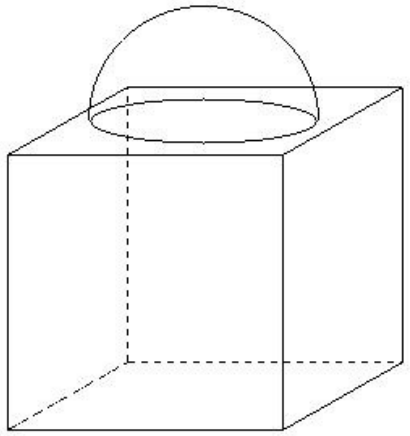
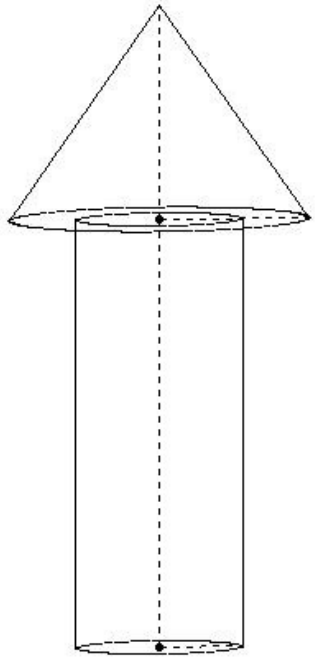
1. If two solids, a cube and a hemisphere are combined such that the base of the block is a cube with edge 17.00 cm and the hemisphere fixed on the top has a diameter of 14.00 cm, find the total surface area of the block.



(i) 2038.00 sq.cm (ii) 2058.00 sq.cm (iii) 1768.00 sq.cm (iv) 1888.00 sq.cm (v) 1618.00 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 13.00 cm , while the height of the cylindrical part is 26.00 cm. The base of the conical portion has a diameter of 18.00 cm while the base diameter of the cylindrical portion is 10.00 cm. If the conical portion is painted with white and cylindrical portion with gray, find the area of the rocket painted with each of these colors



(i) white area = 624.20 sq.cm , gray area = 896.71 sq.cm

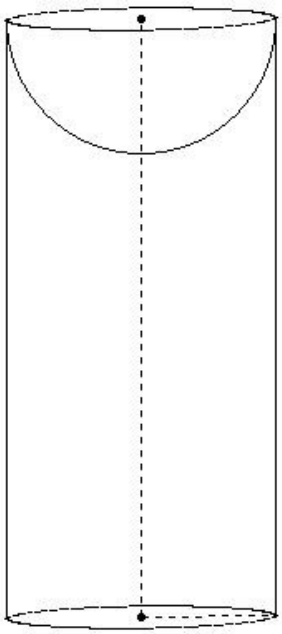
(ii) white area = 625.20 sq.cm , gray area = 897.71 sq.cm

(iii) white area = 623.20 sq.cm , gray area = 895.71 sq.cm

(iv) white area = 621.20 sq.cm , gray area = 893.71 sq.cm

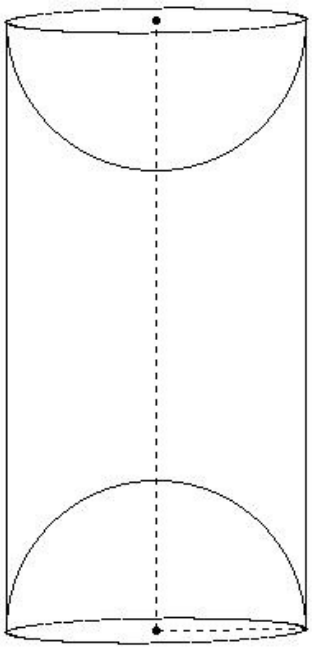
(v) white area = 622.20 sq.cm , gray area = 894.71 sq.cm

3. A hemispherical depression is cut out from one face of a cylinder. The height of the cylinder is 36.00 cm and its radius is 8.00 cm. Find the total surface area of the solid



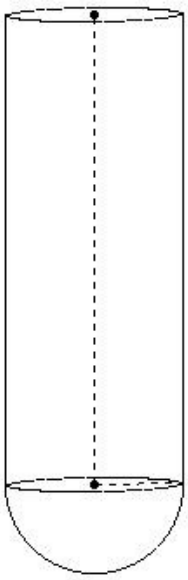
(i) 2563.71 sq.cm (ii) 2413.71 sq.cm (iii) 2373.71 sq.cm (iv) 2683.71 sq.cm (v) 2173.71 sq.cm

4. A hemispherical depression is cut out from both ends of a cylinder. The height of the cylinder is 37.00 cm and its radius is 9.00 cm. Find the total surface area of the solid



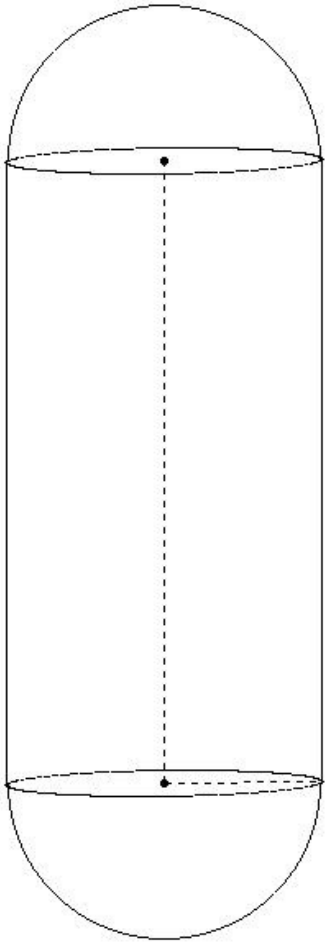
(i) 2891.43 sq.cm (ii) 3291.43 sq.cm (iii) 3111.43 sq.cm (iv) 3381.43 sq.cm (v) 2961.43 sq.cm

