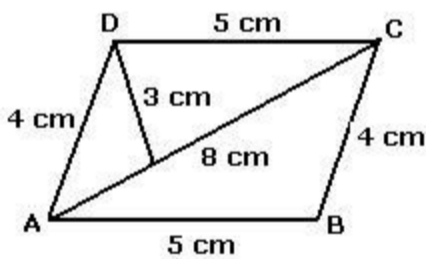Mensuration

<1M>
1.Q 1 Find the volume of a cuboid whose length is 8 cm, breadth 6 cm and height 3.5 cm.

2.Find the altitude of a trapezium, the sum of the lengths of whose bases is 6.5 cm and whose area is 26 cm^2.

3.Find the height of a cuboid whose volume is 275 cm^3 and base area is 25 cm^2.

4.Find the area of a rhombus whose diagonals are of measurements 6 cm and 8 cm.

5.Find the volume of the cylinder whose base diameter is 14 cm and height is 10 cm.

6.Find the area of a triangle whose base is 4 cm and altitude is 6 cm.

<2M>
7.Find the total surface area of a cube whose volume is 343 cm^3.

8.Find the side of a cube whose surface area is 2400 cm^2.

9.How many bricks will be required for a wall which is 8 m long, 6m high and 22.5 cm thick, if each brick measures 25 cm ✕ 11.25 cm ✕ 6 cm?

10.The diameter of garden roller is 1.4 m and it is 2 m long. How much area will it cover in 5 revolutions?

11.Find the volume of a cuboid whose length is 8 cm, width is 3 cm and height is 5 cm.

12.A cylindrical tank has a capacity of 5632 m^3. If the diameter of its base is 16 m, find its depth.

13.Find the volume of 64 cubes whose one side is 4 cm.

14.Find the volume of a cylinder whose base radius is 14 cm and height is 35 cm.

15.Find the area of a parallelogram whose measurements are given in the following figure.

16.Find the total surface area of a cylinder whose base radius is 8 cm and height is 14 cm.

17.Find the area of a rhombus whose diagonals are of lengths 20 cm and 16 cm.

18.Find the height of cuboid whose volume is 490 cm^3 and base area is 35 cm^2.

<3M>
19.The diagonal of a quadrilateral shaped field is 24 cm and perpendicular dropped on it from the remaining opposite vertices are 6 m and 12 m. Find the area of the field.

20.A godown is in the form of a cuboid of measures 60 m ✕ 40 m ✕ 20 m . How many cuboidal boxes can be stored in it if the volume of one box 0.8 m^3?

21.The internal measures of a cuboidal room are 10 m × 8 m × 4 m . Find the total cost of whitewashing four walls of a room, if the cost of white washing is Rs 5 per m^2.

22.Find the area of a rhombus whose side is 5 cm and its altitude is 4 cm. If one of its diagonal is 8 cm long, find the length of the other diagonal.

23.In a building there are 4 cylindrical pillars. The radius of each pillar is 21 cm and height is 5 m. Find the curved surface area of four pillars.
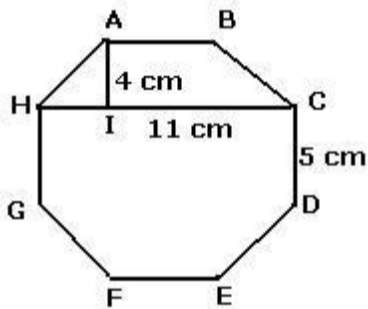
24.In a building there are 4 cylindrical pillars. The radius of each pillar is 21 cm and height is 5 m. Find the curved surface area of four pillars.

Q 24 A rectangular paper of width 7 cm is rolled along its width and a cylinder of radius 20 cm is formed. Find the volume of the cylinder.

25.The perimeter of a trapezium is 52 cm. Its non-parallel sides are 10 cm each and the distance between two parallel sides is 8 cm. Find the area of the trapezium.

<4M>
26.The top surface of a box is in the shape of a regular octagon as shown in the figure. Find the area of the octagonal surface.

<5M>
27.A tin is in a cylindrical shape whose base has a diameter of 14 cm and height 20 cm. A label is placed around the surface of the container. If the label is placed 2 cm from top and bottom, what is the area of the label?

28.A rectangle piece of metal sheet 11 m x 4 m is folded without overlapping to make a cylinder of height 4 m. Find the volume of the cylinder.