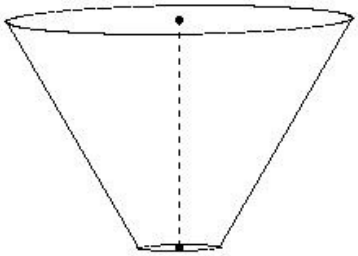
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Surface Areas and Volumes

Grade : CBSE Grade X

1. The radii of the ends of a frustum of a right circular cone 14.00 cm high are 10.50 cm and 2.50 cm. Its volume is

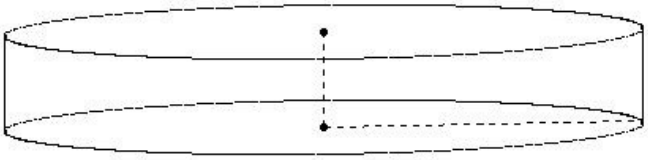


(i) 2023.67 cu.cm (ii) 1853.67 cu.cm (iii) 2093.67 cu.cm (iv) 2243.67 cu.cm (v) 2133.67 cu.cm

2. A copper rod of diameter 0.40 cm and length 10.00 cm is drawn into a wire of length 3.60 m of uniform thickness. Find the thickness of the wire.

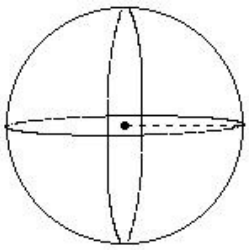
(i) $\frac{1}{30}$ cm (ii) $\frac{2}{15}$ cm (iii) $\frac{1}{15}$ cm (iv) 0 cm (v) $\frac{1}{10}$ cm

3. If the height of a cylinder is 6.00 cm and base area is 1257.14 sq.cm, its T.S.A is



(i) 3268.57 sq.cm (ii) 3188.57 sq.cm (iii) 3138.57 sq.cm (iv) 3498.57 sq.cm (v) 3428.57 sq.cm

4. If the volume of a sphere is 1437.33 cu.cm, its radius is

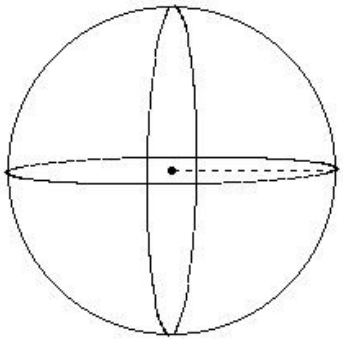


(i) 6.00 cm (ii) 8.00 cm (iii) 9.00 cm (iv) 5.00 cm (v) 7.00 cm

5. A hollow sphere of internal and external diameters 12.00 cm and 18.00 cm respectively is melted into a cone of base diameter 8.00 cm. Find the height of the cone

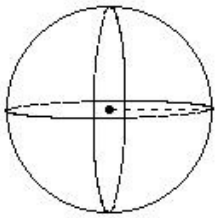
(i) 128.25 cm (ii) 135.25 cm (iii) 116.25 cm (iv) 153.25 cm (v) 112.25 cm

6. If the L.S.A of a sphere is 1257.14 sq.cm, its T.S.A is



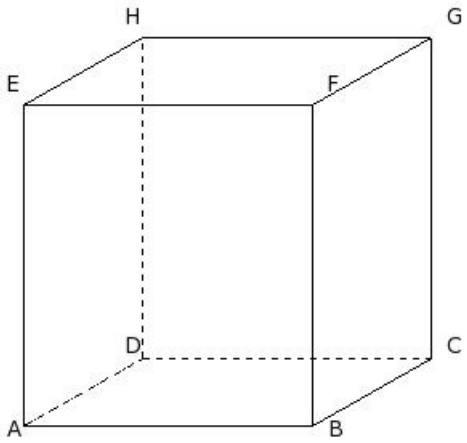
(i) 1257.14 sq.cm (ii) 997.14 sq.cm (iii) 1337.14 sq.cm (iv) 1127.14 sq.cm (v) 1377.14 sq.cm

7. If the T.S.A of a sphere is 452.57 sq.cm, its L.S.A is



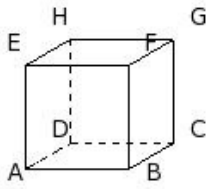
(i) 452.57 sq.cm (ii) 434.57 sq.cm (iii) 479.57 sq.cm (iv) 467.57 sq.cm (v) 426.57 sq.cm

8. If the breadth, height and T.S.A of a cuboid are 17.00 cm, 20.00 cm and 2012.00 sq.cm respectively, its volume is



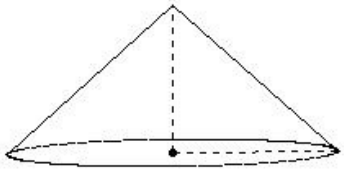
(i) 6120.00 cu.cm (ii) 5990.00 cu.cm (iii) 6340.00 cu.cm (iv) 5840.00 cu.cm (v) 6180.00 cu.cm

