



## Tenth Grade - Geometry

1) If the radius of a cone is multiplied by  $\frac{1}{3}$  and height of the cone is tripled then the volume of new cone:

- Remains the same
- Decreases thrice
- Increases by one third
- Increases by one fourth

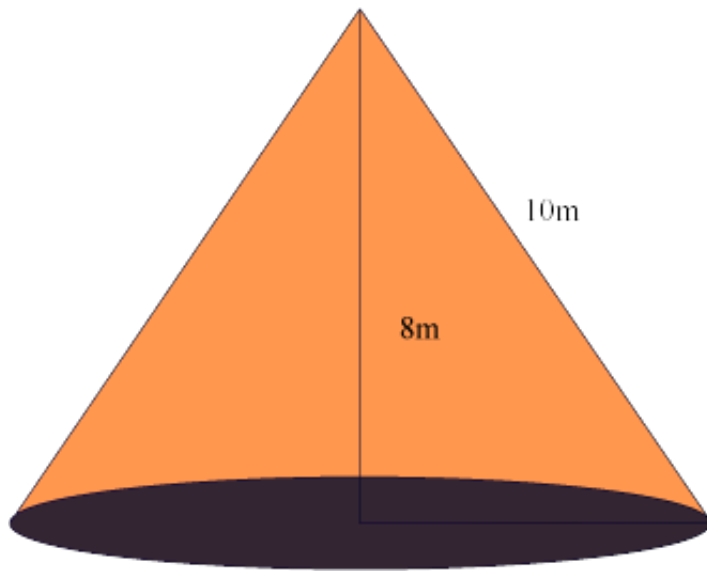
2) If 3:2 is the ratio of radius of two right circular cones and 1:1 is the ratio of their volumes. Then what will be the ratio of their heights?

- 1:5
- 4:9
- 4:5
- 2:3

3) If 1:2 and 1:3 are the ratios of radius and height of two different cones then which of the following is the ratio of their volumes?

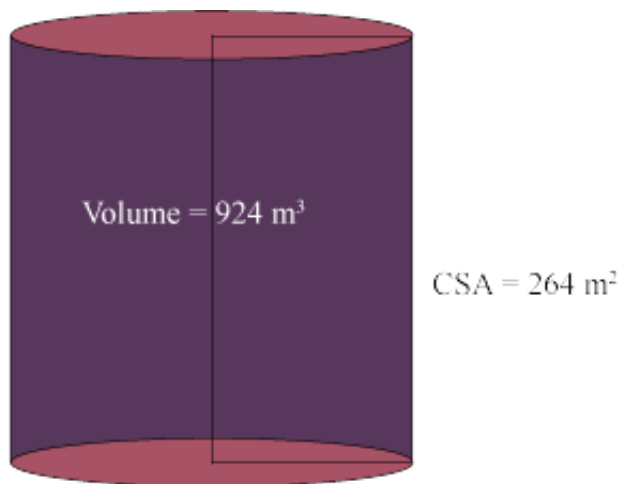
- 1:12
- 3:14
- 2:13
- 1:16

4) The slant height of a right circular cone is 10 m and its height is 8 m. Find the area of its curved surface.



- $90^\circ$  ?
- $75^\circ$  ?
- $80^\circ$  ?
- $60^\circ$  ?

