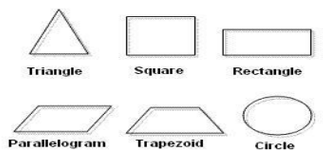
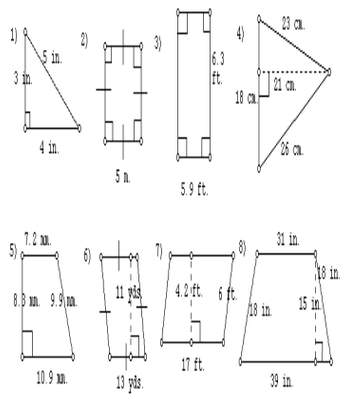
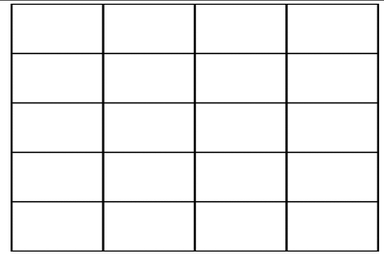
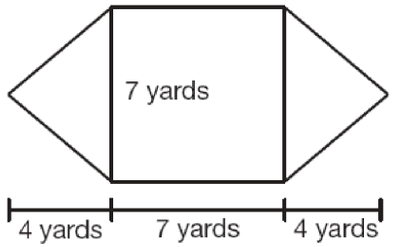
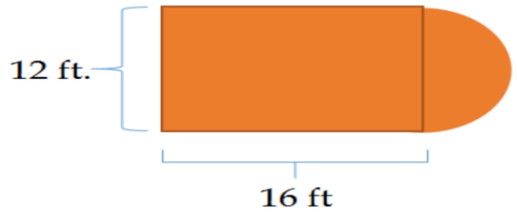
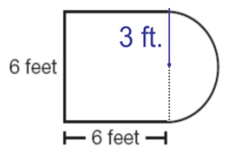
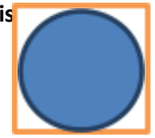
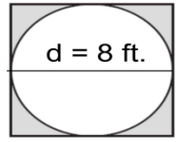
GRADES 1 to 12
DAILY LESSON LOG

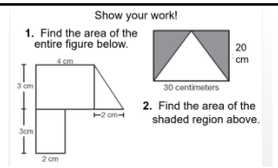
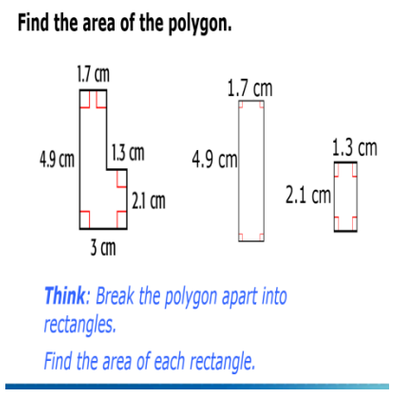
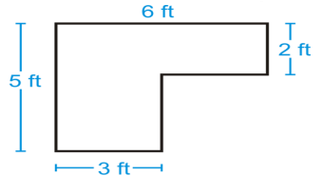
School:	DepEdClub.com	Grade Level:	VI
Teacher:	File created by Ma'am ANNALICE R. QUINAY	Learning Area:	MATHEMATICS
Teaching Dates and Time:	APRIL 10 - 14, 2023 (WEEK 9)	Quarter:	3RD QUARTER

