

1. The radius and slant height of a cone are in the ratio of 4 : 7. If its curved surface area is 792 cm^2 find its radius. (Use $\pi = 22/7$).
2. The circumference of the base of a 10 m high conical tent is 44 metres. Calculate the length of canvas used in making the tent if width of canvas is 2 m . (Use $\pi = 22/7$).
3. The lateral surface of a cylinder is equal to the curved surface of a cone. If the radius be the same find the ratio of the height of the cylinder and slant height of the cone.
4. The radius and height of a cone are in the ratio 4: 3. The area of the base is 154 cm^2 . Find the area of the curved surface.
5. Find the curved surface area of a cone with base radius 5.25 cm and slant height 10 cm .
6. Find the total surface area of a cone, if its slant height is 21 m and diameter of its base is 24 m .
7. How many square metres of canvas is required for a conical tent whose height is 3.5 m and the radius of the base is 12 m ?
8. What length of tarpaulin 3 m wide will be required to make a conical tent of height 8 m and base radius 6 m ? Assume that the extra length of material will be required for stitching margins and wastage in cutting is approximately 20 cm (Use $\pi = 3.14$)
9. A cone of height 24 cm has a curved surface area 550 cm^2 . Find its volume. (Take $\pi = 22/7$).
10. Find the volume of a sphere whose surface area is 154 square cm.
11. Find the amount of water displaced by a solid spherical ball of diameter 4.2 cm , when it is completely immersed in water.
12. Three solid spheres of iron whose diameters are 2 cm , 12 cm and 16 cm , respectively, are melted into a single solid sphere. Find the radius of the solid sphere.

13. The volumes of the two spheres are in the ratio 64: 27. Find the ratio of their surface area.
14. The surface area of a sphere of radius 5cm is five times the area of curved surface of a cone of radius 4cm . Find the height and volume of the cone.
15. The diameter of the moon is approximately one fourth of the diameter of the earth. What fraction of the volume of the earth is the volume of the moon?

