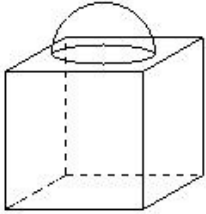


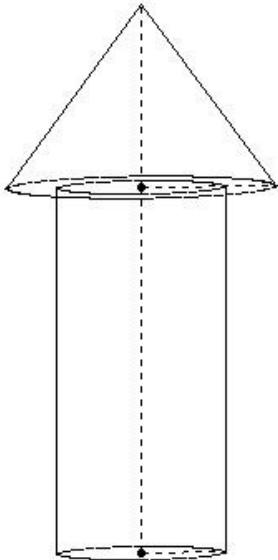


1. If two solids, a cube and a hemisphere are combined such that the base of the block is a cube with edge 8.00 cm and the hemisphere fixed on the top has a diameter of 6.00 cm, find the total surface area of the block.



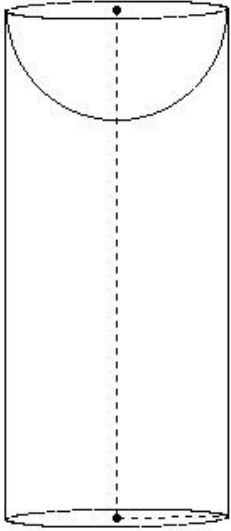
- (i) 418.29 sq.cm (ii) 412.29 sq.cm (iii) 440.29 sq.cm (iv) 390.29 sq.cm (v) 395.29 sq.cm

2. A wooden toy rocket is in the shape of a cone mounted on a cylinder. The height of the conical part is 11.00 cm, while the height of the cylindrical part is 22.00 cm. The base of the conical portion has a diameter of 16.00 cm while the base diameter of the cylindrical portion is 10.00 cm. If the conical portion is painted with yellow and cylindrical portion with red, find the area of the rocket painted with each of these colors



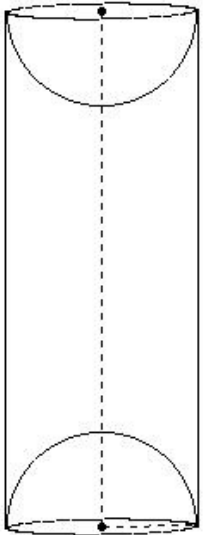
- (i) yellow area = 463.51 sq.cm, red area = 769.00 sq.cm (ii) yellow area = 462.51 sq.cm, red area = 768.00 sq.cm  
(iii) yellow area = 465.51 sq.cm, red area = 771.00 sq.cm  
(iv) yellow area = 466.51 sq.cm, red area = 772.00 sq.cm  
(v) yellow area = 464.51 sq.cm, red area = 770.00 sq.cm

3. A hemispherical depression is cut out from one face of a cylinder. The height of the cylinder is 30.00 cm and its radius is 6.50 cm. Find the total surface area of the solid



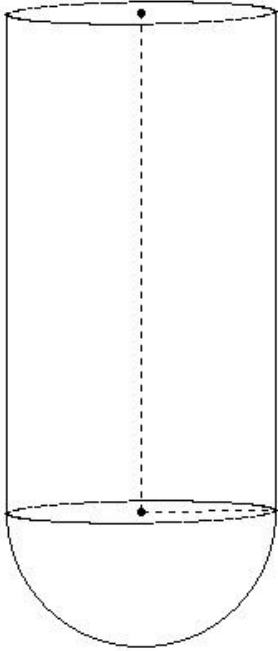
- (i) 1624.07 sq.cm (ii) 1744.07 sq.cm (iii) 1564.07 sq.cm (iv) 1364.07 sq.cm (v) 1794.07 sq.cm

4. A hemispherical depression is cut out from both ends of a cylinder. The height of the cylinder is 30.00 cm and its radius is 5.50 cm. Find the total surface area of the solid



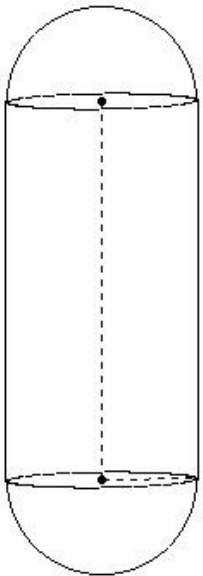
- (i) 1647.43 sq.cm (ii) 1577.43 sq.cm (iii) 1337.43 sq.cm (iv) 1417.43 sq.cm (v) 1297.43 sq.cm

5. A solid consists of a cylinder with one hemispherical end with length 30.00 cm and diameter 16.00 cm. Find the total surface area of the solid