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
I. OBJECTIVES	The learner…..				
A. Content Standard	demonstrates understanding of rate and speed, and of area and surface area of plane and solid/space figures.				
B. Performance Standard	is able to apply knowledge of speed, area, and surface area of plane and solid/space figures in mathematical problems and real-life situations				
C. Learning Competencies / Objectives	**finds the area of composite figures formed by any two or more of the following: triangle, square, rectangle, circle, and semi-circle. M6ME-IIIh-89**		**solves routine and non-routine problems involving area of composite figures formed by any two or more of the following: triangle, square, rectangle, circle, and semi-circle M6ME-IIIh-90**		
Measurement	Measurement	Measurement	Measurement		
III. LEARNING RESOURCES					
A. References					
1. Teacher's Guide pages	21ST Century Mathletes, p.103-107	21ST Century Mathletes, p.103-107	21ST Century Mathletes, p.103-107	21ST Century Mathletes, p.103-107	
2. Learner's Materials pages	21st Century Mathletes 6,	21st Century Mathletes 6,	21st Century Mathletes 6	21st Century Mathletes 6	
3. Textbook pages	21st Century Mathletes 6	21st Century Mathletes 6	21st Century Mathletes 6	21st Century Mathletes 6	
4. Additional Materials from Learning Resource (LR) Portal					
B. Other Learning Resources	Mathletes 6 textbook, video clip, power point presentation	Mathletes 6 textbook, video clip, power point presentation, drawings of patterns, picture cards	Mathletes 6 textbook, video clip, power point presentation	Mathletes 6 textbook, video clip, power point presentation	
IV. PROCEDURES					
A. Reviewing previous lesson or presenting the new lesson	A.Drill: Identify ff. the figures. (See TG p. 103  Match the figures in column A with their corresponding formula (area) in column B. Column A Triangle Square Rectangle Circle	Drill: Group Activity! Find the area of the ff. figures  	Drill: **Warm Up** **1.** What is the area of a rectangle with length 10 cm and width 4 cm? **2.** What is the area of a parallelogram with base 18 ft and height 12 ft? **3.** What is the area of a triangle with base 16 cm and height 8 cm?	Draw the given figure with its dimension. Write the formula in finding its area then solve: 1) a rectangle whose length is 15 cm and its width is 10 cm 2) a square whose side is 3.5 m 3) a circle whose radius is 5.2 dm 4) a trapezoid whose bases are 15 in and 12 in. Its height is 17 in. 5) a parallelogram whose base is 20 cm and the height is 25.5 cm.	

	Parallelogram Column B L x w B x h ½ b x h πr^2 $c = 2\pi r$ Review: Group Game Solve each situation. Show complete solution 1.What is the area of square room with a side of 14m? 2.A circular garden has a diameter of 2.5m. what is the area of the garden? 3.A triangular structure has a base of 36 m and a height of 75m. what is its area? 4.A parallelogram has a base of 32m and a height of 18m. what is its area? 5.The width of a rectangle is 8m. its length is twice its width. What is its area?			
B. Establishing a purpose for the lesson	A.As you have learned in your previous grades or lessons, the area of a figure is the amount of flat space that the figure covers. Area is measured in square units, such as square inches or square cm. Do you remember how find the area of: Rectangle Square Parallelogram Triangle Circle Show this façade of the house	Aldrin works for a company that remodels kitchens. In one kitchen he builds the rectangular island shown below. What is the size of the granite tiles that he need to cover its cour To find the size of the granite tiles, we need to find the area of the rectangle. Area=Lxw =6ft. x 2.5 ft Area= 15sq.ft.	 What is the area of the region? We have a rectangular array. Since the region is filled w/ 20sq.cm, its area is 20sq.cm. the number of units is 5 x 4 =20 Original File Submitted and Formatted by DepEd Club Member - visit depedclub.com for more	 Most of the outdoor basketball court was already repainted green. The only part left to redo was the brown key. The painters need to know the total **area** of the space remaining in order to buy enough paint.

