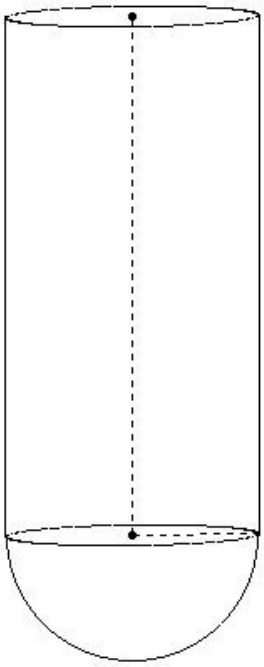
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Surface Areas and Volumes

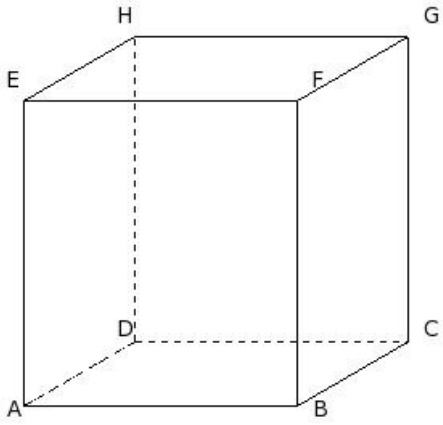
Grade : CBSE Grade X

1. A solid consists of a cylinder with one hemispherical end with length 31.00 cm and diameter 15.00 cm. Find the total surface area of the solid



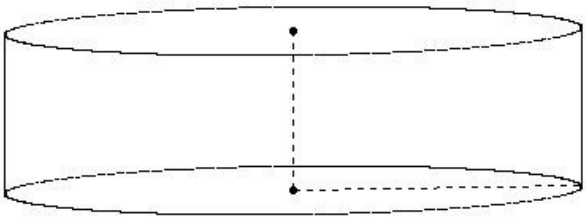
(i) 2171.79 sq.cm (ii) 1991.79 sq.cm (iii) 1711.79 sq.cm (iv) 1851.79 sq.cm (v) 2041.79 sq.cm

2. If the length, height and T.S.A of a cuboid are 17.00 cm, 19.00 cm and 1798.00 sq.cm respectively, its volume is



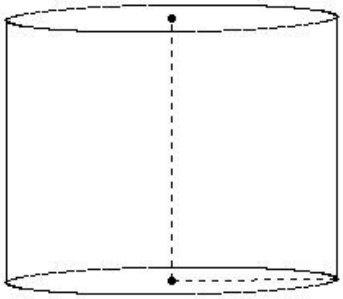
(i) 5298.00 cu.cm (ii) 5028.00 cu.cm (iii) 5018.00 cu.cm (iv) 5168.00 cu.cm (v) 5288.00 cu.cm

3. If the height of a cylinder is 10.00 cm and T.S.A is 3168.00 sq.cm, its volume is



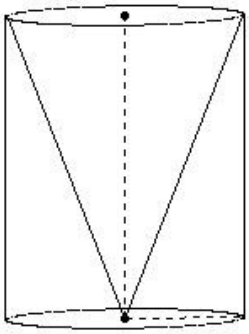
(i) 8882.86 cu.cm (ii) 10182.86 cu.cm (iii) 8382.86 cu.cm (iv) 12782.86 cu.cm (v) 11582.86 cu.cm

4. If the height of a cylinder is 16.00 cm and base area is 314.29 sq.cm, its volume is



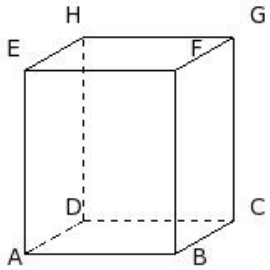
(i) 5168.57 cu.cm (ii) 4788.57 cu.cm (iii) 4848.57 cu.cm (iv) 5158.57 cu.cm (v) 5028.57 cu.cm

5. From a circular cylinder of diameter 14.00 cm and height 18.00 cm, a conical cavity of the same base radius and of the same height is hollowed out. Find the total surface area of the remaining solid.



