INDIAN SCHOOL NIZWA - WORKSHEET

MATHEMATICS

CH:13.Surface area and Volume

Name: _____ Date:_____ Class: IX Sec: ___

1. The surface area of a sphere of diameter 14 cm is _____
2. The volume of a right circular cone with radius 6 cm and height 7 cm is _____
3. The lateral surface area of a cuboid of length 'l', breadth 'b' and height 'h' is _____
4. The side of a cube is 1cm. Find the total surface area of the figure formed by joining two such cubes ?
5. What is the ratio of the whole surface area of a solid sphere and a solid hemisphere ?
6. The height of a right circular cylinder is 15 cm and volume is 2310cm^3 then, find the radius of the base. [take $\pi = \frac{22}{7}$]
7. A wall 4 m long, 3 m height and 12cm thick is made up of bricks each measuring 20cm x 12 cm x 6.5 cm. Find the number of bricks required to build the wall.
8. The volume of a cone of base radius 3 cm is 12 πcm^3. Find the slant height of the cone.
9. A cylinder of 6 m high , is open at the top. The circumference of its base is 22 m. Find its total surface area.
10. A circus tent is in the form of a cone of height 15 m and diameter 16 m. Find the length of the canvas needed to make the tent if the width of the canvas is 2m.
11. A hemispherical bowl is made of steel 0.25 cm thick. The inner radius of the bowl is 5 cm. Find the outer curved surface area of the bowl.
12. The diameter of a roller is 84cm and its length is 120cm. It takes 500 complete revolutions to move once over to level a playground. Find the area of the playground in m^2.
13. The side of a rhombus is 10 cm and one diagonal is 16cm , find the area of the rhombus.
14. Find the area of the isosceles triangle , if the perimeter is 11cm and the base is 5cm.
15. An isosceles right angled triangle has area of 12 sq.cm. find the length of its hypotenuse.

16. The sides of a triangular field are 41m, 40m and 9 m. Find the number of rose beds that can be prepared in the field, if each rose bed on an average needs 900sq.cm space.

17. The lengths of two adjacent sides of a parallelogram are 17cm and 12 cm . One of its diagonals is 25 cm long. Find the area of the parallelogram. Also find the length of altitude from vertex on the side of length 12cm.