

# Assignments for Mensuration

---

## Question 1

There are two cuboidal whose dimensions are given below. Which box requires the higher amount of material to make?

Cuboid A:  $L=23$ ,  $B=30$ ,  $H=40$

Cuboid B:  $L=30$ ,  $B=12$ ,  $H=44$

## Question 2

Three cubes, each of edge 2 cm. long are placed together. Find the total surface area of the cuboid so formed?

## Question 3

Find the side of a cube whose surface area is  $2400 \text{ cm}^2$ .

## Question 4

Meghna painted the outside of the cabinet of measure  $2 \text{ m} \times 3 \text{ m} \times 2.5 \text{ m}$ . How much surface area did she cover if she painted all except the bottom of the cabinet and back side?

## Question 5

Ahmed is painting the walls and ceiling of a cuboidal hall with length, breadth and height of 25 m, 12 m and 8 m respectively. From each can of paint  $200 \text{ m}^2$  of area is painted. How many cans of paint will she need to paint the room?

## Question 6

An open cylindrical tank of radius 14 m and height 3 m is made from a sheet of metal. How much sheet of metal is required?

## Question 7

The lateral surface area of a hollow cylinder is  $4224 \text{ cm}^2$ . It is cut along its height and formed a rectangular sheet of width 33 cm. Find the perimeter of rectangular sheet?

### Question 9

A road roller takes 750 complete revolutions to move once over to level a road. Find the area of the road if the diameter of a road roller is 84 cm and length is 1 m.

### Question 10

A rectangular sheet of metal foil is 88 cm. long and 20 cm. wide. A cylinder is made out of it, by rolling the foil along width. Find the volume of the cylinder.

### Question 11

The perimeter of the floor of a hall is 250 m. If the height is 4 m, find the cost of painting the four walls at the rate of Rs. 12 per square meter.

### Question 12

How many times do the volume and surface area of a cube increase if its edges get tripled.

### Question 13

How many times do the volume and surface area of a cylinder increase if its radius doubled and height remains same

### Question 14

How many times do the volume and surface area of a cylinder increase if its radius remains same and height is doubled

**Question 15**

The height of a cylinder is 15 cm. and curved surface area is  $660 \text{ cm}^2$ . Find the radius of the cylinder