EduSahara™ Worksheet

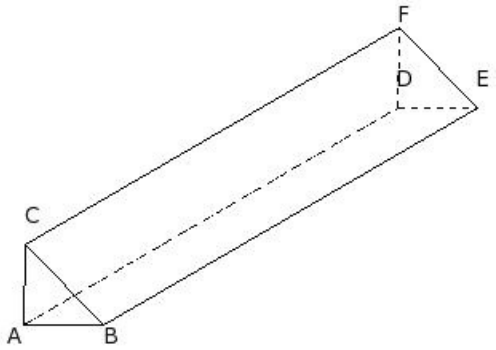
Name : Chapter Based Worksheet

Chapter : Mensuration

Grade : SSC Grade X

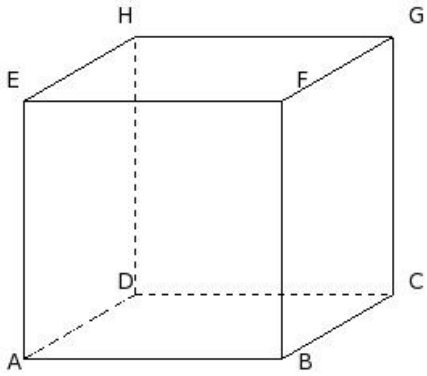
License : Non Commercial Use

1. If the three sides of a triangular prism are 5.00 cm, 7.00 cm, 5.00 cm and height is 54.00 cm, its volume is



(i) 675.00 cu.cm (ii) 667.00 cu.cm (iii) 701.00 cu.cm (iv) 663.00 cu.cm (v) 689.00 cu.cm

2. If the T.S.A of a cube is 1536.00 sq.cm, its volume is

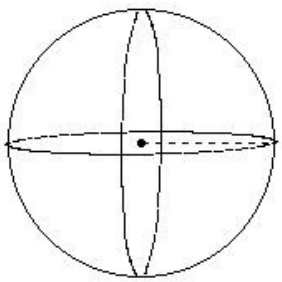


(i) 3866.00 cu.cm (ii) 3976.00 cu.cm (iii) 4276.00 cu.cm (iv) 4336.00 cu.cm (v) 4096.00 cu.cm

3. Metallic spheres of radii 12.00 cm, 11.00 cm, 5.00 cm are melted to form a single solid sphere. Find the radius of the resulting sphere.

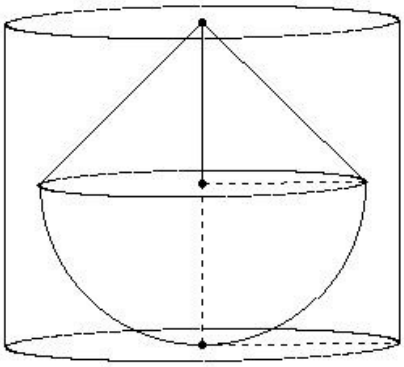
(i) $\sqrt[5]{3184}$ cm (ii) $\sqrt[3]{3181}$ cm (iii) 3184 cm (iv) $\sqrt[3]{3187}$ cm (v) $\sqrt[3]{3184}$ cm

4. If the radius of a sphere is 8.00 cm, its L.S.A is



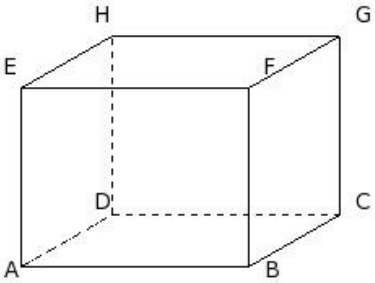
(i) 822.57 sq.cm (ii) 791.57 sq.cm (iii) 779.57 sq.cm (iv) 810.57 sq.cm (v) 804.57 sq.cm

5. 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 20.00 cm. The radius of the hemisphere is 10.00 cm and the height of the cone is 10.00 cm. Find the volume of water left in the cylinder.



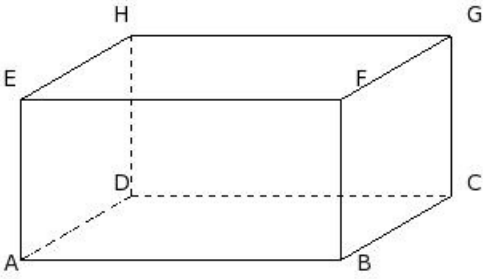
(i) 6028.57 cu.cm (ii) 5768.57 cu.cm (iii) 5758.57 cu.cm (iv) 5908.57 cu.cm (v) 5948.57 cu.cm

6. If the length, breadth and volume of a cuboid are 14.00 cm, 13.00 cm and 2002.00 cu.cm respectively, its L.S.A is



(i) 609.00 sq.cm (ii) 597.00 sq.cm (iii) 577.00 sq.cm (iv) 594.00 sq.cm (v) 588.00 sq.cm

