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

Class-IX Maths Ch-13, Surface Areas and Volumes

Assignment Part-1

Q.1- The dimensions of a room are (9m × 8m × 6.5m). It has one door of dimensions (2m × 1.5m) and two windows, each of dimensions (1.5m × 1m). Find the cost of white washing the walls at Rs 25 per square metre.

Q.2- A classroom is 10m long, 6.4m wide and 5m high. If each student be given 1.6 m^2 of the floor area, how many students can be accommodated in the room?

Q.3- The surface area of a cuboid is 758 cm^2. Its length and breadth are 14 cm and 11 cm respectively. Find its height.

Q.4- Find the length of the longest pole that can be put in a room of dimensions (10m × 10m × 5m).

Q.5- The sum of length, breadth and depth of a cuboid is 19 cm and the length of its diagonal is 11 cm. Find the surface area of the cuboid.

Q.6- Each edge of a cube is increased by 50%. Find the percentage increase in the surface area of the cube.

Q.7- The length of a cold storage is double its breadth and its height is 3 metres. If the area of its four walls be 108 m^2, find total surface area excluding floor.

Q.8- A room is half as long again as it is broad. The cost of carpeting the room at Rs 13 per m^2 is Rs 702. and the cost of papering the walls at Rs 7 per m^2 is Rs 1204. If 1 door and 2 windows occupy 8 m^2, find the dimensions of the room.

Q.9- Kunal built a cubical water tank with lid for his house, with each outer edge 1.5 m long. He gets the outer surface of the tank excluding the base covered with square tiles of side 25 cm. Find how much he would ~~spend~~ spend for the tiles, if the cost of the tiles is Rs 540 per dozen.

Q.10- A room is 16 m long, 9 m wide and 7m high. It has two doors, each of dimensions (2m × 1.5m) and three windows, each of dimensions (1.6m × 75cm). Find the cost of distempering the walls of the room from inside at the rate of Rs 50 per square metre.