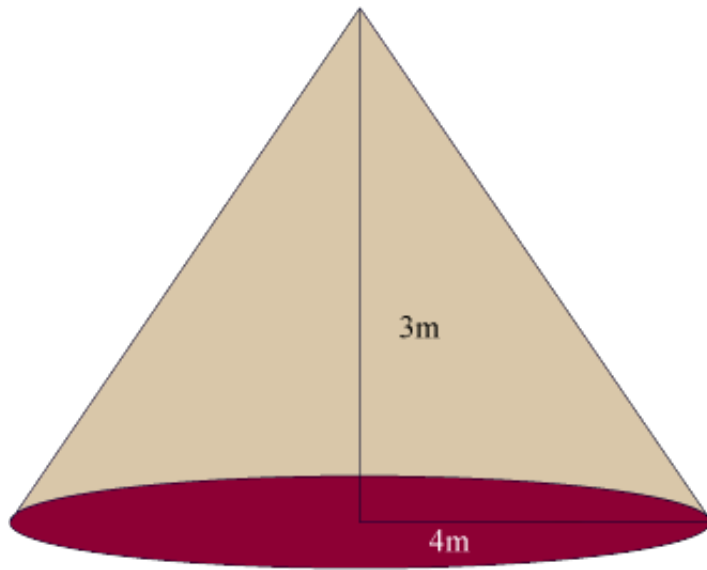
5) The curved surface area of a cylindrical pillar is  $264\text{ m}^2$  and its volume is  $924\text{ m}^3$ . Find the ratio of its diameter to its height



- $7 : 2$
- $6 : 3$
- $5 : 3$
- $7 : 3$

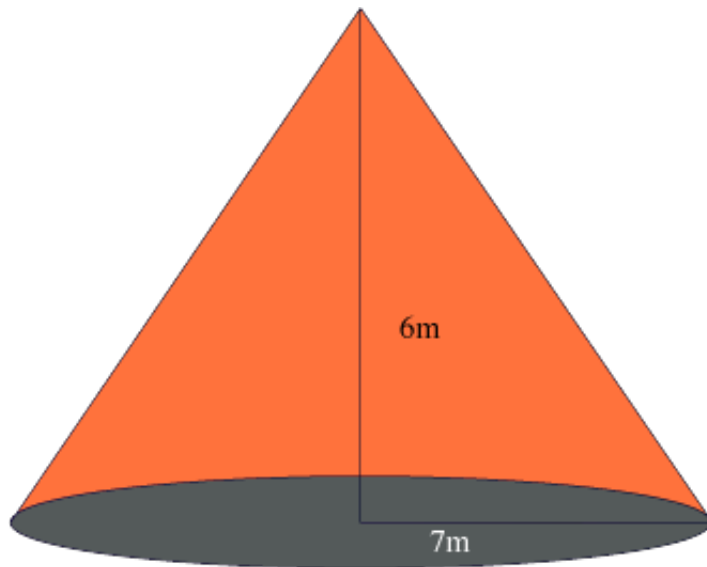


6) Find the surface area of cone if  $r = 4$  m and  $h = 3$  m.



- 113.1
- 111.3
- 100.8
- 129.4

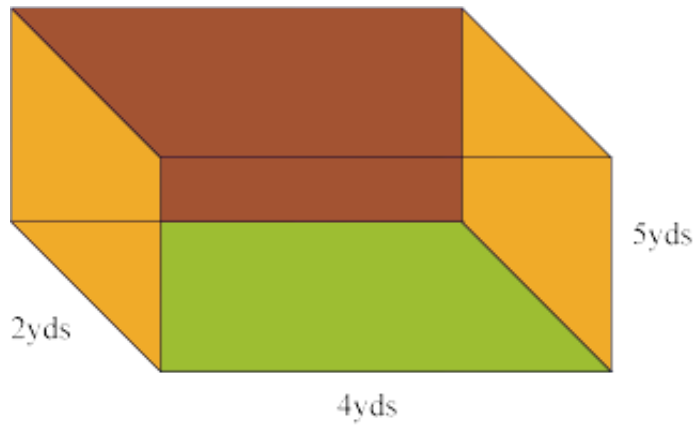
7) Find the surface area of cone if  $r = 7$  m and  $h = 6$  m.