7. If the length, breadth and volume of a cuboid are 20.00 cm, 16.00 cm and 3200.00 cu.cm respectively, its height is



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

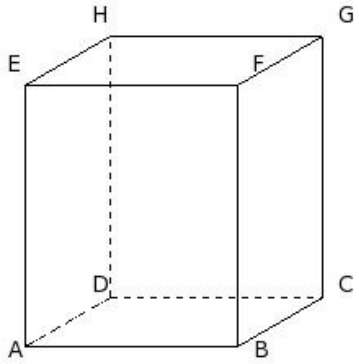
8. An open cylindrical vessel of internal diameter 11.00 cm and height 10.00 cm stands on a horizontal table. Inside this is placed a solid metallic right circular cone, the diameter of whose base is 5.50 cm and height 10.00 cm and filled with water. If the cone is replaced by another cone whose height is 5.00 cm and base radius is 1.38 cm, find the drop in the water level.

(i) 7.73 cm (ii) 1.73 cm (iii) 2.73 cm (iv) 8.73 cm (v) 0.73 cm

9. A conical vessel of radius 8.00 cm and height 15.00 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

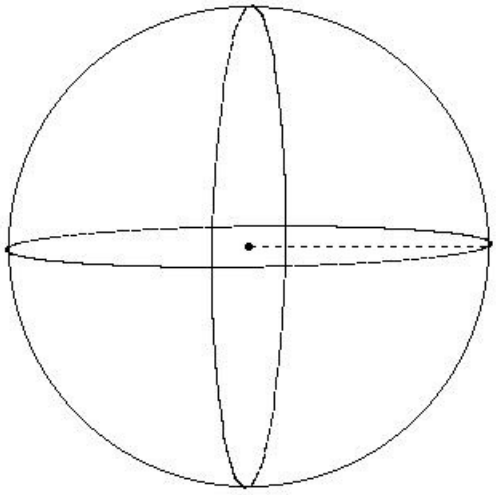
(i) $\frac{55296}{119998}$ (ii) $\frac{55298}{120000}$ (iii) $\frac{55296}{120000}$ (iv) $\frac{55294}{120000}$ (v) $\frac{55296}{120002}$

10. If the length, breadth and T.S.A of a cuboid are 13.00 cm, 12.00 cm and 1112.00 sq.cm respectively, its L.S.A is



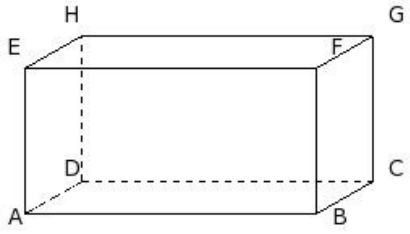
(i) 804.00 sq.cm (ii) 800.00 sq.cm (iii) 785.00 sq.cm (iv) 818.00 sq.cm (v) 773.00 sq.cm

11. If the L.S.A of a sphere is 2828.57 sq.cm, its T.S.A is



(i) 2758.57 sq.cm (ii) 2648.57 sq.cm (iii) 3108.57 sq.cm (iv) 2998.57 sq.cm (v) 2828.57 sq.cm

12. If the length, breadth and height of a cuboid are 18.00 cm, 8.00 cm and 9.00 cm respectively, its T.S.A is

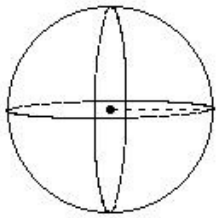


(i) 748.00 sq.cm (ii) 762.00 sq.cm (iii) 730.00 sq.cm (iv) 769.00 sq.cm (v) 756.00 sq.cm

13. A hollow metallic cylindrical tube has an internal radius of 14.50 cm and height 28.00 cm. The thickness of the metal is 1 cm .The tube is melted to cast into a right circular cone of height 8.00 cm. Find the radius of the cone.

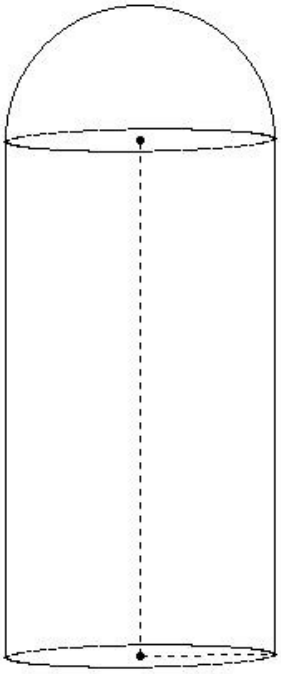
(i) 17.75 cm (ii) 14.75 cm (iii) 20.75 cm (iv) 22.75 cm (v) 12.75 cm

14. If the T.S.A of a sphere is 452.57 sq.cm, its radius is



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

15. A solid consists of a cylinder with one hemispherical end with length 31.00 cm and diameter 16.00 cm. Find the total surface area of the solid



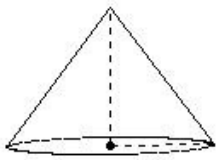
(i) 2022.29 sq.cm (ii) 2162.29 sq.cm (iii) 2402.29 sq.cm (iv) 2142.29 sq.cm (v) 2292.29 sq.cm

16. A farmer connects a pipe of internal diameter 40 cm from a canal into a cylindrical tank in his field, which is 10 m in diameter and 4 m deep.

