



INDIAN SCHOOL AL WADI AL KABIR

Class VIII, Mathematics (2023-24)

Worksheet DTQ – MENSURATION

SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each)

- Q1** The area of a trapezium is 240cm^2 . If the parallel sides are 24 cm and 36cm long. find the distance between them.
- Q2** A cube has lateral surface area 64m^2 , find its volume.
- Q3** A room has the dimensions $10\text{m} \times 6\text{m} \times 8\text{m}$. How many boxes of dimensions $1.5\text{m} \times 2\text{m} \times 0.5\text{m}$ can fit in the room?
- Q4** The area of a rhombus is 228cm^2 . If one of the diagonals is 24cm, find the other diagonal.
- Q5** Multipurpose hall of school is in the shape of a rhombus such that the lengths of the two diagonals of the hall are 120m and 160m. find the cost of tiling the floor at the rate of ₹6 per square metre.
- Q6** The area of a trapezium is 68cm^2 and the sum of parallel sides is 34cm. find the distance between the parallel sides.
- Q7** Find the area of a rhombus whose side is 10cm and one of the diagonals is 12cm (**CBQ**)

SHORT ANSWER TYPE- 5 QUESTIONS. (3 Marks each)

- Q8** A closed cylindrical tank of diameter 7cm and height 4cm made from a sheet of metal. How much sheet of metal is required? Also find the cost if 1 cm^2 metal cost ₹12.
- Q9** The lengths of the diagonals of rhombus are in the ratio 4:5. If the area of rhombus is 810 m^2 , find the length of each diagonal.
- Q10** A tank in the shape of a cuboid is 30m and 25 m wide. How much high must it be to hold 4.5 litres of water?
- Q11** A road roller takes 800 complete revolutions to move once over to level a road. Find the area of the road if the radius of the roller is 42cm and length 90cm.

LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each)

- Q12** The length, breadth and height of a cuboid are in the ratio 4:2:1 and its total surface area is 1372m^2 , Find the dimensions of the cuboid (**CBQ**)
- Q13** Find the ratio of total surface area and curved surface area of a circular cylinder with height 0.9m and radius 2.1m. (**CBQ**)
- Q14** A cuboidal tin box opened at the top has dimensions $20\text{cm} \times 16\text{cm} \times 14\text{cm}$. What is the total area of metal sheet required to make 10 such boxes.
- Q15** Find the curved surface area and volume of cylinder with diameter of base is 7cm and height 60cm.

ANSWERS

Q1.	8cm	Q2.	64m^3	Q3.	320
Q4.	19cm	Q5.	₹57600	Q6.	4cm
Q7.	96cm^2	Q8.	₹1980	Q9.	36cm,45cm
Q10.	6m	Q11.	1900.8m^2	Q12.	L=28m.b=14m,h=7m
Q13.	10:3	Q14.	1.328m^2	Q15.	CSA = 1320cm^2 V = 2310cm^3