- 413.4
- 345.8
- 400.6
- 422.4

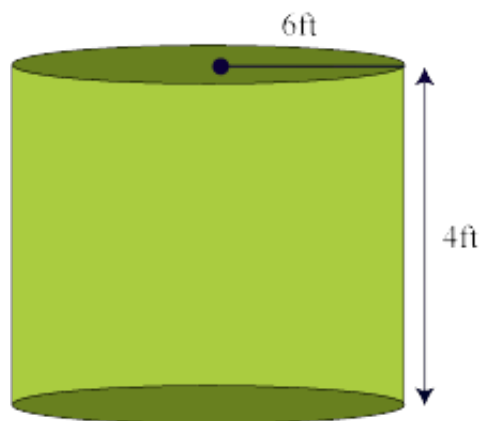


8) Find the surface area of cuboid if  $l = 4$  yds,  $w = 2$  yds, and  $h = 5$  yds



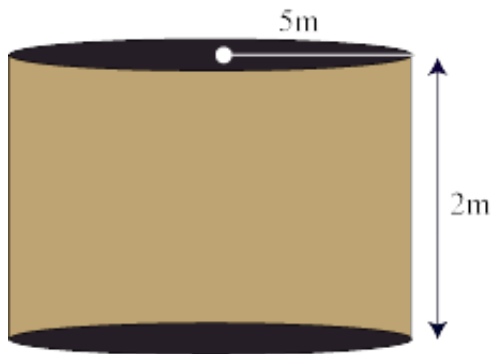
- 67
- 50
- 76
- 70

9) Find the surface area of Cylinder if  $r = 6$  ft and  $h = 4$  ft



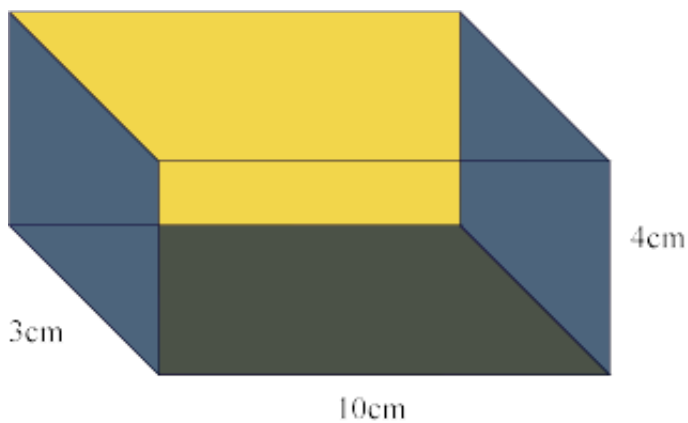
- 377
- 310
- 363
- 350

10) Find the surface area of Cylinder if  $r = 5$  cm and  $h = 2$  cm



- 234.2
- 219.9
- 201.7
- 212.4

11) Find the surface area of a  $10\text{cm} \times 4\text{cm} \times 3\text{cm}$  brick



- 120
- 164
- 135
- 140

12) A cistern 6 m long and 4 m wide contains water up to a breadth of 1 m 25 cm. Find the total area of the wet surface

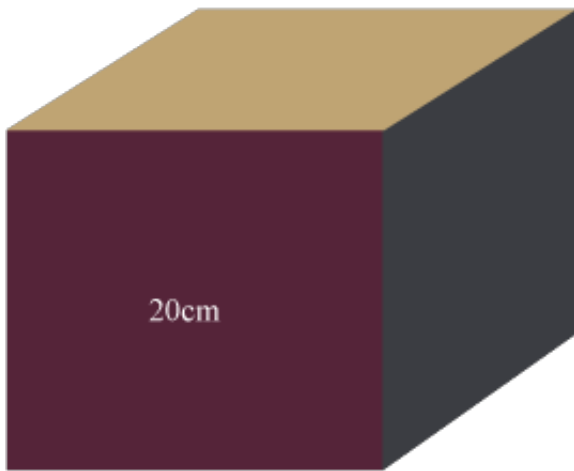
- 36
- 46
- 49
- 47



13) A swimming pool 9 m wide and 12 m long is 1 m deep on the shallow side and 4 m deep on the deeper side. Its volume is

- 215
- 245
- 234
- 270

14) The perimeter of one face of a cube is 20 cm. Its volume will be:



