number of sides</u>	Triangle	3	Quadrilateral	4	Pentagon	5	Hexagon	6	Heptagon	7	Octagon	8	Nonagon	9	Decagon	10	Undecagon	11	Dodecagon	12	n-gon	n-sides
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E. Discussing new concepts and practicing new skills #2	The teacher discuss further on interior and exterior angles, consecutive vertices, consecutive sides and diagonals found on page 214 – 215 of the Learner’s Module .																								

F. Developing mastery (leads to formative assessment 3)	Working in pairs, (10 minutes) Activity 18 Sum of the Interior Angles of a Convex Polygon Materials needed: pencil, paper, protractor Procedures: 1) Draw a triangle. Using a protractor, determine the measure of its interior angles and determine the sum of the interior angles. 2) Draw a quadrilateral. Then fix a vertex and draw diagonals from this vertex. Then answer the following: a) How many diagonals are drawn from the fixed vertex? b) How many triangles are formed by this/these diagonal(s)? c) Without actually measuring, can you determine the sum of the interior angles of a quadrilateral? Answers: 1. Sum of the interior angles of a triangle																																																																																				
G. Finding practical applications of concepts and skills in daily living	The teacher ask the learners to answer the problem : 1. Henry is eating a tagaktak. What is the sum of the interior angles of the tagaktak? Answer: 180°																																																																																				
H. Making generalizations and abstractions about the lesson	The teacher reiterates a polygon with n sides has n number of vertices and n number of interior angles. To find the measure of the interior angles use $(n-2)180^{\circ}$																																																																																				
I. Evaluating Learning	The teacher let the students complete the table by pair. (5minutes) 5) Search for a pattern and complete the table below: <table><tr><th>No. of sides</th><th>No. of diagonals from a fixed vertex</th><th>No. of triangles formed by the diagonals drawn from a fixed vertex</th><th>Sum of the interior angles</th></tr><tr><td>3</td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>n</td><td></td><td></td><td></td></tr></table> Answers: <table><tr><th>No. of sides</th><th>No. of diagonals from a fixed vertex</th><th>No. of triangles formed by the diagonals drawn from a fixed vertex</th><th>Sum of the interior angles</th></tr><tr><td>3</td><td>0</td><td>1</td><td>180°</td></tr><tr><td>4</td><td>1</td><td>2</td><td>360°</td></tr><tr><td>5</td><td>2</td><td>3</td><td>540°</td></tr><tr><td>6</td><td>3</td><td>4</td><td>720°</td></tr><tr><td>7</td><td>4</td><td>5</td><td>900°</td></tr><tr><td>8</td><td>5</td><td>6</td><td>1080°</td></tr><tr><td>9</td><td>6</td><td>7</td><td>1260°</td></tr><tr><td>10</td><td>7</td><td>8</td><td>1440°</td></tr><tr><td>n</td><td>n-3</td><td>n-2</td><td>$(n-2)180^{\circ}$</td></tr></table>	No. of sides	No. of diagonals from a fixed vertex	No. of triangles formed by the diagonals drawn from a fixed vertex	Sum of the interior angles	3				4				5				6				7				8				9				10								n				No. of sides	No. of diagonals from a fixed vertex	No. of triangles formed by the diagonals drawn from a fixed vertex	Sum of the interior angles	3	0	1	180°	4	1	2	360°	5	2	3	540°	6	3	4	720°	7	4	5	900°	8	5	6	1080°	9	6	7	1260°	10	7	8	1440°	n	n-3	n-2	$(n-2)180^{\circ}$
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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	(Localization and Contextualization is done) G. Finding practical application of concepts and skills in daily living.

Prepared by:

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