

INTERNATIONAL INDIAN SCHOOL, BURAI DAH
CLASS IX (2022-2023) - WORKSHEET
CHAPTER (13) - Surface Areas & Volumes

1. The dimensions of a hall is 1m, 80cm, 50cm. Find the area of the four walls.
2. The edge of a cube is 6cm. Find its surface area.
3. The length, breadth and height of a room are 5m, 4m and 3m respectively. Find the cost of painting the walls and ceiling at Rs 50 per m².
4. The dimensions of a cuboid are 3:4:5 and its total surface area is 3384cm². Find the dimensions of the solid.
5. A rectangular sheet of paper 22cm x 15cm is rolled along its length to form a hollow cylinder. Find the radius of the cylinder.
6. The curved surface area of a cylinder is 4400cm² and circumference of the base is 110cm. Find the height of the cylinder.
7. The circumference of the base of a right circular cone is 44cm and its slant height is 10cm. Find its curved surface area.
8. The curved surface area of a cone of radius 8cm is 352cm². Find its height.
9. Surface area of a sphere 154cm². Find its radius.
10. Find the number of cubes of side 3cm that can be cut out of a cuboid of dimensions 18cm x 12cm x 9cm.
11. Two cylindrical vessels have their base radii 16cm and 8cm and their heights 8cm and 16cm respectively. Find the ratio of their volumes.
12. The radius of the base of a right circular cylinder is 20cm and its volume is 17600cm³. Find the total surface area of the cylinder.
13. If the area of the base of a cone is 420cm² and its height is 15cm, find its volume.
14. Volume of right circular cone is 9856cm³. If diameter of the cone is 28cm, find the curved surface area of the cone.
15. A solid spherical ball of diameter 4.2cm is completely immersed in water. How much water is displaced?
16. Find the surface area of a sphere whose volume is $\frac{99}{7}$ cm³
17. The total surface area of a solid hemisphere is 1848cm². Find the volume of the hemisphere.

ANSWERS

1) 18000 cm ²	7) 220 cm ²	13) 2100 cm ³
2) 216 cm ²	8) $2\sqrt{33}$ cm	14) 2200 cm ²
3) Rs 3700	9) 3.5 cm	15) 38.8 cm ³
4) 18cm, 24cm, 30cm	10) 72	16) $\frac{198}{7}$ cm ²
5) 3.5 cm	11) 2 : 1	17) 5749.33 cm ³
6) 40 cm	12) 4274.29 cm ²	