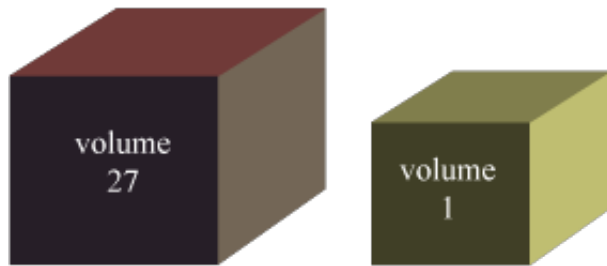
- 125
- 130
- 111
- 115

15) The cost of the paint is Rs 36.50 per kg. If 1 kg of paint covers 16 square feet, how much will it cost to paint outside of a cube having 8 feet each side.

- 798
- 876
- 768
- 815

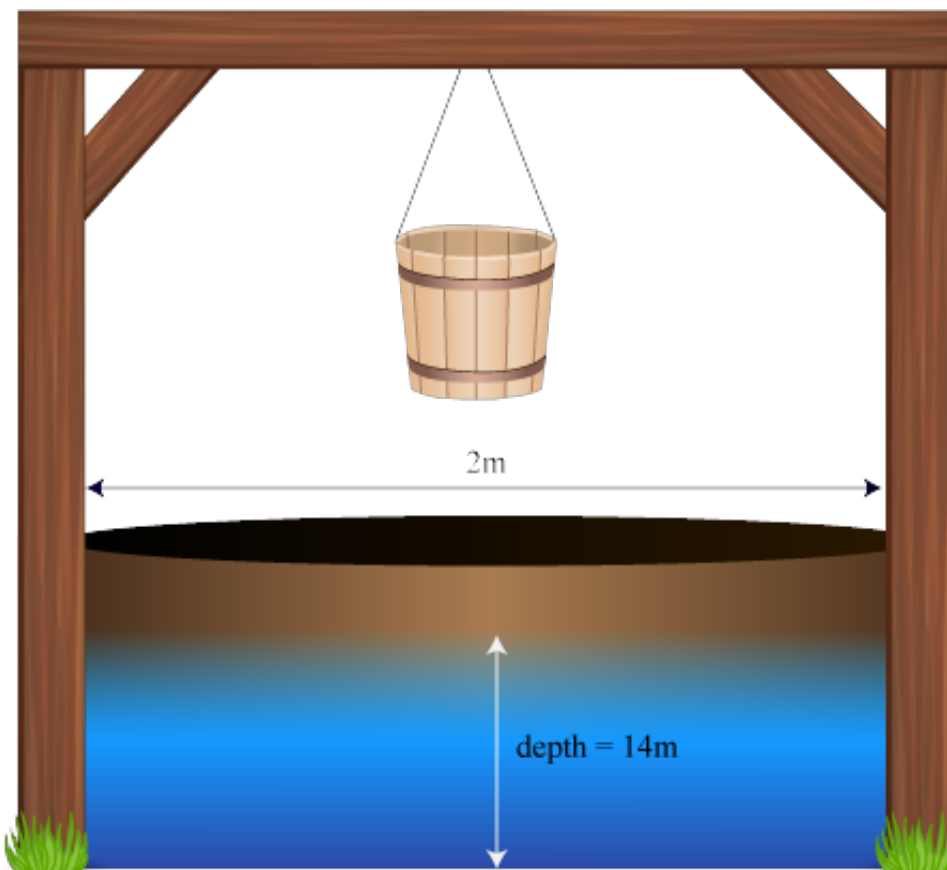


16) If the volume of two cubes are in the ratio 27:1, the ratio of their edges is:



- 1:2
- 2:5
- 4:5
- 3:1

17) A circular well with a diameter of 2 meters, is dug to a depth of 14 meters. What is the volume of the earth dug out



