

SURFACE AREA & VOLUME 9th

1. The length, breadth and height are 5m, 4m and 3m respectively. Find the cost of white washing the walls and ceiling of the room at the rate of rs 7.50 per m^2
2. The floor of a rectangular hall has a perimeter 250m. If the cost of painting the four walls at the rate of rs 10 per m^2 is rs 15000. Find the height of the hall.
3. The diameter of the roller is 84 cm and its length is 120cm. It takes 500 complete revolutions to move once over to level a playground. Find the area of playground in m^2 .
4. In a hot water heating system, there is a cylindrical pipe of length 28m and diameter 5cm. Find the total radiating surface in the system.
5. Find –(1)-the lateral surface area of a closed cylindrical petrol storage tank that is 4.2m in diameter and 4.5 m high.
(2)- how much steel was actually used, if $\frac{1}{12}$ of steel was wasted in making tank.
6. The capacity of a cuboidal tank is 50,000 litres of water. Find the breadth of the tank if its length and depth are respectively 2.5m and 10 m.
7. A village, having a population of 4000, requires 150 litres of water per head per day. If it has a tank measuring $20m \times 15m \times 6m$. For how many days will the water of this tank last?
8. A river is 3 m deep and 40 m wide is flowing at the rate of 2km per hour. How much water will fall into the sea in 30 min?
9. The capacity of a closed cylinder vessel of height 1 m is 15.4 litres. How many square meters of metal sheet would be required?
10. A patient in a hospital is given soup daily in a cylindrical bowl of diameter 7 cm. If the bowl is filled with soup to a height of 4 cm, how much soup has to be prepared daily to serve 250 patients?