INDIAN SCHOOL AL WADI AL KABIR

Class VIII, Mathematics (2024-25)

Worksheet DTQ – MENSURATION

SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each)	
Q1.	The area of a trapezium is 385 cm^2. Its parallel sides are in the ratio 3 : 4 and the perpendicular distance between them is 11cm. What will be the length of the longer side?
Q2.	Find the cost of painting the four walls of a room of dimension 10m x 5m x 6m at the rate of ₹4 per square meter.
Q3.	If the volume of a cube is 729cm^3, then find its surface area.
Q4.	A box is 64 cm x 45 cm x 600 cm. How many soaps can be fitted in it if each measures 18 cm x 5 cm x 30 cm?
Q5.	The capacity of a cylindrical tank is 1848 m^3. What would be the depth of the tank if the diameter of its base is 14 m.
Q6.	a) The area of a rhombus is 90 cm^2. If one of the diagonal is 15 cm, find the length of the other diagonal. b) The height of a cuboid whose base area is 60 m^2 and volume is 1080 m^3
Q7.	The diagonal of a quadrilateral shape field is 30m and the perpendiculars dropped on it from the remaining opposite vertices are 9 m and 10 m. Find the area of the field.
SHORT ANSWER TYPE- 5 QUESTIONS. (3 Marks each)	
Q8.	The capacity of a cuboidal tank is 30,000 litres of water. Find the breadth of the tank, if its length and breadth are 4 m and 2.5 m.
Q9.	The dimensions of a cuboid are in the ratio 1:2:3 and its total surface area is 88 m^2. Find its dimensions.
Q10.	Find the cost of digging a cuboidal pit 6 m long, 4 m broad and 3 m deep at the rate of ₹250 per m^3.
Q11.	The diameter of a roller is 80cm and its length 126cm.It takes 500 complete revolutions moving over once to level a playground. Find the area of the playground in sq.m.
Q12.	Find the cost of white washing the four walls and the ceiling of a room of length 8m, breadth 6m and height 4m at the rate of ₹ 25 per sq.m. Also find the cost of polishing the floor at the rate of ₹12 per sq.m.
LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each)	
Q.13	Which has a greater volume and by how much: A cuboid with length, breadth and height as 7 m, 14 m and 7 m. OR A cylinder with radius 7 m and height 14 m.

Q14.	The walls and the ceiling of the walls are to be painted. The length, breadth and height of the room are 5 m, 4 m and 3 m respectively. a) Find the cost of painting the four walls and ceiling at the rate of ₹ 200 per m^2? b) Find the cost of tiling the floor at the rate of ₹ 50 per m^2? c) Find the total amount to be paid after painting the walls and the ceiling, tiling the floor?
Q15.	The volume of a cylinder is 1540 cm^3. If it is 10 cm long, find: a) Radius of the base. b) Curved surface area. c) Total surface area. (take $\pi=\frac{22}{7}$)

ANSWERS					
Q1.	40m	**Q2.**	₹720	**Q3.**	486cm^2
Q4.	640 soaps	**Q5.**	12m	**Q6.**	12 cm, 18m
Q7.	285m^2	**Q8.**	3 m	**Q9.**	2m, 4m, 6m
Q10.	₹ 18,000	**Q11.**	1584m^2	**Q12.**	₹4000, ₹576
Q13.	686 m^3, 2156 m^3, Cylinder by 1470 m^3	**Q14.**	a) ₹14800 b) ₹1000 c) ₹15800	**Q15.**	a) 7 cm b) 440cm^2 c) 748cm^2