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



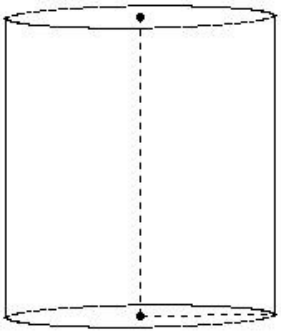
(i) 243.00 sq.cm (ii) 204.00 sq.cm (iii) 232.00 sq.cm (iv) 216.00 sq.cm (v) 209.00 sq.cm

10. If the base radius of a cone is 10.00 cm and L.S.A is 422.71 sq.cm, its vertical height is



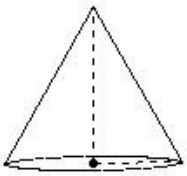
(i) 10.00 cm (ii) 8.00 cm (iii) 11.00 cm (iv) 9.00 cm (v) 7.00 cm

11. If the radius of a cylinder is 8.00 cm and volume is 3620.57 cu.cm, its T.S.A is



(i) 1277.43 sq.cm (ii) 1147.43 sq.cm (iii) 1427.43 sq.cm (iv) 1307.43 sq.cm (v) 1467.43 sq.cm

12. If the base radius of a cone is 5.00 cm and slant height is 10.30 cm, its L.S.A. is

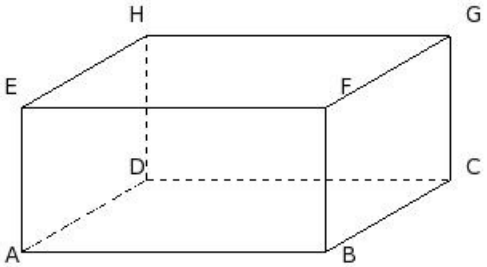


(i) 168.86 sq.cm (ii) 188.86 sq.cm (iii) 149.86 sq.cm (iv) 161.86 sq.cm (v) 146.86 sq.cm

13. A copper sphere having a radius of 4.00 cm is melted and drawn into a cylindrical wire of radius 0.20 cm. Calculate the length of the wire.

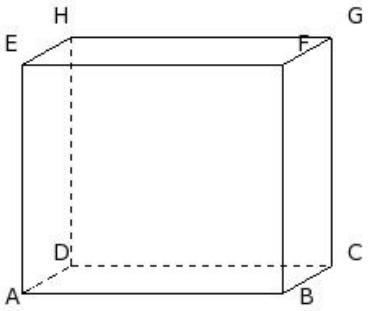
(i) 24.33 m (ii) 21.33 m (iii) 26.33 m (iv) 18.33 m (v) 16.33 m

14. If the length, breadth and L.S.A of a cuboid are 19.00 cm, 18.00 cm and 666.00 sq.cm respectively, its height is



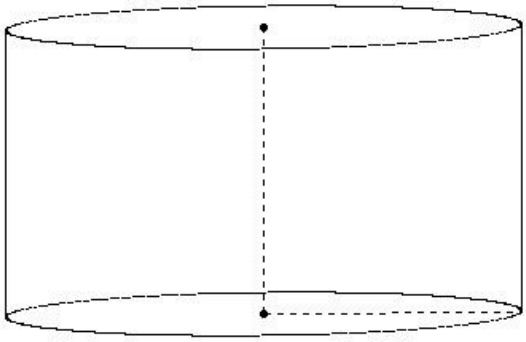
(i) 9.00 cm (ii) 11.00 cm (iii) 8.00 cm (iv) 7.00 cm (v) 10.00 cm

15. If the breadth, height and L.S.A of a cuboid are 7.00 cm, 14.00 cm and 644.00 sq.cm respectively, its volume is



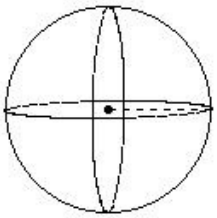
(i) 1568.00 cu.cm (ii) 1438.00 cu.cm (iii) 1598.00 cu.cm (iv) 1448.00 cu.cm (v) 1818.00 cu.cm

16. If the height of a cylinder is 18.00 cm and volume is 14482.29 cu.cm, its radius is



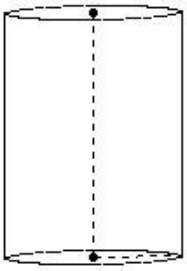
(i) 16.00 cm (ii) 13.00 cm (iii) 11.00 cm (iv) 21.00 cm (v) 19.00 cm