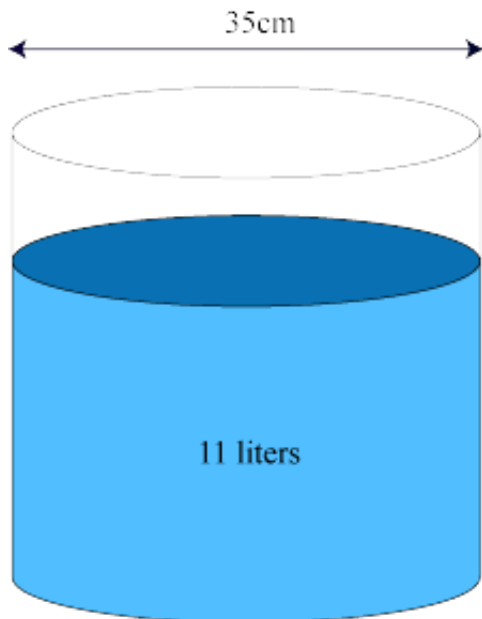
- 66
- 49
- 44
- 79



18) Two right circular cylinders of equal volumes have their heights in the ratio 1:2. Find the ratio of their radii.

- 2 : 1
- $\sqrt{2}$  : 1
- 1 :  $\sqrt{2}$
- 1 : 2

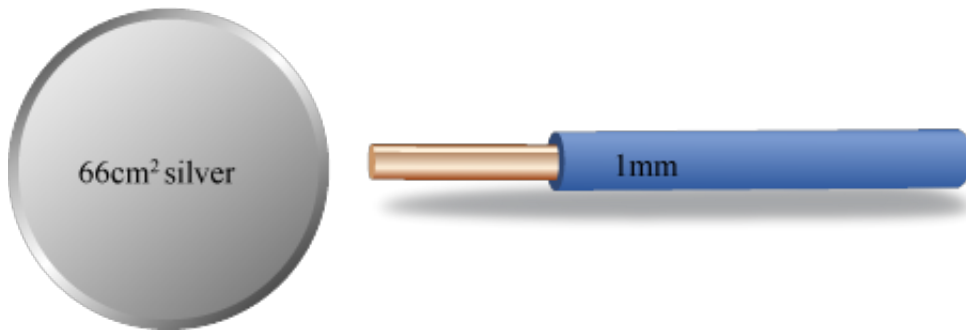
19) A cylindrical tank of diameter 35 cm is full of water. If 11 liters of water is drawn off, the water level in the tank will drop by



- $\frac{78}{9}$
- $\frac{84}{5}$
- $\frac{80}{7}$
- $\frac{75}{6}$

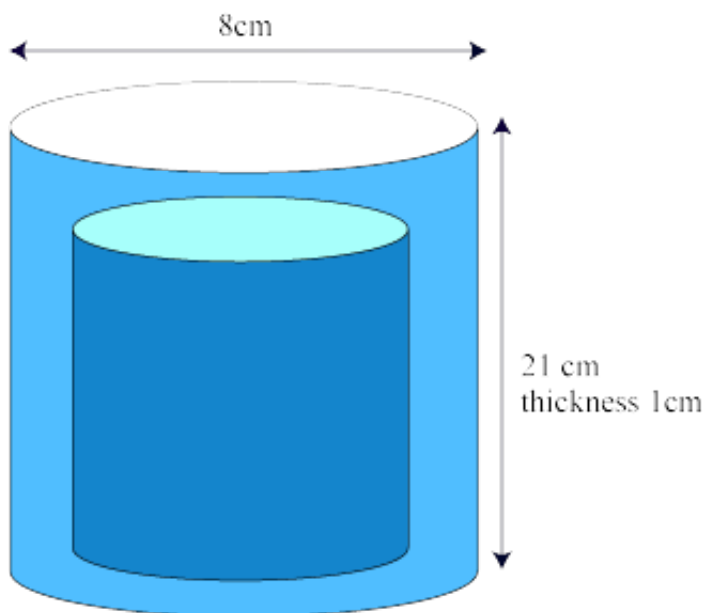
20) 66 cubic centimeters of silver is drawn into a wire 1 mm in diameter. The length of the wire in meters will be:





