# Application_Grade-9_Surface Areas and Volume

Cone and Cylinder

1. How much ice-cream can be put into a cone with base radius 3.5 cm and height 12 cm ?

2. A joker's cap is in the form of right circular cone of base radius 7 cm and slant height 25 cm. Find the area of sheet required for 10 such caps

3. Bhavya has a piece of canvas whose area is 552 m². She uses it to make a conical tent with a base radius of 7 m. Assuming that all the stitching margins and the wastage incurred while cutting amounts to approximately 2 m². Find the volume of the tent that can be made with it.

4. The capacity of a closed cylindrical vessel of height 1 m is 15.4 litres. How much m² of metal sheet is needed to make it?

5. The difference between the outside and inside surface of a cylindrical metallic pipe 14 cm long is 44 cm. If the pipe is made of 99 cm³ of metal, find the outer and inner radii of the pipe.

6. A cylindrical bowl of internal diameter 18 cm an height 15 cm is full of liquid. The whole of the liquid is to be filled in small cylindrical bottles of diameter 3 cm and height 4 cm, Each bottle is sold for $5, then find the amount earned.

7. Curved surface of cylindrical reservoir 12 m deep is plastered from inside with concrete mixture $15 per m². If the total payment made is of $5652, then find the capacity of this reservoir in litres.

8. The frame of a lampshade is cylindrical in shape. It has base diameter 28 cm and height 17 cm. It is to be covered with a decorative cloth. A margin of 2 cm is to be given for folding it over top $\frac{1}{12}$ and bottom of the frame. If of cloth is wasted in cutting and pasting, find how much cloth is required to be purchased for covering the frame.