17. If the volume of a sphere is 905.14 cu.cm, its T.S.A is



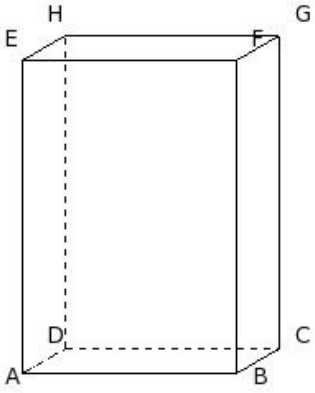
(i) 470.57 sq.cm (ii) 468.57 sq.cm (iii) 435.57 sq.cm (iv) 452.57 sq.cm

18. If the height of a cylinder is 14.00 cm and L.S.A is 440.00 sq.cm, its radius is



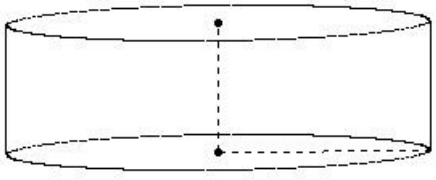
(i) 7.00 cm (ii) 4.00 cm (iii) 3.00 cm (iv) 6.00 cm (v) 5.00 cm

19. If the length, height and L.S.A of a cuboid are 13.00 cm, 19.00 cm and 722.00 sq.cm respectively, its breadth is



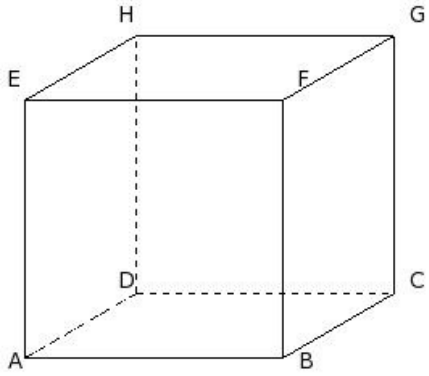
(i) 5.00 cm (ii) 4.00 cm (iii) 7.00 cm (iv) 8.00 cm (v) 6.00 cm

20. If the radius of a cylinder is 13.00 cm and T.S.A is 1716.00 sq.cm, its L.S.A. is



(i) 661.71 sq.cm (ii) 628.71 sq.cm (iii) 676.71 sq.cm (iv) 650.71 sq.cm (v) 653.71 sq.cm

21. If the volume of a cube is 4096.00 cu.cm, its side is

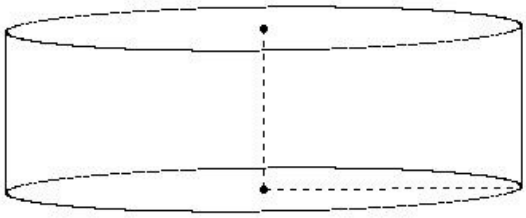


(i) 21.00 cm (ii) 19.00 cm (iii) 11.00 cm (iv) 13.00 cm (v) 16.00 cm

22. An ice cream container has the shape of a right circular cylinder having inner diameter 28.00 cm and height 38.00 cm . The ice cream is filled into cones of diameter 15.00 cm and height 12.00 cm , having a hemispherical shape on the top. Find the number of such complete cones which can be filled with ice cream

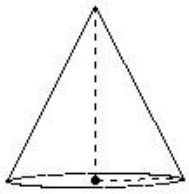
(i) 11 (ii) 14 (iii) 9 (iv) 17 (v) 19

23. If the height of a cylinder is 10.00 cm and T.S.A is 2614.86 sq.cm, its L.S.A. is



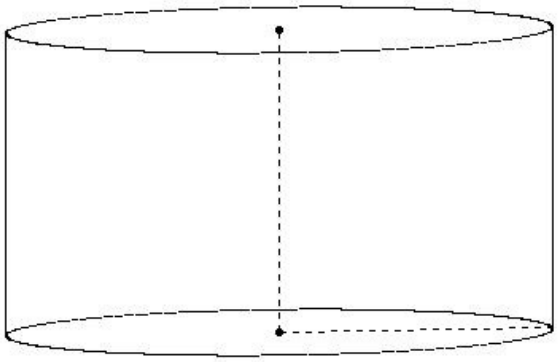
(i) 825.71 sq.cm (ii) 975.71 sq.cm (iii) 1005.71 sq.cm (iv) 1265.71 sq.cm (v) 1155.71 sq.cm

24. If the base radius of a cone is 5.00 cm and volume is 261.90 cu.cm, its vertical height is



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

25. If the height of a cylinder is 19.00 cm and volume is 17257.43 cu.cm, its T.S.A is



(i) 3846.86 sq.cm (ii) 3866.86 sq.cm (iii) 3726.86 sq.cm (iv) 3996.86 sq.cm (v) 3586.86 sq.cm

Assignment Key

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