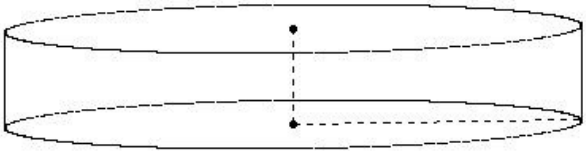
(i) 1370.82 sq.cm (ii) 1320.82 sq.cm (iii) 1540.82 sq.cm (iv) 1530.82 sq.cm (v) 1200.82 sq.cm

6. If the length, height and L.S.A of a cuboid are 9.00 cm, 11.00 cm and 374.00 sq.cm respectively, its breadth is



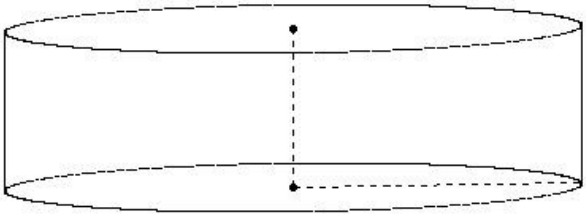
(i) 8.00 cm (ii) 9.00 cm (iii) 6.00 cm (iv) 7.00 cm (v) 10.00 cm

7. If the radius of a cylinder is 18.00 cm and volume is 6109.71 cu.cm, its T.S.A is



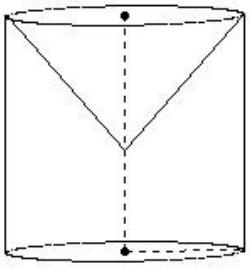
(i) 2715.43 sq.cm (ii) 2595.43 sq.cm (iii) 2765.43 sq.cm (iv) 2875.43 sq.cm (v) 2635.43 sq.cm

8. If the height of a cylinder is 10.00 cm and L.S.A is 1131.43 sq.cm, its base area is



(i) 1188.29 sq.cm (ii) 798.29 sq.cm (iii) 868.29 sq.cm (iv) 1018.29 sq.cm

9. From a solid cylinder of height 14.00 cm and base radius 7.00 cm, a conical cavity of height 8.00 cm and base radius 7.00 cm is drilled out. Find the volume of the resulting solid

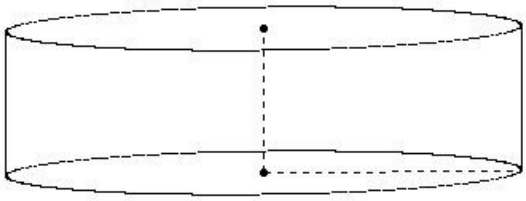


(i) 1775.33 cu.cm (ii) 1565.33 cu.cm (iii) 1745.33 cu.cm (iv) 1975.33 cu.cm

10. A copper rod of diameter 1.20 cm and length 18.00 cm is drawn into a wire of length 25.92 m of uniform thickness. Find the thickness of the wire.

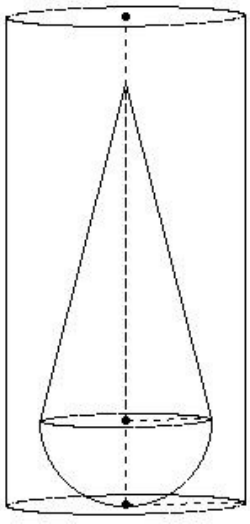
(i) $\frac{1}{10}$ cm (ii) $\frac{1}{20}$ cm (iii) $\frac{3}{20}$ cm (iv) $\frac{1}{5}$ cm (v) 0 cm

