

INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2025-26

CLASS: VIII

SUBJECT: MATHEMATICS

DATE:14-12-2025

Lesson 09: MENSURATION

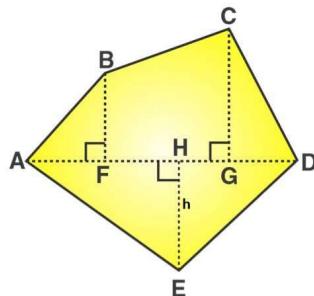
1. a) Area of a trapezium =-----  
b) Area of a Rhombus =-----  
c)  $1\text{cm}^3$  =-----mL  
d)  $1\text{L}$  =----- $\text{cm}^3$   
e)  $1\text{m}^3$  =-----L
2. Find the area of a triangle with base 10 cm and height 6 cm.
3. Find the volume of a cuboid whose length is 8cm, breadth 6cm, and height 3.5cm
4. Find the altitude of a trapezium, the sum of the lengths of whose bases is 6.5cm and whose area is  $26\text{cm}^2$
5. Find the volume of a cube of side 5 cm.
6. The area of a rhombus is  $720\text{ cm}^2$  and one of the diagonals is 24cm. Find the other diagonal
7. Find the curved surface area of a cylinder of radius 7 cm and height 10 cm.
8. Find the area of a trapezium whose parallel sides are 12 cm and 18 cm and the distance between them is 7 cm.
9. Find the total surface area of a cuboid of dimensions  $10\text{ cm} \times 8\text{ cm} \times 6\text{ cm}$ .
10. Find the volume of a cylinder of radius 3.5 cm and height 10 cm.
11. Find the area of a rhombus whose diagonals are 12 cm and 16 cm.
12. How many cubic centimetres of water can a tank of dimensions  $20\text{ cm} \times 15\text{ cm} \times 10\text{ cm}$  hold?
13. Find the side of a cube whose surface area is  $1734\text{ cm}^2$
14. In a building there are 16 pillars. The radius of each pillar is 14cm and height is 4m. Find the total cost of painting the curved surface area of all pillars at the rate of ₹9 per  $\text{m}^2$
15. Find the height of a cuboid whose base area is  $360\text{ cm}^2$  and volume is  $2520\text{ cm}^3$
16. A rectangular piece of paper  $22\text{cm} \times 8\text{cm}$  is folded without overlapping to make a cylinder of height 8cm. Find the volume of the cylinder

17. A godown is in the form of a cuboid of measure  $80\text{m} \times 60\text{m} \times 40\text{m}$ . How many cuboidal boxes can be stored in it if the volume of one box is  $0.12\text{m}^3$

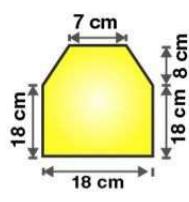
18. The circumference of the base of a cylinder is  $88\text{cm}$  and its height is  $15\text{cm}$ . Find its curved surface area and total surface area

19. The diameter of a roller is  $84\text{ cm}$ , and its length is  $120\text{ cm}$ . It takes 500 complete revolutions moving once over to level a playground. What is the area of the playground?

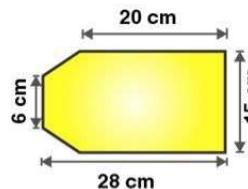
20. Find the area of the polygon if  $AD = 10\text{cm}$ ,  $AG = 8\text{cm}$ ,  $AF = 5\text{cm}$ ,  $BF = 5\text{cm}$ ,  $CG = 7\text{cm}$  and  $EH = 3\text{cm}$ .



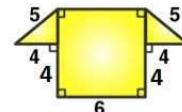
21. Find the area of the following figures as the sum of the areas of a rectangle and trapezium.



(i)



(ii)



(iii)

Answers:

1. a) $\frac{1}{2} h(a+b)$	b) $\frac{1}{2} d_1 \times d_2$	c) 1
d) 1000	e) 1000	
2. $30\text{cm}^2$	3. $168\text{cm}^3$	4. 8cm
5. $125\text{cm}^3$	6. 60cm	7. $440\text{cm}^2$
8. $105\text{cm}^2$	9. $376\text{cm}^2$	10. $385\text{ cm}^3$
11. $96\text{cm}^2$	12. $3000\text{cm}^3$	13. 17cm
14. ₹506.88	15. 7cm	16. $308\text{cm}^3$
17. 16,00,000 boxes	18. $1320\text{cm}^2, 2552\text{cm}^2$	19. $1584\text{m}^2$
20. $52.5\text{cm}^2$	21. i) $424\text{cm}^2$	ii) $384\text{cm}^2$
		iii) $54\text{cm}^2$

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