C. Presenting Examples/Instances of new lesson	 The pupils will describe the façade of the house.	Find the area of the composite figure. The composite figure contains 2 triangles and 1 square. We need to find the area of each region.  Area of 1 triangle: A = ½ bh A = ½ (7)(4) A = ½ (28) A = 14 yds^2 Area of square: A = lw = 7(7) = 49 yd^2 Total area of figure: Add up areas of 2 triangles and square: A = 2(14) + 49 = 28 + 49 = **77 yd^2.**	Present the problem on page 266. (Example no. 7) A roller-rink floor is shown below. Each end is a semi=circle. What is the area? If hardwood flooring costs Php220.00 per square foot, how much will the flooring cost? Discuss the solution on page 266.	**Given the dimensions shown below, what area should the workers use to calculate their supplies?**  First, find the area of the rectangle. The area of the rectangle is 192 square feet. Next, recognize that you have been given a diameter and need to divide that by 2 to get the radius. The problem states that the diameter of the circle is the same as the width of the rectangle, 3 feet. The area for a full circle is approximately 113 square feet. Then, remember that you have a semi-circle and divide this area by 2. The area of the semi-circle is 56.5 square feet. Add the two areas together. The workers will need to by enough paint to cover **248.5 sq. ft.**
D. Discussing new concepts and practicing new skills #1	Present the ff. problems: 1.A figure or shape that can be divided into more than one of the basic figures is said to be a composite figure (or shape) Suppose a swimming pool at the figure (on page 105, TG) looks like this. How do you find the area of this swimming pool? Is it possible to find the area? 2.Father wants to paint the façade of the house. He needs to find out the area so that he would know the amount of paint to buy. The side of the square is 12 m and the height of the triangle is 13m. what is the area of the façade of the house? What figures are used in the structure?	A **composite** figure is formed from two or more figures. **<u>To find the area of a composite figure:</u>** Find the areas of each figure then ***<u>add</u>*** them up. To find the area of a shaded region, you need to ***<u>subtract</u>*** the areas. Find the area of the figure. The figure contains: 1 square and a semicircle  Ans: Area of square: A = lw = 6(6) = 36 ft^2 Area of circle:	Discuss Example no. 8 on page 267. Let them watch the video of "Composite figures, Finding the Area".	Find the area of each combined figure. A rectangle and a semi-circle. The rectangle has a length of 9 inches and a width of 4.5 inches. The diameter of the circle matches the length. A rectangle and a semi-circle. The rectangle has a length of 7 feet and a width of 4 feet. The diameter of the circle matches the length. A rectangle and a semi-circle. The rectangle has a length of 5.5 feet and a width of 3.5 feet. The diameter of the circle matches the width. Ans: 72.29 sq. in. . 47.23 sq. ft. 3 . 24.06 sq. ft.

	Divide the pupils into 5 groups and let them find the area of the structure. Ans: Area of the square= sxs =12 x 12 = 144 sq.m. Area of the triangle= 1/2bh =1/2(12x13) =1/2(156) =78sq.m. Area of the façade of the house = area of a square + area of a triangle =144sq.m. + 78 sq.m. =222sq.m.	$A = \pi r^2$ $A = \pi(3)^2 = 9\pi$ ft^2 Area of semicircle = $\frac{1}{2}(9\pi) = 4.5\pi$ ft^2 Total area of figure: Add areas of square and semicircle: A = **$36 + 4.5\pi$ cm^2**		
E. Discussing new concepts and practicing new skills #2	**What is the area of the unshaded region if the radius of the circle is 10 and the side of the square is**  **To find the answer, subtract the area of the circle from the area of the square.** **Discuss example no. 6 , a & c, on page 263 of Mathletes textbook.**	Find the area of the shaded region if the area of the square is 64 ft^2. We are given the area of the square, we need to find the area of the circle. What is its radius?  Ans: We are given the area of the square, we need to find the area of the circle. What is its radius? Diameter = Length of square = = 8 ft. Radius = ½ (8) = 4 ft. Area of circle: $A = \pi r^2$ $A = \pi(4)^2 = 16\pi$ ft^2. Area of shaded region = Area of square – Area of circle $A = 64 - 16\pi$ ft^2.	Solve each problem. 1.Rob is painting large polka dots on a sheet for the backdrop of the school musical. He painted 16 polka dots, each with a radius of 3 feet. What is the total area that the polka dots cover? 2.The librarian is having the library at her school carpeted. The library is a circular room with a diameter of 420 feet. How many square feet of carpet will she need to order? Ans: 452.16 sq. ft. 138,474 sq. ft	Show a video of “Area of Composite Shapes:
F. Developing mastery (Leads to Formative Assessment)	To deepen pupil’s understanding, let them answer the ff. (TG p. 106)	Group Activity:	Group Activity: Solve the ff. problems: How many sq.cm. of tiles are needed to floor a hexagonal terrace if each	Find the area of each combined figure. A square and a semi-circle. The square has a side length of 11 mm. The diameter of the circle matches the square’s side.

