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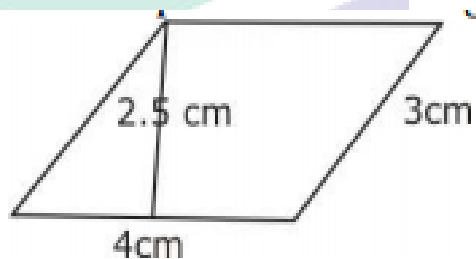
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**CLASS VIII – MENSURATION**

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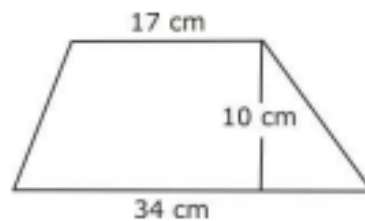
Date:

- 01.** Find the volume of a cuboid whose length is 8 cm, breadth 6 cm and height 3.5 cm.  
(a).  $168 \text{ cm}^3$       (b).  $168 \text{ cm}^2$       (c).  $215 \text{ cm}^3$       (d).  $150 \text{ cm}^3$
- 02.** Find the area of a triangle whose base is 4 cm and altitude is 6 cm.  
(a).  $10 \text{ cm}^2$       (b).  $12 \text{ cm}^2$       (c).  $14 \text{ cm}^2$       (d).  $16 \text{ cm}^2$
- 03.** Find the volume of a cuboid whose length is 8 cm, width is 3 cm and height is 5 cm.  
(a).  $125 \text{ cm}^3$       (b).  $130 \text{ cm}^3$       (c).  $120 \text{ cm}^3$       (d).  $135 \text{ cm}^3$
- 04.** Find the cube root of  $140 \times 2450$ .  
(a). 65      (b). 45  
(c). 55      (d). 70
- 05.** Find the perimeter of the given figure.  
(a). 14 cm      (b). 12 cm  
(c). 10 cm      (d). 8cm
- 06.** Find the altitude of a trapezium, the sum of the lengths of whose bases is 6.5cm and whose area is  $26\text{cm}^2$ .  
(a). 8 cm      (b). 6 cm      (c). 10 cm      (d). 12 cm
- 07.** Find the total surface area of a cube whose volume is  $343 \text{ cm}^3$ .  
(a).  $200 \text{ cm}^2$       (b).  $294 \text{ cm}^2$       (c).  $350 \text{ cm}^2$       (d).  $494 \text{ cm}^2$
- 08.** A cylindrical tank has a capacity of  $5632 \text{ m}^3$ . If the diameter of its base is 16 m, find its depth.  
(a). 26 m      (b). 30 m      (c). 28 m      (d). 66 m
- 09.** Find the area of a rhombus whose diagonals are of lengths 20 cm and 16 cm.  
(a).  $150 \text{ cm}^2$       (b).  $120 \text{ cm}^2$       (c).  $140 \text{ cm}^2$       (d).  $160 \text{ cm}^2$
- 10.** Find the height of a cuboid whose volume is  $275 \text{ cm}^3$  and base area is  $25 \text{ cm}^2$ .  
(a). 11 cm      (b). 9 cm      (c). 22 cm      (d). 6 cm
- 11.** Find the side of a cube whose surface area is  $2400 \text{ cm}^2$ .  
(a). 15 cm      (b). 20 cm      (c). 10 cm      (d). 25 cm
- 12.** Find the volume of 64 cubes whose one side is 4 cm.  
(a).  $3096 \text{ cm}^3$       (b).  $2096 \text{ cm}^3$       (c).  $4096 \text{ cm}^3$       (d).  $1096\text{cm}^3$

