Volume and surface area
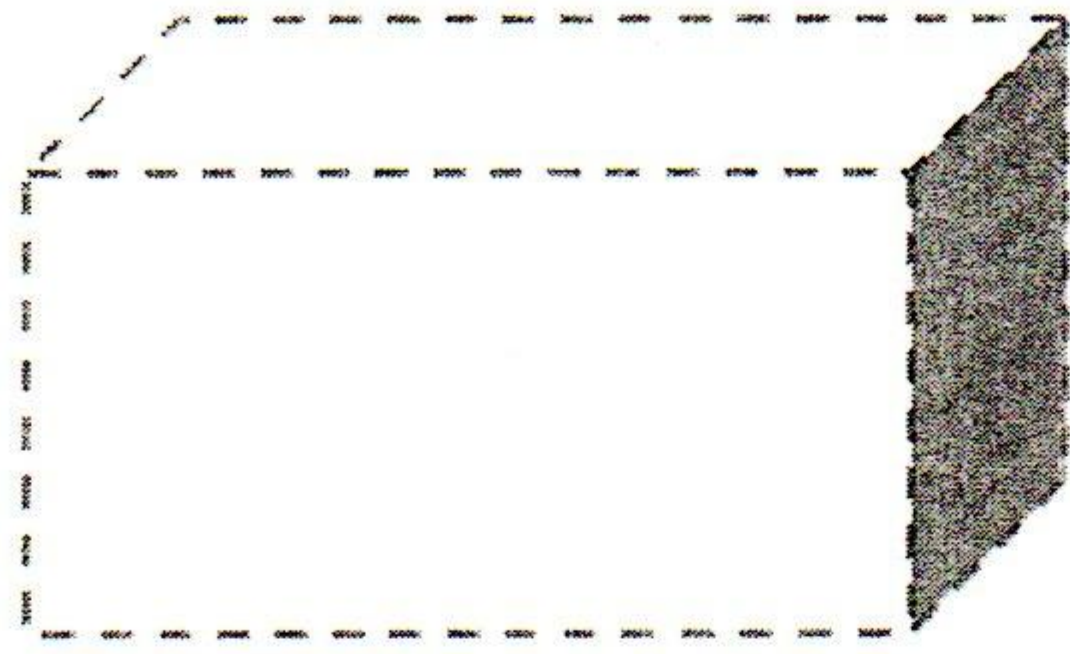
Volumes and Surface areas of Cuboid and Cube.

<u>Cuboid</u>   <u>Cube</u>
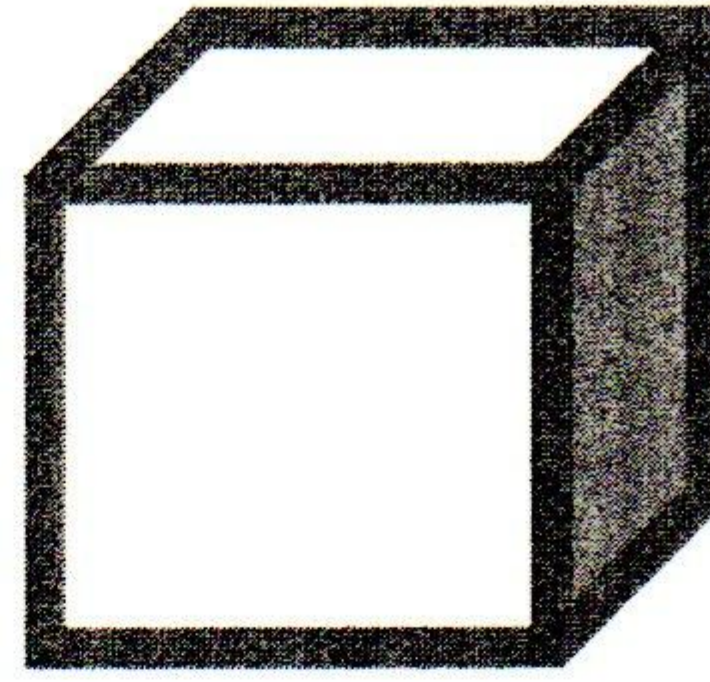
Volume (Capacity)-   L x W x H   Volume- L x L x L
Surface Area- 2 x (LxH + LxW + HxW)   Surface Area- 6 x (LxL)
Total Edge Length-   4 x (L+ W +H)   Total Edge Length- 12 x L

Exercise: 11

Find the volume and surface area of the followings.
1) L=6m, W=4m, H=3m.

a) Volume _____   b) Surface Area   _____

2) L=4.5m, W=1.2m, H=2m

a) Volume _____   b) Surface Area   _____

3) L=30m, W=20m, H=5m.

a) Volume _____   b) Surface Area   _____

4) L=8m, W=2m, H=50cm.

a) Volume _____   b) Surface Area   _____

5Find the total edge length of a cuboid which measures 7x5x3cm^3.

