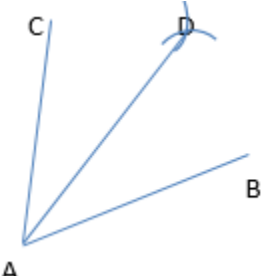


DAILY LESSON LOG OF M8GE-IIg-2 (Week Seven-Day one of Two)

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 triangle congruence		
B. Performance Standards	The learner is able to communicate mathematical thinking with coherence and clarity, in formulating, investigating, analyzing and solving real life problems involving proving triangle congruence.		
C. Learning Competencies/ Objectives	Applies triangle congruence to geometric constructions of perpendicular and angle bisector - Construct an angle and its bisector using a straightedge and compass - State the steps used to construct an angle and its bisector when using a straightedge and compass - Demonstrate interest and enthusiasm in the construction of angle bisector.		
II. CONTENT	Construct an Angle Bisector		
III. LEARNING RESOURCES			
A. References			
1. Teacher's Guide			
2. Learner's Materials			
3. Textbook pages			
4. Additional Materials from Learning Resource (LR) portal	compass, ruler, protractor, sketch pad or bond paper, ppt. presentation,		
B. Other Learning Resources	www.cpalms.org		
IV. PROCEDURES			
A. Review previous lesson or presenting the new lesson	Students should already know: - what an angle is - how to create an angle using a straight edge - how to measure an angle using a protractor - basic use of a compass (drawing an arc, locating the needle, positioning the pencil, and opening and closing the tool)		

B. Establishing a purpose for the lesson	When or how would being able to construct an angle bisector be necessary ? (Answers may vary, but some examples are sharing a slice of pizza or pie and making a kite.)
C. Presenting examples/ instances of the new lesson	The teacher will model and say each step in constructing an angle and its bisector. (An example of each step is modeled in the " <u>Constructing an Angle Bisector.pptx</u> " PowerPoint.) See steps below:
D. Discussing new concepts and practicing new skills #1	● Create point A (this will be the start of your ray and the vertex of your angle) ● Draw a ray that starts at point A ● On that ray label point B (do not make the distance between the two points too far or too close, a little more than half way will be fine, this point will help you create your first arc) ● Create another ray that starts at point A and goes in a different direction than point B ● Place the needle of your compass on point A and open it up so the pencil lies on point B ● Without moving the needle, create an arc with the compass that starts on point B and intersects the other side of your angle ● At the intersection of the arc and the angle side, label point C ● Without changing the distance on your compass, place the needle on point B and create an arc inside your angle ○ Place your needle on point C and repeat the previous step ○ At the intersection of the two arcs created from point B and C, label point D ○ Draw a ray starting at point A that runs through point D ● Angle CAB is bisected by ray AD making angle CAD congruent to angle BAD Verify this by measuring angle CAD and angle BAD with a protractor.

	○ If students are having difficulty seeing the different angles, use different colors to trace out the angles. 
E. Discussing new concepts and practicing new skills #2	
F. Developing mastery (leads to formative assessment 3)	The teacher will repeat this model twice. Use the same steps but a different size angle. For example, create an acute angle first, and then an obtuse angle. The teacher will guide the students through each step in creating an angle and its bisector. After each step, the teacher will check each student's drawing for accuracy and provide praise and/or corrections.
G. Finding practical applications of concepts and skills in daily living	
H. Making generalizations and abstractions about the lesson	The teacher will draw generalizations out of constructing angle bisector. 1. Describe the measure of two angles that divides the angles? 2. What do you call the ray that divides an angle into two congruent measures? 3. What is an angle bisector?
I. Evaluating Learning	Students will create an angle and its bisector using a compass and straightedge, write the steps they used and verify that their angle bisector is correct. (Attached sheet on possible answers)
J. Additional activities or remediation	
V. REMARKS	
VI. REFLECTION	<i>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.</i>

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	Angle bisector is necessary in making Kites and slicing pizza. The use of constructing materials is locally available.

Prepared by:

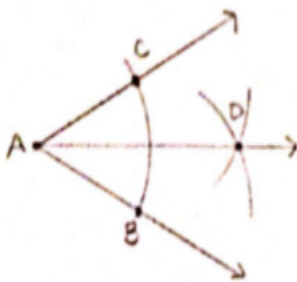
GAYE MAUREEN B. BAJO

STVS Math 8 Teacher

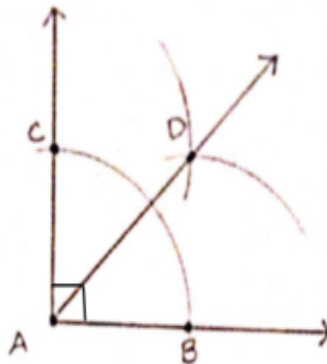
Name: _____ Possible angles and answers _____ Date: _____

Part 1: Construct an angle and its bisector using a straightedge and compass.

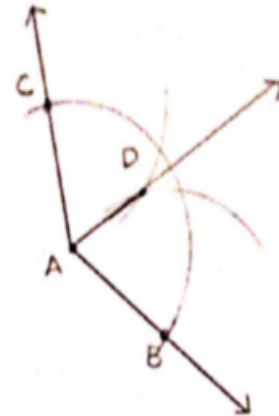
Acute Angle



Right Angle



Obtuse Angle



Part 2: Write the steps you took in Part 1.

Create point A
Draw a ray that starts at point A
On that ray create point B
Create another ray that starts at point A and goes in a different direction than point B
Place the needle of your compass on point A and open it up so the pencil lies on point B
Without moving the needle, create an arc with the compass that starts on point B and intersects the other side
At the intersection of the arc and the angle side, label point C
Without changing the distance on your compass, place the needle on point B and create an arc inside your angle
Place your needle on point C and repeat the previous step
At the intersection of the two arcs created from point B and C, label point D
Draw a ray starting at point A that runs through point D

Part 3: Verify that your construction is accurate and explain how you did so.

They can verify their construction is accurate by using a protractor and measuring the two angles to make sure they are congruent.
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