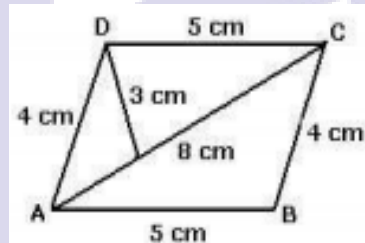


## DCA CLASSES

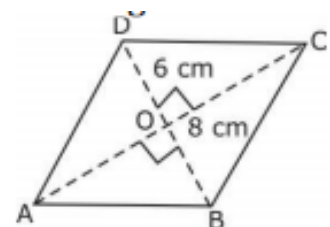
- 13.** Find the height of cuboid whose volume is  $490 \text{ cm}^3$  and base area is  $35 \text{ cm}^2$   
 (a). 10 cm                      (b). 12 cm                      (c). 16 cm                      (d). 14 cm
- 14.** Find the side of a cube whose surface area is  $2400 \text{ cm}^2$ .  
 (a). 60 cm                      (b). 40 cm                      (c). 10 cm                      (d). 20 cm
- 15.** Find the area of a rhombus whose diagonals are of measurements 6 cm and 8 cm.  
 (a).  $24 \text{ cm}^2$                       (b).  $20 \text{ cm}^2$                       (c).  $15 \text{ cm}^2$                       (d).  $12 \text{ cm}^2$
- 16.** 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  $25 \text{ cm} \times 11.25 \text{ cm} \times 6 \text{ cm}$ ?  
 (a). 6000                      (b). 6400                      (c). 7100                      (d). 8000
- 17.** Find the volume of a cylinder whose base radius is 14 cm and height is 35 cm.  
 (a).  $21650 \text{ cm}^3$                       (b).  $32560 \text{ cm}^3$                       (c).  $21560 \text{ cm}^3$                       (d).  $71560 \text{ cm}^3$
- 18.** Find the volume of the cylinder whose height is 7 cm and radius is 20 cm.  
 (a).  $7700 \text{ cm}^3$                       (b).  $8000 \text{ cm}^3$                       (c).  $6600 \text{ cm}^3$                       (d).  $8800 \text{ cm}^3$
- 19.** Find the area of the following trapezium.



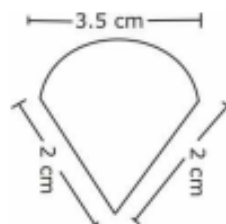
- (a).  $255 \text{ cm}^2$                       (b).  $200 \text{ cm}^2$   
 (c).  $240 \text{ cm}^2$                       (d).  $300 \text{ cm}^2$
- 20.** Find the volume of the cylinder whose base diameter is 14 cm and height is 10cm.  
 (a).  $1540 \text{ cm}^3$                       (b).  $1440 \text{ cm}^3$                       (c).  $1340 \text{ cm}^3$                       (d).  $1240 \text{ cm}^3$
- 21.** The diameter of garden roller is 1.4 m and it is 2 m long. How much area will it cover in 5 revolutions?



- (a).  $33 \text{ m}^2$                       (b).  $44 \text{ m}^2$   
 (c).  $55 \text{ m}^2$                       (d).  $66 \text{ m}^2$
- 22.** Find the area of a ||gram whose measurements are given in the following fig.



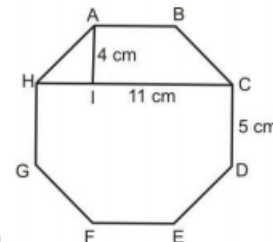
- (a).  $26 \text{ cm}^2$                       (b).  $28 \text{ cm}^2$                       (c).  $24 \text{ cm}^2$                       (d).  $30 \text{ cm}^2$
- 23.** The diagonals of a rhombus are 16 cm and 12 cm, find its area.  
 (a).  $96 \text{ cm}^2$                       (b).  $90 \text{ cm}^2$   
 (c).  $80 \text{ cm}^2$                       (d).  $100 \text{ cm}^2$
- 24.** Find the perimeter of the given figure.



**Q01. Fill in the blanks:**

- (a). Area of a trapezium = Half of the sum of the lengths of parallel sides  $\times$  \_\_\_\_\_  
 (b). \_\_\_\_\_ of a solid is the sum of the areas of its faces.  
 (c). Amount of region occupied by a solid is called its \_\_\_\_\_.  
 (d).  $1 \text{ cm}^3 =$  \_\_\_\_\_ mL

**Q02.** 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.

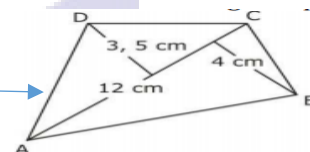


**Q03.** A rectangular paper of width 7 cm is rolled along its width and a cylinder of radius 20 cm is formed. Find the volume of the cylinder.

**Q04.** The top surface of a box is in the shape of a regular octagon as shown in the fig. Find the area of the octagonal surface.

**Q05.** The parallel sides of a trapezium are 25 cm and 13 cm. Its non-parallel sides are equal, each being 10 cm. Find the area of the trapezium.

