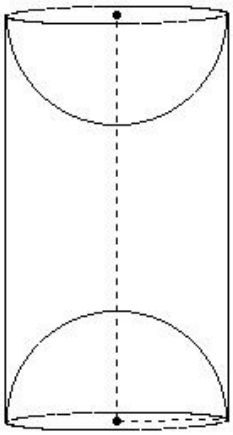
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Mensuration

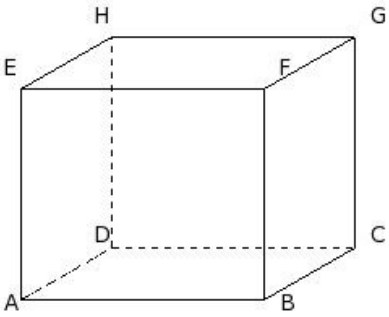
Grade : SSC Grade X

1. A hemispherical depression is cut out from both ends of a cylinder. The height of the cylinder is 24.00 cm and its radius is 6.50 cm. Find the total surface area of the solid



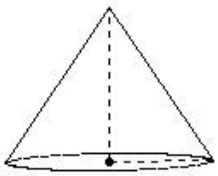
(i) 1511.71 sq.cm (ii) 1641.71 sq.cm (iii) 1391.71 sq.cm (iv) 1431.71 sq.cm (v) 1751.71 sq.cm

2. If the length, breadth and volume of a cuboid are 15.00 cm, 13.00 cm and 2535.00 cu.cm respectively, its T.S.A is



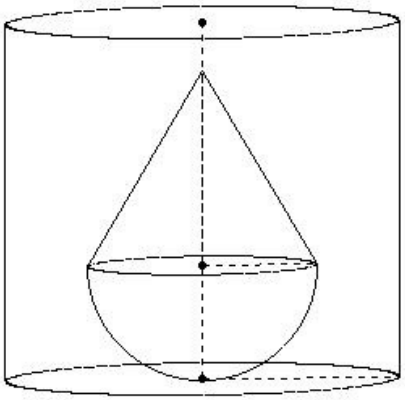
(i) 1378.00 sq.cm (ii) 998.00 sq.cm (iii) 1288.00 sq.cm (iv) 888.00 sq.cm (v) 1118.00 sq.cm

3. If the base radius of a cone is 6.00 cm and vertical height is 9.00 cm, its volume is



(i) 339.43 cu.cm (ii) 341.43 cu.cm (iii) 325.43 cu.cm (iv) 327.43 cu.cm (v) 354.43 cu.cm

4. 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 12.00 cm and height is 22.00 cm. The radius of the hemisphere is 7.00 cm and the height of the cone is 12.00 cm. Find the volume of water left in the cylinder.

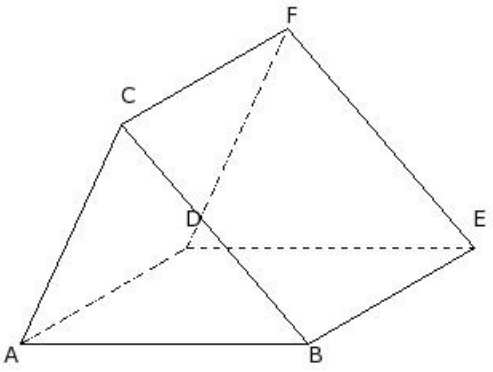


(i) 8461.90 cu.cm (ii) 8771.90 cu.cm (iii) 8641.90 cu.cm (iv) 8621.90 cu.cm

5. A conical vessel of radius 6.00 cm and height 8.00 cm is completely filled with water. A sphere is lowered into the water and its size is such that when it touches the sides, it is just immersed. Find the fraction of the water that overflows

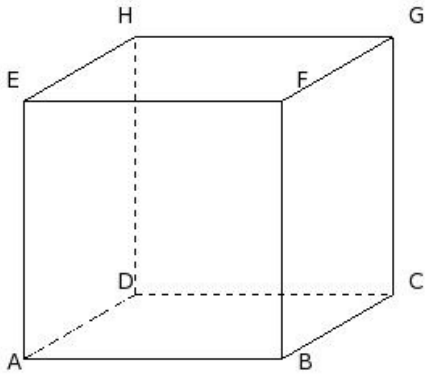
(i) $\frac{5}{8}$ (ii) $\frac{1}{8}$ (iii) $\frac{1}{2}$ (iv) $\frac{3}{8}$ (v) $\frac{3}{10}$