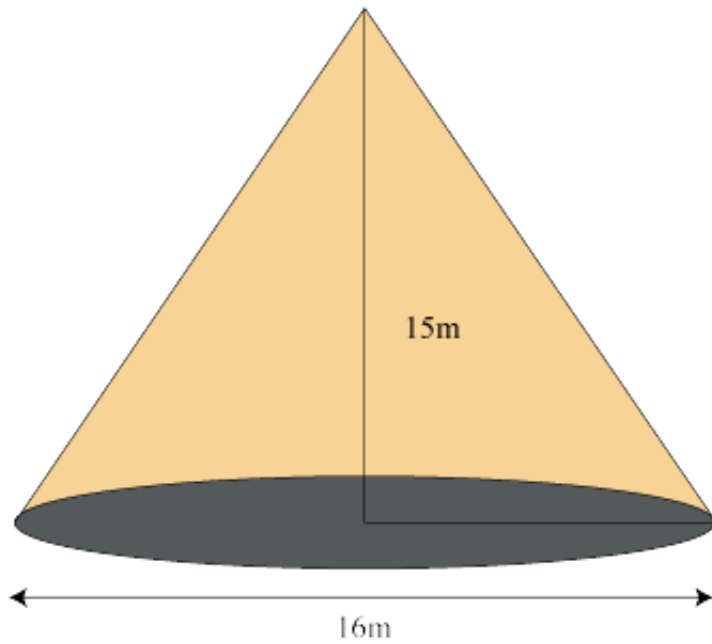
- 34
- 56
- 80
- 84

21) A hollow iron pipe is 21 cm long and its external diameter is 8 cm. If the thickness of the pipe is 1 cm and iron weights 8g/cm cube, then find the weight of the pipe.



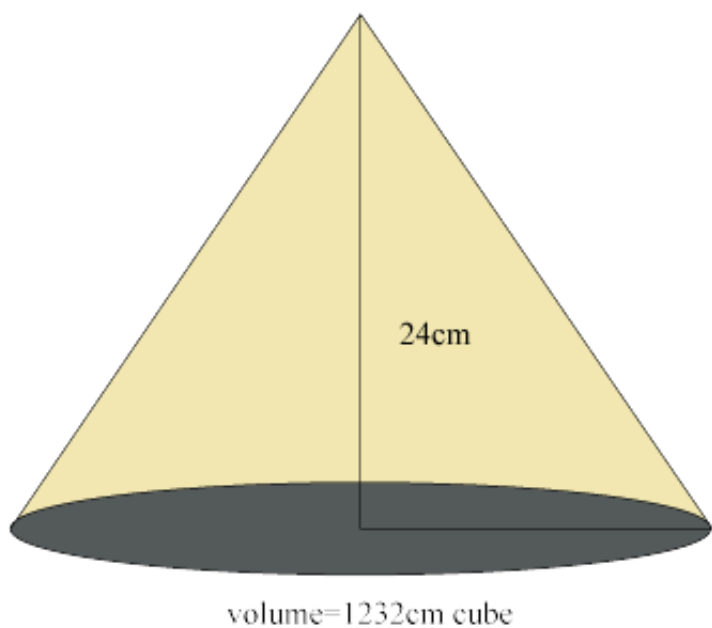
- 3.696
- 4.000
- 3.094
- 5.876

22) The curved surface of a right circular cone of height 15 cm and base diameter 16 cm is:



- 126?
- 106?
- 186?
- 136?

