CLASS 9 FOUNDATION COURSE

SURFACE AREAS AND VOLUMES

Ques No.	Question
1 - 24014	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A cube of side 4cm contains a sphere touching its side. Find the volume of the gap in between. Click to watch Free Video Solution of this question on Doubtnut
2 - 24035	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A wooden toy is in the form of a cone surmounted on a hemisphere. The diameter of the base of the cone is 5cm and its height is 4cm. Find the cost of painting the toy at the rate of Rs. 5 per $1000cm^2$. Click to watch Free Video Solution of this question on Doubtnut
3 - 24062	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** Find the surface area of a chalk box whose length, breadth and height are $16cm, 8cmand6cm$, respectively. Click to watch Free Video Solution of this question on Doubtnut
4 - 24070	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A rectangular container, whose base is a square of side 5cm, stands on a horizontal table, and holds water upto 1cm from the top. When a cube is placed in the water it is completely submerged, the water rises to the top and 2 cubic cm of water overflows. Calculate the volume of the cube and also the length of its edge. Click to watch Free Video Solution of this question on Doubtnut
5 - 24072	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A metal cube of edge 12cm is melted and formed into three smaller cubes. If the edges of the two smaller cubes are 6cm and 8cm, find the edge of the third smaller cube. Click to watch Free Video Solution of this question on Doubtnut
6 - 24075	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** The external length, breadth and height of a closed rectangular wooden box are 18cm, 10cm and 6cm respectively and thickness of wood is $\frac{1}{2}cm$. When the box is empty, it weight 15kg and when filled with sand it weighs 100kg. Find the weight of one cubic cm of weed and cubic cm of sand.

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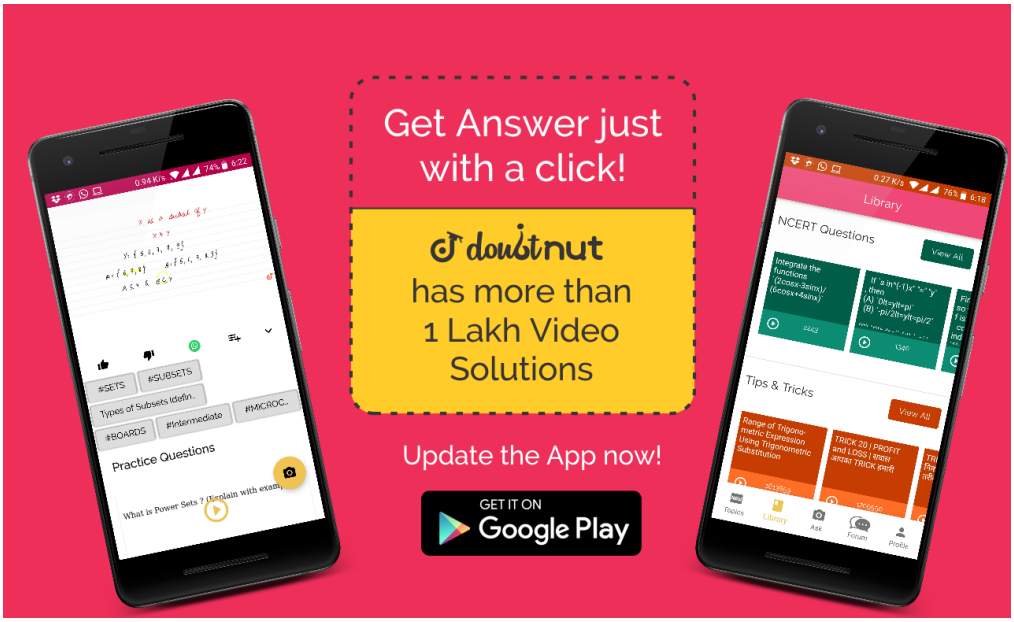
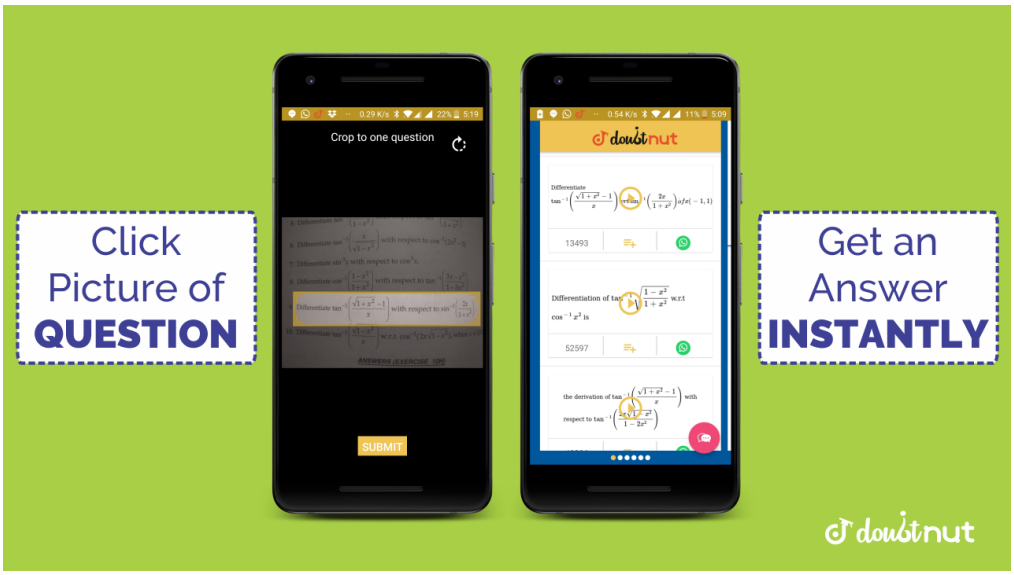
doubtnut पढ़ना हुआ आसान	
7 - 24080	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A plot of land in the form of a rectangle has a dimension $240m \times 180m$. A drain 10m wide is dug all around it (on the outside) and the earth dug out is evenly spread over the plot, increasing its surface level by 25cm. Find the depth of the drain let. Click to watch Free Video Solution of this question on Doubtnut
8 - 24081	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A metallic sheet is of the rectangular shape with dimensions $48cm \times 36cm$. From each one of its corners, a square of 8cm is cutoff. An open box is made of the remaining sheet. Find the volume of the box. Click to watch Free Video Solution of this question on Doubtnut
9 - 24093	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** Shanti Sweets stall was placing an order for making cardboard boxes for packing their sweets. Two sizes of boxes were required. The bigger of dimensions $25cm \times 20cm \times 5cm$ and the smaller of dimensions $15cm \times 12cm \times 5cm$. 5% of the total surface area is required extra, for all the overlaps. If the cost of cardboard is Rs. 4 for $1000cm^3$, find the cost of cardboard required for supplying 250 boxes of each kind. Click to watch Free Video Solution of this question on Doubtnut
10 - 24094	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** An agricultural field is in the form of a rectangle of length $20m$ and width $14m$. A pit $6mlong, 3mwideand2.5mdeep$ is dug in a corner of the field and the earth taken out of the pit is spread uniformly over the remaining area of the field. Find the extent to which the level of the field has been raised. Click to watch Free Video Solution of this question on Doubtnut
11 - 24729	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES**