6. If the L.S.A of a triangular prism is 1224.00 sq.cm, base area is 122.72 sq.cm and base perimeter is 51.00 cm, its height is



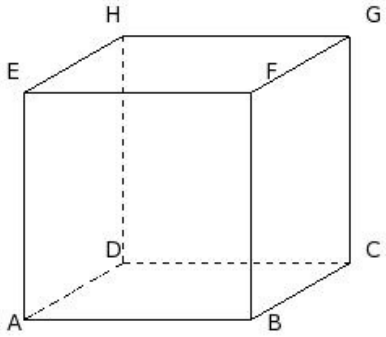
(i) 21.00 cm (ii) 19.00 cm (iii) 27.00 cm (iv) 24.00 cm (v) 29.00 cm

7. If the T.S.A of a cube is 1536.00 sq.cm, its L.S.A is



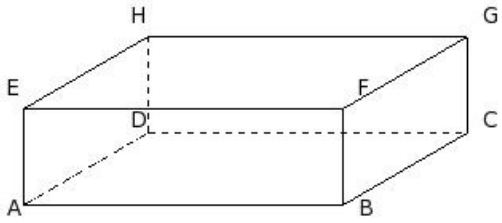
(i) 844.00 sq.cm (ii) 1174.00 sq.cm (iii) 784.00 sq.cm (iv) 1194.00 sq.cm (v) 1024.00 sq.cm

8. If the L.S.A of a cube is 784.00 sq.cm, its volume is



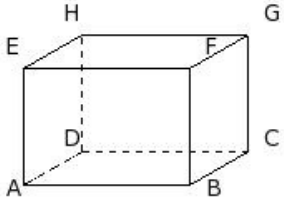
(i) 2714.00 cu.cm (ii) 2744.00 cu.cm (iii) 2494.00 cu.cm (iv) 2924.00 cu.cm

9. If the length, height and L.S.A of a cuboid are 20.00 cm, 6.00 cm and 456.00 sq.cm respectively, its breadth is



(i) 23.00 cm (ii) 15.00 cm (iii) 13.00 cm (iv) 21.00 cm (v) 18.00 cm

10. If the length, breadth and L.S.A of a cuboid are 10.00 cm, 8.00 cm and 252.00 sq.cm respectively, its volume is

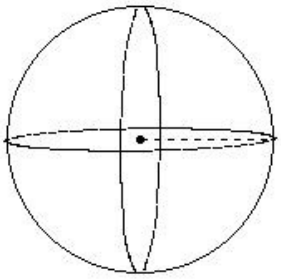


(i) 563.00 cu.cm (ii) 543.00 cu.cm (iii) 545.00 cu.cm (iv) 588.00 cu.cm (v) 560.00 cu.cm

11. A cone of maximum volume is carved out of a cuboid of dimensions 22.00 cm×22.00 cm×14.00 cm. Find the volume of the cone

(i) 1804.67 cu.cm (ii) 1654.67 cu.cm (iii) 2034.67 cu.cm (iv) 1774.67 cu.cm

12. If the volume of a sphere is 2145.52 cu.cm, its L.S.A is

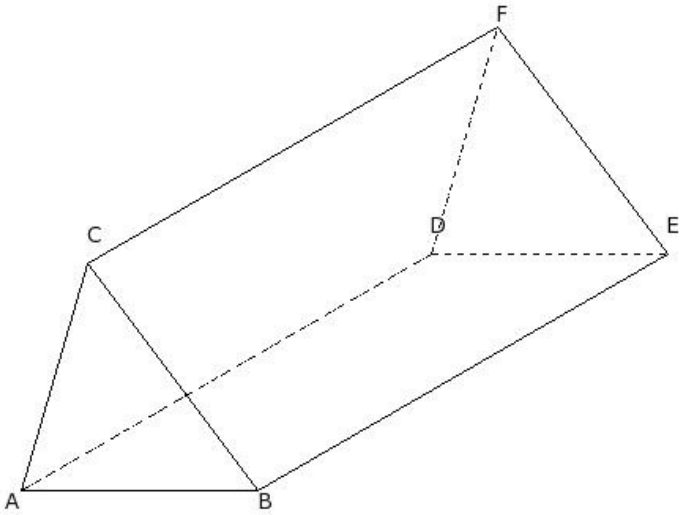


(i) 788.57 sq.cm (ii) 804.57 sq.cm (iii) 789.57 sq.cm (iv) 831.57 sq.cm (v) 816.57 sq.cm