23) If a right circular cone of height 24 cm has a volume of 1232 cm cube, then the area of its curved surface is :

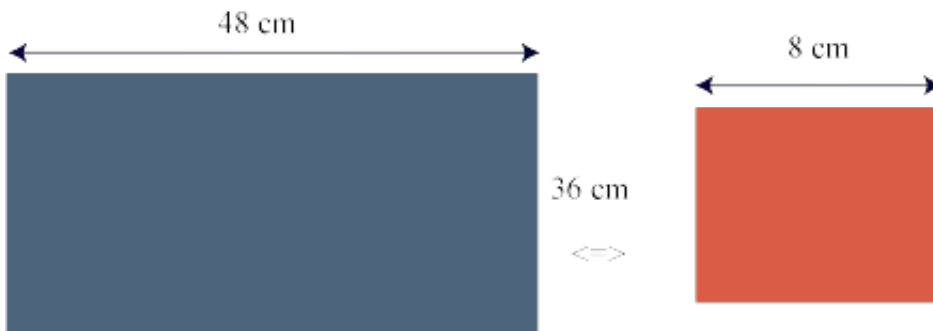


- 610
- 596
- 500



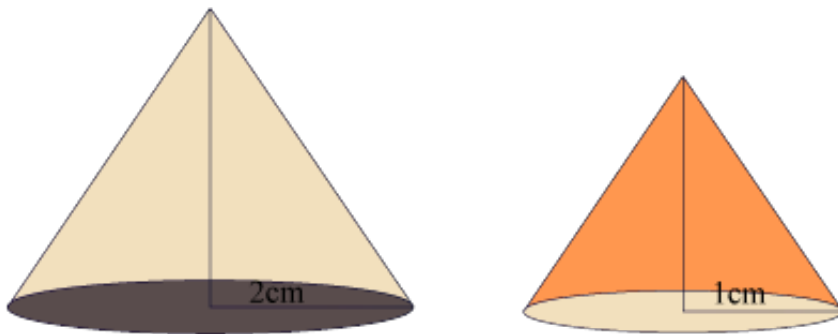
- 550

24) A metallic sheet is of rectangular shape with dimensions 48 m  $\times$  36 m. From each of its corners, a square is cut off so as to make an open box. If the length of the square is 8 m, the volume of the box (in m cube) is:



- 5120
- 4560
- 3451
- 5500

25) A hollow spherical metallic ball has an external diameter 2 cm and is 1 cm thick. The volume of metal used in the metal is:

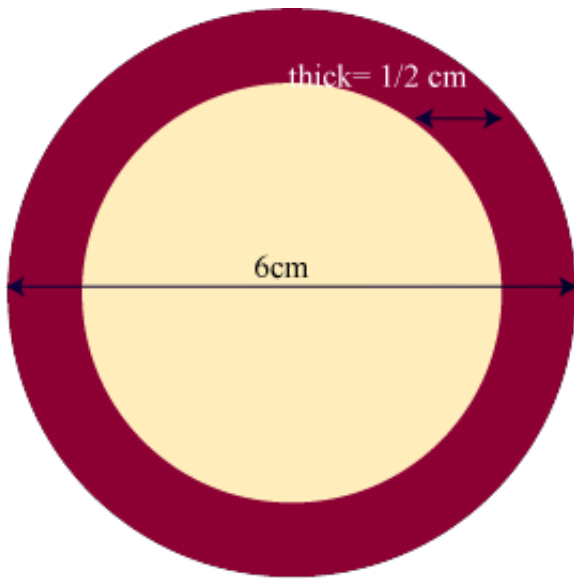


- 1:9
- 1:0
- 1:6
- 1:4

26) A hollow spherical metallic ball has an external diameter 6 cm and is  $\frac{1}{2}$  cm thick. The volume of



metal used in the metal is:



- 1387
- 1433
- 1312
- 1237

27) The surface area of a sphere is same as the curved surface area of a right circular cylinder whose height and diameter are 12 cm each. The radius of the sphere is:

- 9
- 6
- 4
- 3

28) 12 spheres of the same size are made from melting a solid cylinder of 16 cm diameter and 2 cm height. Find the diameter of each sphere.

- 9
- 7
- 4
- 3



29) A hemisphere and a cone have equal bases. If their heights are also equal, then the ratio of their curved surface will be :

- $2 : 3$
- $2 : 1$
- $2 : 1$
- $2 : 2$

30) The volume of the largest right circular cone that can be cut out of a cube of edge 7 cm is:

- 79
- 80
- 57
- 86