**Q06.** Find the area of the given quadrilateral.

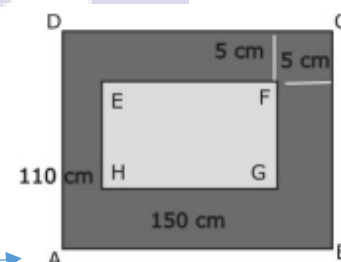


**Q07.** A godown is in the form of a cuboid of measures  $60 \text{ m} \times 40 \text{ m} \times 20 \text{ m}$ . How many cuboidal boxes can be stored in it if the volume of one box  $0.8 \text{ m}^3$ ?

**Q08.** 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.

**Q09.** The cost of papering the wall of a room, 12 m long, at the rate of Rs. 1.35 per square meter is Rs. 340.20. The cost of matting the floor at Re. 0.85 per  $\text{m}^2$  is Rs. 91.80. Find the height of the room.

**Q10.** The area of a trapezium is  $384 \text{ cm}^2$ . Its parallel sides are in the ratio 3:5 and the distance between them is 12 cm. Find the length of each parallel side.



**Q11.** In the given figure find the area of the path.

**Q12.** The internal measures of a cuboidal room are  $10\text{m} \times 8\text{m} \times 4\text{m}$ . Find the total cost of whitewashing four walls of a room, if the cost of white washing is Rs5 per  $\text{m}^2$ .

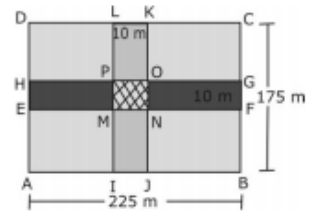
**Q13.** Square and a rectangle have the same perimeter; if the side of the square is 16m and the length of the rectangle is 18 m, find the breadth of the rectangle.

**Q14.** A cylindrical container of radius 28 cm contains sufficient water to submerge a

## DCA CLASSES

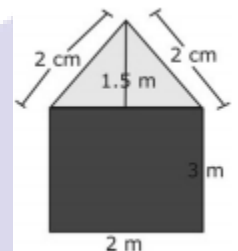
rectangular solid of dimensions  $32\text{ cm} \times 22\text{ cm} \times 14\text{ cm}$ . Find the rise in the level of water, when the solid is completely submerged.

- Q15.** A cylindrical tube, open at both ends is made of metal. The internal diameter of the tube is  $10.4\text{ cm}$  and its length is  $25\text{ cm}$ . The thickness of the metal is  $8\text{ mm}$  everywhere. Calculate the volume of the metal in the cylinder.



- Q16.** Find the area of the roads, if two roads are running in cross section, through the middle of a ground.
- Q17.** Find the area of a rhombus whose side is  $5\text{ cm}$  and its altitude is  $4\text{ cm}$ . If one of its diagonal is  $8\text{ cm}$  long, find the length of the other diagonal.
- Q18.** Radha bought a rectangular plot of dimensions  $120\text{ m} \times 80\text{ m}$  and Radhika bought a square field of dimension  $95\text{ m}$ . Who bought plot of greater area and by how much?
- Q19.** A pool is  $20\text{ m}$  long,  $15\text{ m}$  broad and  $4\text{ m}$  deep. Find the cost of cementing its floor and its walls at the rate of Rs.  $12$  per square metre.

- Q20.** A tin is in a cylindrical shape whose base has a diameter of  $14\text{ cm}$  and height  $20\text{ cm}$ . A label is placed around the surface of the container. If the label is placed  $2\text{ cm}$  from top and bottom, what is the area of the label?



- Q21.** Find the area and perimeter of the dollhouse.
- Q22.** In a building there are 4 cylindrical pillars. The radius of each pillar is  $21\text{ cm}$  and height is  $5\text{ m}$ . Find the curved surface area of four pillars.
- Q23.** The parallel sides of a trapezium are in the ratio  $2:3$  and the area of the trapezium is  $125\text{ cm}^2$ . The distance between the parallel lines is  $10\text{ cm}$ . Find the length of the parallel sides of the trapezium.
- Q24.** A rectangular piece of iron sheet is  $44\text{ m}$  long and  $20\text{ m}$  broad. It is rolled along its length to form a cylinder. Find the volume of the cylinder so formed.
- Q25.** A rectangle piece of metal sheet  $11\text{ m} \times 4\text{ m}$  is folded without overlapping to make a cylinder of height  $4\text{ m}$ . Find the volume of the cylinder.
- Q26.** In the given figure of a cube and a cuboid which one has a greater surface area and by how much?

