

Chapter 13 Surface Areas and Volumes

Class- 9th

Q.1 Find the total surface area of a cone, if its slant height is 21 m and diameter of its base is 24 m.

Q.2 Curved surface area of a cone is 308 cm^2 and its slant height is 14 cm. Find

(i) radius of the base and

(ii) total surface area of the cone.

Q.3 The inner diameter of a circular well is 3.5 m. It is 10 m deep. Find

(i) its inner curved surface area.

(ii) the cost of plastering this curved surface at the rate of ₹40 per m^2 .

Q.4 The length, breadth and height of a room are 5 m, 4 m and 3 m, respectively. Find the cost of white washing the walls of the room and the ceiling at the rate of ₹17.50 per m^2 .

Q.5 Find the total surface area of a hemisphere of radius 10 cm. [Use $\pi=3.14$]

Q.6 Find the radius of a sphere whose surface area is 154 cm^2 . (Assume $\pi = 22/7$)

Q.7 The diameter of the moon is approximately one fourth of the diameter of the earth. Find the ratio of their surface areas.

Q.8 A hemispherical bowl is made of steel, 0.25 cm thick. The inner radius of the bowl is 5cm. Find the outer curved surface of the bowl. (Assume $\pi = 22/7$)

Q. 9 The height of a cone is 15cm. If its volume is 1570cm^3 , find the diameter of its base. (Use $\pi = 3.14$)

Q.10 A hemi spherical tank is made up of an iron sheet 1cm thick. If the inner radius is 1 m, then find the volume of the iron used to make the tank. (Assume $\pi = 22/7$)