

Assignment
Chapter-13
Surface area and volume

1. The Surface Area of a Sphere is 616 cm^2 . Find its radius.
2. A cylinder and a cone area of the same base radius and of the same height. Find the ratio of the cylinder to that of the cone.
3. Two cones have their heights in the ratio 1:3 and radii 3:1. What is the ratio of their volumes?
4. The radii of two cones are in the ratio 2:1 and their volumes are equal. What is the ratio their heights?
5. The diameter of a sphere is 6 cm. it is melted and drawn into a wire of diameter 2mm. Find the length of the wire.
6. Find the curved surface area of a right circular cone of height 15cm and base diameter is 16 cm.
7. Find the maximum volume of a cone that can be out of a solid hemisphere of radius r .
8. Metallic sphere of radii 6cm, 8cm and 10cm respectively, are melted to form a single solid sphere. Find the radius of the resulting sphere.
9. A 20m deep well with diameter 7m is dug and the earth from digging is evenly spread out to form a platform 22m by 14m. Find the height of the platform.
10. Two cubes of volume 64cm^3 are joined end to end. Find the volume of the sphere.
11. The largest sphere is curved out of a cube of a side 7cm. Find the volume of the sphere.
12. A circus tent is cylindrical up to a height of 3m and conical above it. If the diameter of the base is 105m and the slant height of the conical part is 53m. Find the total canvas used in making the tent.
13. A vessel is in the form of a hemispherical bowl mounted by a hollow cylinder. The diameter of the sphere is 14cm and the total height of the vessel is 13 cm. Find it's capacity?
14. A solid toy is in the form of a right circular cylinder with a hemispherical shape at one end and a cone at the other end. Their common diameter is 4.2cm and the heights of the cylindrical and conical position are 12cm and 7cm respectively. Find the volume of the solid toy.