If water flows through the pipe at the rate of $\frac{25}{2}$ kmph, in how much time will the tank be filled ?

(i) 15.00 min (ii) 7.00 min (iii) 12.00 min (iv) 17.00 min (v) 9.00 min

17. If the base radius of a cone is 6.00 cm and slant height is 10.00 cm, its base area is

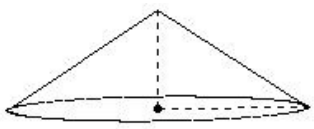


(i) 119.14 sq.cm (ii) 97.14 sq.cm (iii) 113.14 sq.cm (iv) 130.14 sq.cm (v) 91.14 sq.cm

18. A hollow sphere of internal and external diameters 24.00 cm and 30.00 cm respectively is melted into a cone of base diameter 10.00 cm. Find the height of the cone

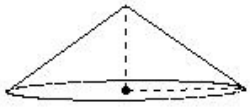
(i) 248.52 cm (ii) 263.52 cm (iii) 270.52 cm (iv) 257.52 cm (v) 275.52 cm

19. If the base radius of a cone is 9.00 cm and vertical height is 6.00 cm, its T.S.A is



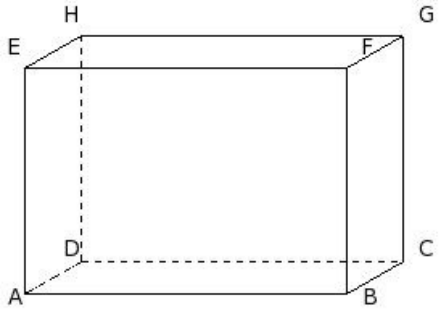
(i) 575.62 sq.cm (ii) 584.62 sq.cm (iii) 560.62 sq.cm (iv) 547.62 sq.cm (v) 558.62 sq.cm

20. If the base radius of a cone is 7.00 cm and vertical height is 5.00 cm, its slant height is



(i) 8.60 cm (ii) 6.60 cm (iii) 10.60 cm (iv) 7.60 cm (v) 9.60 cm

21. If the length, breadth and volume of a cuboid are 20.00 cm, 8.00 cm and 2240.00 cu.cm respectively, its T.S.A is

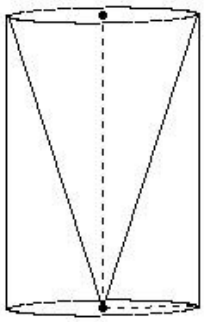


(i) 1024.00 sq.cm (ii) 1244.00 sq.cm (iii) 1124.00 sq.cm (iv) 974.00 sq.cm (v) 1104.00 sq.cm

22. The height of a right circular cone is 19.00 cm and the radius of its base is 4.00 cm. It is melted and recast into a right circular cone with base radius 2.40 cm. Find the new height

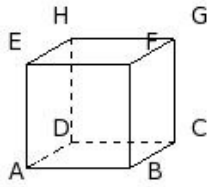
(i) 49.78 cm (ii) 57.78 cm (iii) 47.78 cm (iv) 55.78 cm (v) 52.78 cm

23. From a circular cylinder of diameter 11.00 cm and height 17.00 cm, a conical cavity of the same base radius and of the same height is hollowed out. Find the total surface area of the remaining solid.



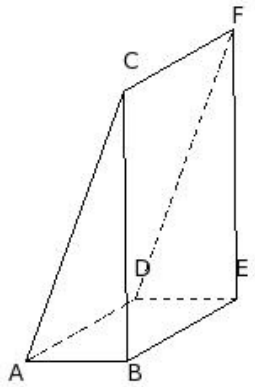
(i) 991.68 sq.cm (ii) 1016.68 sq.cm (iii) 987.68 sq.cm (iv) 994.68 sq.cm (v) 979.68 sq.cm

24. If the L.S.A of a cube is 144.00 sq.cm, its side is



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

25. If the three sides of a triangular prism are 6.00 cm, 16.00 cm, 17.00 cm and height is 15.00 cm, its base area is



(i) 42.99 sq.cm (ii) 50.99 sq.cm (iii) 47.99 sq.cm (iv) 44.99 sq.cm (v) 52.99 sq.cm

Assignment Key

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

Copyright © Small Systems Computing Pvt. Ltd.