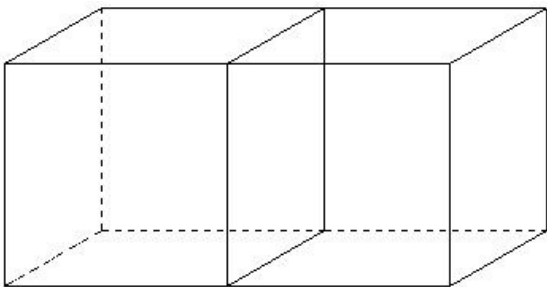
- (i) 2112.00 sq.cm (ii) 2292.00 sq.cm (iii) 2072.00 sq.cm (iv) 2272.00 sq.cm (v) 1882.00 sq.cm

6. A solid consists of a cylinder with two hemispherical ends with length 22.00 cm and diameter 11.00 cm. Find the total surface area of the solid



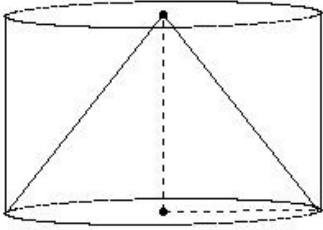
- (i) 1060.86 sq.cm (ii) 1420.86 sq.cm (iii) 1300.86 sq.cm (iv) 870.86 sq.cm (v) 1140.86 sq.cm

7. Two cubes each of volume 2744.00 cu.cm are joined end to end . Find the surface area of the resulting cuboid.



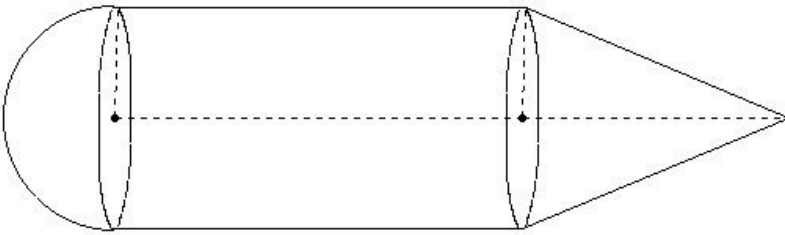
- (i) 1820.00 sq.cm (ii) 1700.00 sq.cm (iii) 1990.00 sq.cm (iv) 2130.00 sq.cm (v) 1960.00 sq.cm

8. From a circular cylinder of diameter 19.00 cm and height 12.00 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.



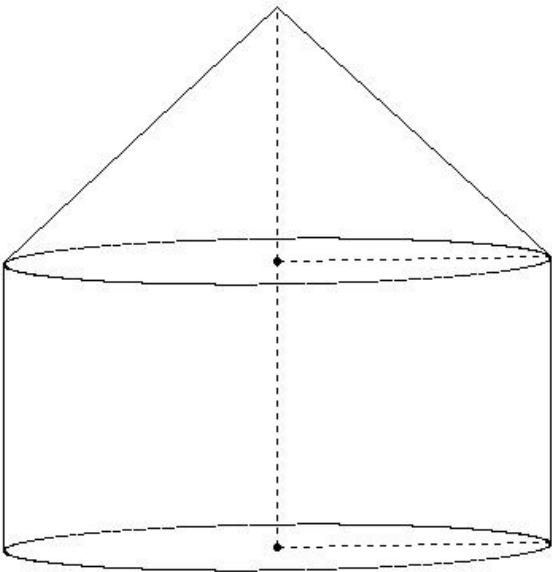
- (i) 1417.33 sq.cm (ii) 1737.33 sq.cm (iii) 1607.33 sq.cm (iv) 1457.33 sq.cm (v) 1287.33 sq.cm

9. A solid consists of a right circular cylinder with a hemisphere on one end and a cone on the other. The radius and height of the cylindrical part are 7.00 cm and 26.00 cm respectively. The radii of the hemispherical and conical parts are the same as that of the cylindrical part. Calculate the total surface area of the solid, if the height of the conical part is 17.00 cm



- (i) 1856.36 sq.cm (ii) 1886.36 sq.cm (iii) 1576.36 sq.cm (iv) 1726.36 sq.cm (v) 2096.36 sq.cm

10. A tent is in the form of a cylinder surmounted by a cone. The height of the tent above the ground is 34 m and the height of the cylindrical part is 18.00 m. If the diameter of the base is 34.00 m, find the quantity of canvas required to make the tent. Allow 14% extra for folds and for stitching.



- (i) 3654.92 sq.m (ii) 3474.92 sq.m (iii) 3614.92 sq.m (iv) 3834.92 sq.m (v) 3344.92 sq.m

## Assignment Key

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1) (ii)

2) (v)

3) (i)

4) (iv)

5) (i)

6) (v)

7) (v)

8) (iv)

9) (i)

10) (iii)