5. A solid consists of a cylinder with one hemispherical end with length 27.00 cm and diameter 10.00 cm. Find the total surface area of the solid



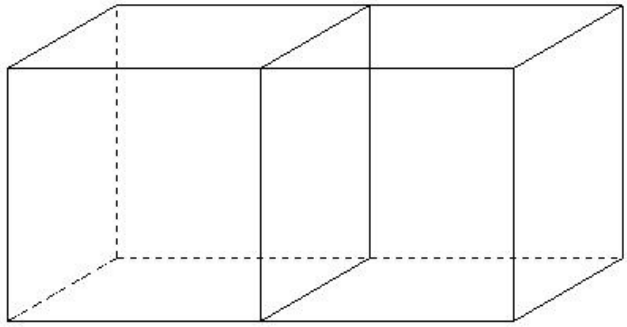
(i) 1084.29 sq.cm (ii) 1054.29 sq.cm (iii) 1164.29 sq.cm (iv) 1344.29 sq.cm (v) 834.29 sq.cm

6. A solid consists of a cylinder with two hemispherical ends with length 38.00 cm and diameter 19.00 cm. Find the total surface area of the solid



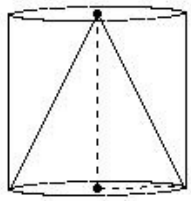
(i) 3683.71 sq.cm (ii) 3233.71 sq.cm (iii) 3353.71 sq.cm (iv) 3403.71 sq.cm (v) 3563.71 sq.cm

7. Two cubes each of volume 4096.00 cu.cm are joined end to end . Find the surface area of the resulting cuboid.



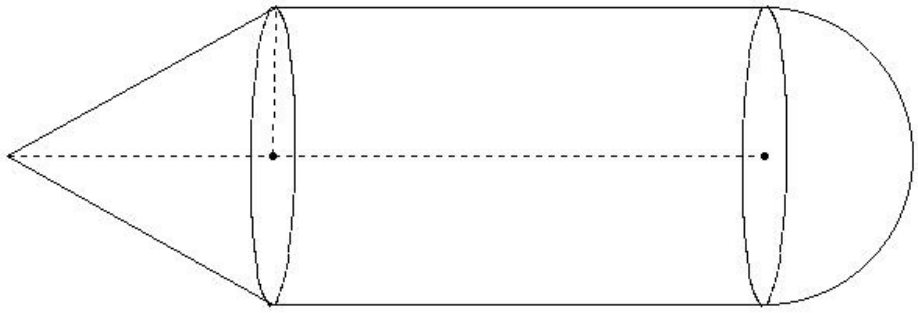
(i) 2680.00 sq.cm (ii) 2560.00 sq.cm (iii) 2400.00 sq.cm (iv) 2810.00 sq.cm (v) 2520.00 sq.cm

8. From a circular cylinder of diameter 10.00 cm and height 10.00 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.



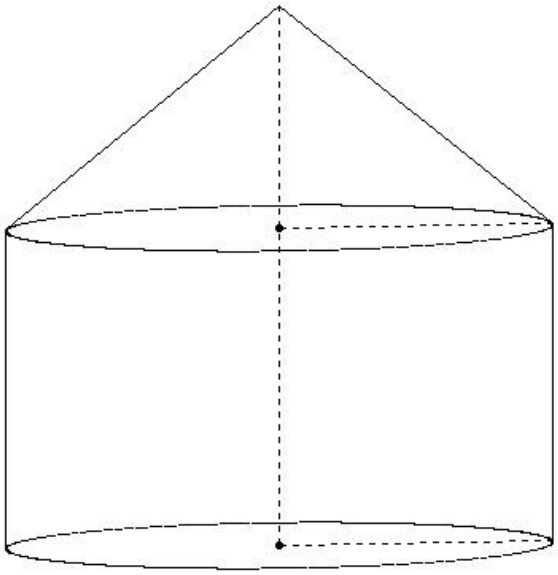
(i) 554.54 sq.cm (ii) 566.54 sq.cm (iii) 568.54 sq.cm (iv) 581.54 sq.cm (v) 583.54 sq.cm

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 9.50 cm and 31.50 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) 3029.60 sq.cm (ii) 2899.60 sq.cm (iii) 3169.60 sq.cm (iv) 3209.60 sq.cm (v) 2849.60 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 20.00 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) 3697.55 sq.m (ii) 4007.55 sq.m (iii) 3797.55 sq.m (iv) 3777.55 sq.m (v) 3637.55 sq.m

Assignment Key

1) (iv)	2) (iii)	3) (ii)	4) (iii)	5) (i)	6) (iv)
7) (ii)	8) (iii)	9) (i)	10) (iv)		