11. If the height of a cylinder is 9.00 cm and L.S.A is 905.14 sq.cm, its T.S.A is



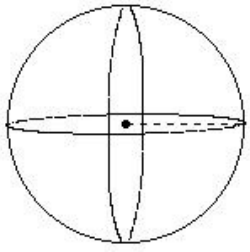
(i) 2274.29 sq.cm (ii) 2784.29 sq.cm (iii) 2634.29 sq.cm (iv) 2514.29 sq.cm (v) 2384.29 sq.cm

12. A solid consisting of a right circular cone, standing on a hemisphere is placed upright, in a right circular cylinder full of water and touches the bottom. The radius of the cylinder is 7.00 cm and height is 29.00 cm. The radius of the hemisphere is 5.00 cm and the height of the cone is 20.00 cm. Find the volume of water left in the cylinder.



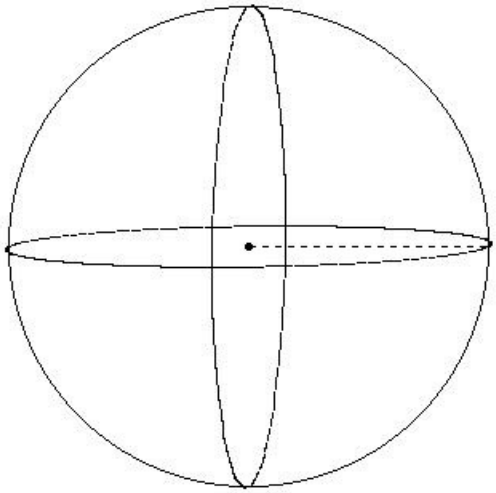
(i) 3680.29 cu.cm (ii) 3850.29 cu.cm (iii) 3500.29 cu.cm (iv) 3660.29 cu.cm (v) 3710.29 cu.cm

13. If the T.S.A of a sphere is 616.00 sq.cm, its radius is



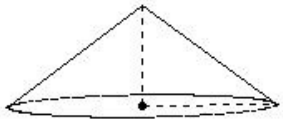
(i) 5.00 cm (ii) 6.00 cm (iii) 8.00 cm (iv) 7.00 cm (v) 9.00 cm

14. If the L.S.A of a sphere is 2828.57 sq.cm, its volume is



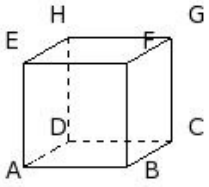
(i) 15942.86 cu.cm (ii) 12442.86 cu.cm (iii) 12542.86 cu.cm (iv) 14342.86 cu.cm (v) 14142.86 cu.cm

15. If the base radius of a cone is 8.00 cm and vertical height is 6.00 cm, its volume is



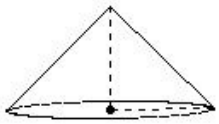
(i) 377.29 cu.cm (ii) 410.29 cu.cm (iii) 414.29 cu.cm (iv) 399.29 cu.cm (v) 402.29 cu.cm

16. If the volume of a cube is 216.00 cu.cm, its T.S.A is



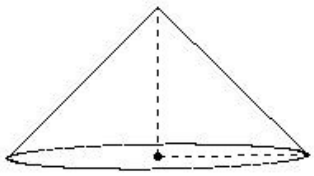
(i) 230.00 sq.cm (ii) 233.00 sq.cm (iii) 201.00 sq.cm (iv) 189.00 sq.cm (v) 216.00 sq.cm

17. If the slant height of a cone is 8.49 cm and T.S.A is 273.24 sq.cm, its volume is



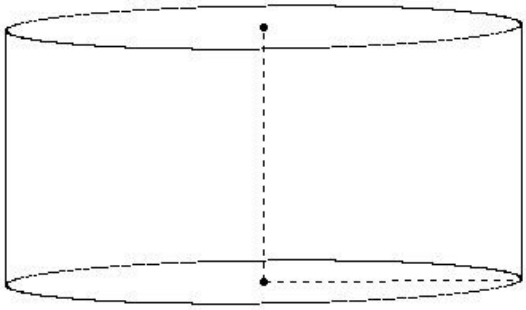
(i) 233.29 cu.cm (ii) 226.29 cu.cm (iii) 240.29 cu.cm (iv) 208.29 cu.cm (v) 210.29 cu.cm