13. The height of a right circular cone is 15.00 cm and the radius of its base is 6.00 cm. It is melted and recast into a right circular cone with base radius 3.60 cm. Find the new height

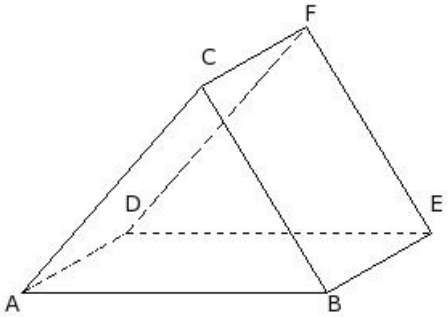
(i) 46.67 cm (ii) 44.67 cm (iii) 36.67 cm (iv) 41.67 cm (v) 38.67 cm

14. If the three sides of a triangular prism are 15.00 cm, 18.00 cm, 15.00 cm and L.S.A is 2880.00 sq.cm, its height is



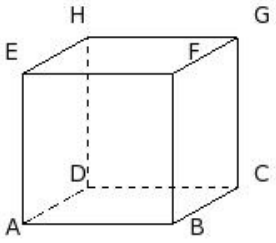
(i) 57.00 cm (ii) 63.00 cm (iii) 60.00 cm (iv) 55.00 cm (v) 65.00 cm

15. If the three sides of a triangular prism are 19.00 cm, 15.00 cm, 17.00 cm and L.S.A is 765.00 sq.cm, its volume is



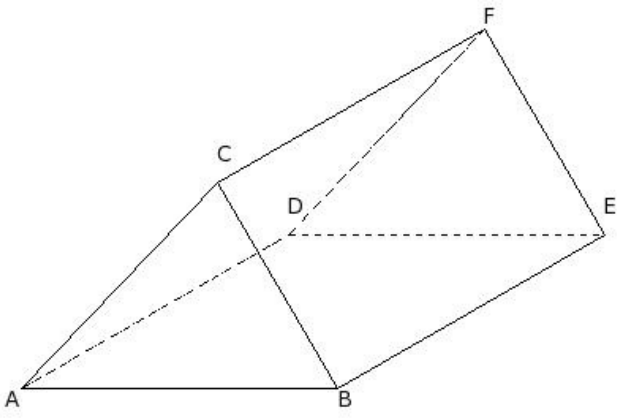
(i) 1744.45 cu.cm (ii) 1974.45 cu.cm (iii) 1704.45 cu.cm (iv) 1824.45 cu.cm (v) 1884.45 cu.cm

16. If the T.S.A of a cube is 486.00 sq.cm, its side is



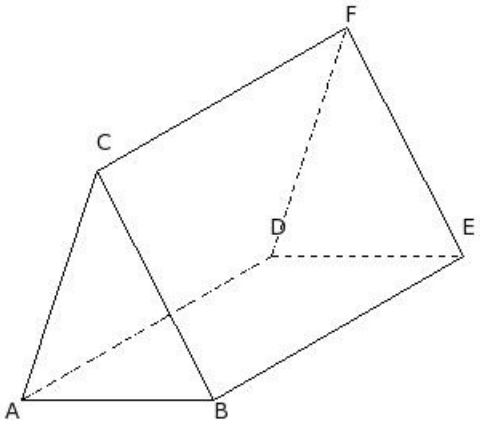
(i) 11.00 cm (ii) 8.00 cm (iii) 7.00 cm (iv) 9.00 cm (v) 10.00 cm

17. If the three sides of a triangular prism are 20.00 cm, 15.00 cm, 18.00 cm and L.S.A is 2067.00 sq.cm, its base perimeter is



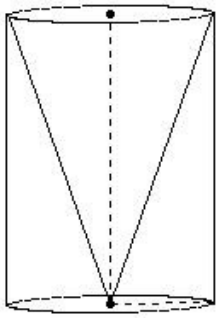
(i) 53.00 cm (ii) 50.00 cm (iii) 48.00 cm (iv) 58.00 cm (v) 56.00 cm

18. If the three sides of a triangular prism are 12.00 cm, 16.00 cm, 15.00 cm and height is 36.00 cm, its L.S.A is



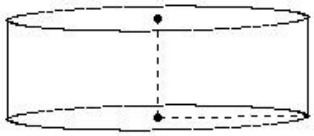
(i) 1548.00 sq.cm (ii) 1418.00 sq.cm (iii) 1268.00 sq.cm (iv) 1698.00 sq.cm (v) 1608.00 sq.cm

19. From a circular cylinder of diameter 12.00 cm and height 17.00 cm, a conical cavity of the same base radius and of the same height is hollowed out. Find the volume of the remaining solid.



