G. N. National Public School, Gorakhnath, GKP.

Class-IX MATHS Chapter-13 Surface Areas and Volumes

Assignment Part-● 5

Q.1. How many metres of cloth, 2.5 m wide, will be required to make a conical tent whose base radius is 7 m and height 24 m?

Q.2. A cylinder and a cone have equal radii of their bases and equal heights. If their curved surface areas are in the ratio 8:5, show that the radius and height of each has the ratio 3:4.

Q.3. A circus tent is cylindrical to a height of 3 metres and conical above it. If its diameter is 105 m and the slant height of the conical portion is 53 m, calculate the length of the canvas 5 m wide to ~~the~~ make the required tent.

Q.4. A tent is in the form of a right circular cylinder, surmounted by a cone. The diameter of the cylinder is 24 m. The height of the cylindrical portion is 11 m, while the vertex of the cone is 16 m above the ground. Find the area of the canvas required for the tent.

Q.5. How many metres of cloth, 5 m wide, will be required to make a conical tent, the radius of whose base is 7 m and height is 24 m?

Q.6- The height and the slant height of a cone are 21cm and 28 cm respectively. Find the radius and curved surface area of the cone.

Q.7- Find the curved surface area and the total surface area of a cone having base radius 35 cm and height 12cm.

Q.8- Two cones have their heights in the ratio 1:3 and the radii of their bases in the ratio 3:1. Show that their curved surface areas are in the ratio $\sqrt{7}:1$ if sum of their heights are 8 and sum of their radii 12.