

1. Find the length of the side of a cube whose total surface area measures  $600\text{cm}^2$  .
2. Raju painted the outside of a cabinet on all sides except the bottom. If the cabinet measures  $2\text{m} \times 1\text{m} \times 1.5\text{m}$  , how much surface did he paint?
3. Find the height of a cuboid of volume  $100\text{cm}^3$  , whose length and breadth are  $5\text{cm}$  and  $4\text{cm}$  respectively.
4. Find the curved surface area of a cylinder, the diameter of whose base is  $7\text{cm}$  and height is  $60\text{cm}$  .
5. Find the lateral surface area of a cube of side 15 metre?
6. Case study  

A metal pipe is  $77\text{cm}$  long, the inner diameter of the cross-section is  $4\text{cm}$  and the outer diameter is  $4.8\text{cm}$  .

  - (a) What is the inner curved surface area?  
 a.  $986\text{ sq cm}$       b.  $968\text{ sq cm}$       c.  $900\text{ sq cm}$       d.  $886\text{ sq cm}$
  - (b) What is the outer curved surface area?  
 a.  $1212\text{sqcm}$       b.  $1158.6\text{sqcm}$       c.  $1161.6\text{sqcm}$       d.  $1166.6\text{sqcm}$
  - (c) What is the total surface area?  
 a.  $2140.66\text{sqcm}$       b.  $2150.66\text{sqcm}$       c.  $2200\text{ sqcm}$       d.  $2000\text{sqcm}$
7. What is the volume of a cuboid having area of the top equal to  $38\text{ sq cm}$  and height equal to  $12\text{m}$  ?
8. What is the altitude of the rhombus whose area is  $30\text{cm}^2$  and its perimeter is  $24\text{ cm}$ .
9. Find the surface area of a cube whose volume is  $512\text{ cm}^3$ .
10. In what ratio will the surface area increased? If the sides of a cube are doubled.
11. Calculate the area of the quadrilateral which has diagonal  $10\text{m}$  and perpendiculars on it from opposite vertices are  $6\text{m}$  and  $5\text{m}$  ?
12. The perimeter of a rhombus is  $146\text{cm}$  and length of one of its diagonals is  $55\text{cm}$  . Find the length of its other diagonal and area of the rhombus.

13. A sheet is 44cm long, 20cm wide. A cylinder is made out of it, by rolling along its width. Find the volume of the cylinder?
14. Find the area of a isosceles trapezium whose parallel sides are 10cm and 18cm. Its nonparallel sides are 5cm each.
15. Cube of edge 14cm is melted to form a cylindrical wire of diameter 7mm. Find the length of the wire?
16. If the area of an equilateral triangle is  $36\sqrt{3}\text{ m}^2$ . Find the length of its side?
17. Find the diameter of an iron rod if the volume of 1m is  $1,386\text{ cm}^3$ .