			side is 30cm long and the radius of the inscribed circle is 15.5cm? A rectangle wrapping cloth has a length of 26inches and a width of 24 inches. Two circular cloth with a diameter of 8 inches will be cut from it. How much cloth will be left?	2.A square and a semi-circle. The square has a side length of 8.5 inches. The diameter of the circle matches the square's side. 3.A square and a semi-circle. The square has a side length of 7.25 inches. The diameter of the circle matches the square's side. Answers 1. 168.49 sq. mm 2. 100.61 sq. in. 3. 73.19 sq. in.
G. Finding practical applications of concepts and skills in daily living	Group Work: Find the area of the ff. composite figures	Pair-share: 	Group Activity: How much material is required to make a circular skirt if the waist hole has a circumference of 60.5 cm. and the diameter of the circular skirt is 12.5cm?	Pair-share: Find the area of each combined figure. 1.A triangle and a semi-circle. The triangle has a base of 5 inches and a height of 4 inches. The diameter of the circle matches the base of the triangle. 2.A triangle and a semi-circle. The triangle has a base of 7 inches and a height of 6 inches. The diameter of the circle matches the base of the triangle. 3.A triangle and a semi-circle. The triangle has a base of 5.5 inches and a height of 4 inches. The diameter of the circle matches the base of the triangle. Ans: 1. 19.81 sq. in 2. 40.23 sq. in. 3. 22.87 sq. in
H. Making generalizations and abstractions about the lesson	How do we find the area of composite figures? To find the **area** of a **composite figure**, separate the**figure** into simpler **shapes** whose **area** can be found. Then add the **areas** together. Be sure than none of the simpler **figures** have overlapping **areas**. Example 1: Find the **area** of the **composite** shape shown below. 		**How do you solve routine and non-routine problems involving area of composite figures formed by any two or more of the following: triangle, square, rectangle, circle, and semi-circle?**	
I. Evaluating Learning	Evaluate item 1-6 Find the area of each shaded region. Assume that all angles that appear to be right angles are right angles. (21st Century Mathletes textbook, page 268)	Evaluate item 7-14 Find the area of each shaded region. Assume that all angles that appear to be right angles are right angles. (21st Century Mathletes textbook, page 269)	Solve each problem. Provide illustration if necessary. (21st Century Mathletes textbook, page 270)	Find the area of each combined figure. 1..A square and a semi-circle. The square has a side length of 13 feet. The diameter of the circle matches the square's side. 2..A square and a semi-circle. The square has a side length of 15.5 feet. The diameter of the circle matches the square's side.

				3.A rectangle and a semi-circle. The rectangle has a length of 8 feet and a width of 5 feet. The diameter of the circle matches the width. 4.A rectangle and a semi-circle. The rectangle has a length of 8.5 feet and a width of 6 feet. The diameter of the circle matches the width. Ans.: 1. 235.33 sq. ft. 2. 334.55 sq. ft. 3 3. 49.81 sq. ft. 4 4. 65.13 sq. ft.
J. Additional activities for application and remediation	Answer Math Challenge			
V. Remarks				
VI. REFLECTIONS				
A. No. of learners who earned 80% on the formative assessment				
B. No. of learners who require additional activities for remediation who scored below 80%				
C. Did the remedial lessons 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 this work?				
F. What difficulties did I encountered 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?				