18. If the base radius of a cone is 9.00 cm and volume is 763.71 cu.cm, its slant height is



(i) 12.73 cm (ii) 17.73 cm (iii) 15.73 cm (iv) 7.73 cm (v) 9.73 cm

19. If the radius of a cylinder is 16.00 cm and L.S.A is 1609.14 sq.cm, its T.S.A is

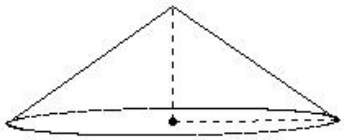


(i) 3058.29 sq.cm (ii) 3448.29 sq.cm (iii) 3218.29 sq.cm (iv) 3098.29 sq.cm (v) 3268.29 sq.cm

20. A copper sphere having a radius of 3.00 cm is melted and drawn into a cylindrical wire of radius 0.90 cm. Calculate the length of the wire.

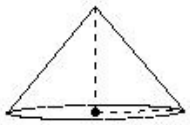
(i) 1.44 m (ii) 0.44 m (iii) 2.44 m (iv) 8.44 m (v) 7.44 m

21. If the slant height of a cone is 12.21 cm and vertical height is 7.00 cm, its base radius is



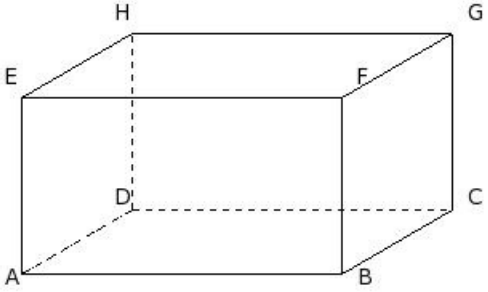
(i) 13.00 cm (ii) 5.00 cm (iii) 10.00 cm (iv) 7.00 cm (v) 15.00 cm

22. If the base radius of a cone is 5.00 cm and T.S.A is 201.30 sq.cm, its vertical height is



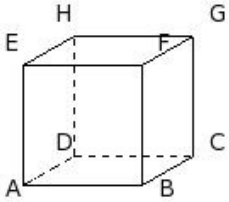
(i) 5.00 cm (ii) 8.00 cm (iii) 4.00 cm (iv) 6.00 cm (v) 7.00 cm

23. If the length, height and L.S.A of a cuboid are 20.00 cm, 11.00 cm and 792.00 sq.cm respectively, its T.S.A is



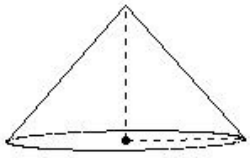
(i) 1682.00 sq.cm (ii) 1372.00 sq.cm (iii) 1302.00 sq.cm (iv) 1472.00 sq.cm (v) 1432.00 sq.cm

24. If the T.S.A of a cube is 294.00 sq.cm, its side is



(i) 9.00 cm (ii) 8.00 cm (iii) 5.00 cm (iv) 6.00 cm (v) 7.00 cm

25. If the base radius of a cone is 7.00 cm and T.S.A is 387.86 sq.cm, its slant height is



(i) 5.63 cm (ii) 15.63 cm (iii) 13.63 cm (iv) 7.63 cm (v) 10.63 cm

Assignment Key

1) (ii)	2) (iv)	3) (ii)	4) (v)	5) (i)	6) (i)
7) (i)	8) (iv)	9) (iii)	10) (ii)	11) (iv)	12) (i)
13) (iv)	14) (v)	15) (v)	16) (v)	17) (ii)	18) (i)
19) (iii)	20) (ii)	21) (iii)	22) (iv)	23) (v)	24) (v)
25) (v)					