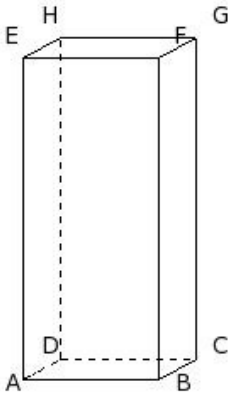
(i) 1282.29 cu.cm (ii) 1132.29 cu.cm (iii) 1442.29 cu.cm (iv) 1112.29 cu.cm (v) 1322.29 cu.cm

20. If the radius of a cylinder is 9.00 cm and height is 6.00 cm, its L.S.A. is



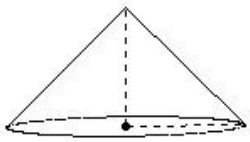
(i) 356.43 sq.cm (ii) 337.43 sq.cm (iii) 313.43 sq.cm (iv) 339.43 sq.cm (v) 364.43 sq.cm

21. If the length, breadth and volume of a cuboid are 8.00 cm, 5.00 cm and 760.00 cu.cm respectively, its L.S.A is



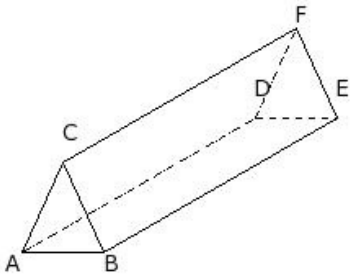
(i) 494.00 sq.cm (ii) 477.00 sq.cm (iii) 499.00 sq.cm (iv) 478.00 sq.cm (v) 506.00 sq.cm

22. If the base radius of a cone is 7.00 cm and vertical height is 7.00 cm, its T.S.A is



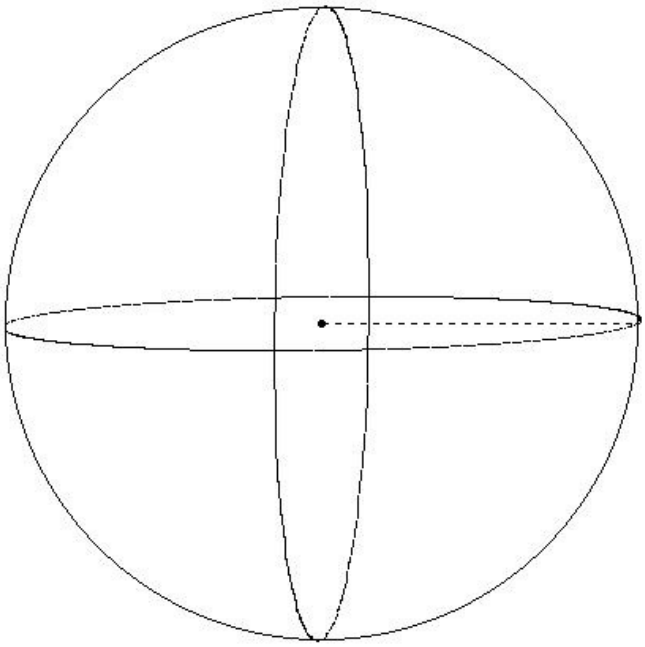
(i) 375.80 sq.cm (ii) 365.80 sq.cm (iii) 349.80 sq.cm (iv) 371.80 sq.cm (v) 388.80 sq.cm

23. If the L.S.A of a triangular prism is 561.00 sq.cm, base area is 13.64 sq.cm and base perimeter is 17.00 cm, its volume is



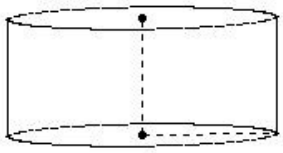
(i) 436.12 cu.cm (ii) 463.12 cu.cm (iii) 450.12 cu.cm (iv) 465.12 cu.cm (v) 438.12 cu.cm

24. If the radius of a sphere is 20.00 cm, its T.S.A is



(i) 5028.57 sq.cm (ii) 5068.57 sq.cm (iii) 4898.57 sq.cm (iv) 5278.57 sq.cm (v) 4808.57 sq.cm

25. If the radius of a cylinder is 8.00 cm and height is 7.00 cm, its volume is



(i) 1438.00 cu.cm (ii) 1248.00 cu.cm (iii) 1258.00 cu.cm (iv) 1638.00 cu.cm (v) 1408.00 cu.cm

Assignment Key

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