	A tent is in the form of a right circular cylinder surmounted by a cone. The diameter of cylinder is 24m. The height of the cylindrical portion is 11m while the vertex of the cone is 16m above the ground. Find the area of the canvas required for the tent. Click to watch Free Video Solution of this question on Doubtnut
12 - 1415168	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A cubical box has each edge $10cm$ and another cuboidal box is $12.5\ cm$ long, $10cm$ wide and $8\ cm$ high. find difference in their volume. Click to watch Free Video Solution of this question on Doubtnut
13 - 1415173	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** Find the area of the four walls of a room whose length is $6\ m,$ breadth $5\ m$ and height $4\ m$. Also find the cost of white-washing the walls, if the rate of white washing is Rs. $5\ per\ square\ meter$. (Doors, Windows and other opening ignored) Click to watch Free Video Solution of this question on Doubtnut
	
14 - 1415179	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** The length of a cold storage is double its breadth. Its height is $3\ metres$. The area of its four walls (including doors) is $108\ m^2$. Find its volume. Click to watch Free Video Solution of this question on Doubtnut
15 - 1415192	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** The length, breadth and height of a room are 5m, 4m and 3m respectively. Find the cost of white washing the walls of the room and the ceiling at the rate of $Rs.7.50\ m^2$. Click to watch Free Video Solution of this question on Doubtnut
16 - 1415205	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES**

	A wooden bookshelf has external dimensions as follows: Height = 10 cm, Depth = 25cm, Breadth = 85 cm (See in Figure). The thickness of the plank is 5 cm everywhere. The external faces are to be polished and the inner faces are to be painted. If the rate of polishing is 20 paise per cm^2 and the rate of painting is 10 paise per cm^2 . Find the total expenses required for polishing and painting the surface of the bookshelf. Click to watch Free Video Solution of this question on Doubtnut
17 - 1415238	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** If the areas of three adjacent faces of a cuboid are $8\ cm^2,\ 18cm^3 and\ 25cm^3$. Find the volume of the cuboid. Click to watch Free Video Solution of this question on Doubtnut
18 - 1415240	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A river 3m deep and 40m wide is flowing at the rate of 2km per hour. How much water will fall into the sea in a minute? Click to watch Free Video Solution of this question on Doubtnut
19 - 1415242	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** Three metal cubes with edges 6cm, 8cm and 10cm respectively are melted together and formed into a single cube. Find the volume, surface area and diagonal of the new cube. Click to watch Free Video Solution of this question on Doubtnut
20 - 1415247	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A box with lid is made of 2cm thick wood. Its external length, breadth and height are 25cm, 18cm and 15cm respectively. How many cubic cm of a liquid can be placed in it? Also, find the volume of the wood used in it. Click to watch Free Video Solution of this question on Doubtnut
	
21 - 1415249	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES**

	How many cubic centimetres of iron are there in an open box whose external dimensions are 36cm, 25cm and 16.5cm, the iron being 1.5cm thick throughout? If 1 cubic cm of iron weighs 15g, find the weight of the empty box in kg. Click to watch Free Video Solution of this question on Doubtnut
22 - 1415256	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** A village, having a population of 4000, requires 150 litres of water per head per day. It has a tank measuring $20m \times 15m \times 6m$. For how many days will the water of this tank last? Click to watch Free Video Solution of this question on Doubtnut
23 - 1415269	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** Three equal cubes are placed adjacently in a row. The ratio of the total surface area of the resulting cuboid to that of the sum of the surface areas of three cubes, is (a) 7:9 (b) 49:81 (c) 9:7 (d) 27:23 Click to watch Free Video Solution of this question on Doubtnut
24 - 1415274	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** If the volumes of two cubes are in the ratio 8:1, then the ratio of their edges is 8:1 (b) $2\sqrt{3}:1$ (c) 2:1 (d) none of these Click to watch Free Video Solution of this question on Doubtnut
25 - 1415280	**CLASS 9 FOUNDATION COURSE - SURFACE AREAS AND VOLUMES** If each edge of a cuboid of surface area S is doubled, then surface area of the new cuboid is (a) 2 S (b) 4 S (c) 6 S (d) 8 S Click to watch Free Video Solution of this question on Doubtnut