_____

Q6 Find the volume, surface area and edge length of a cube whose length is 4cm.

_____

Q7 Find the volume, surface area and edge length of a cube whose length is 1.5m.

_____

Q8 Find the volume, surface area and edge length of a cube whose length is 0.1m.

_____

Q9 A box of cube shape is required for packaging. Its length is 8cm. Find the capacity of that box.

_____

Q10 Find the capacity of a cuboidal tank which measures 3m in length, 1.5m in width and 2m height.

_____

Q11 The dimension of a room is 10x8x2m^3. Find the capacity of that room.

_____

Q12 A cubical shape box whose length is 10cm has to be painted from outer side. The charge for paint is calculated using per cm^2. Find the total area that is chargeable.

_____

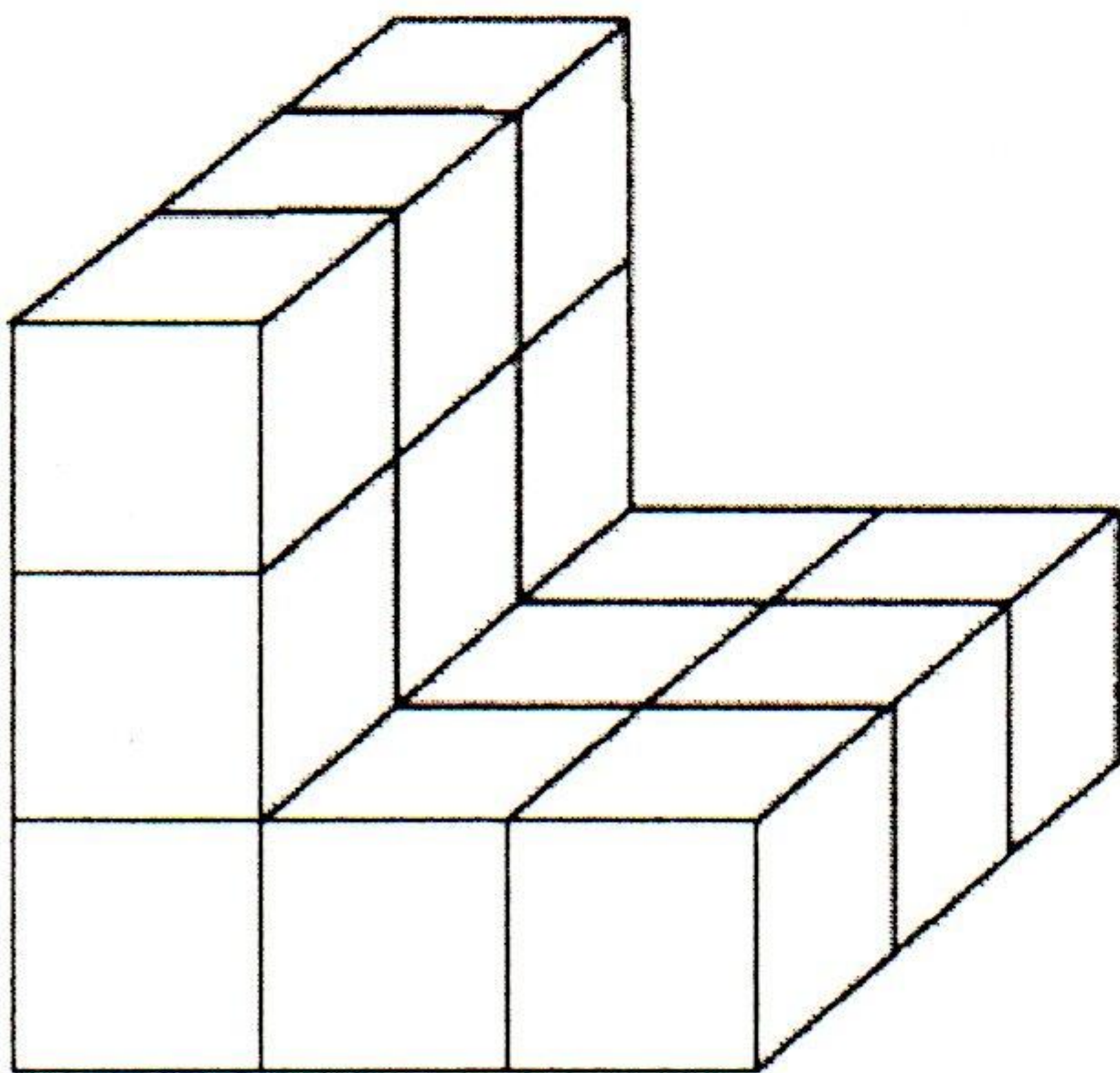Q13 The length of small cube is 1cm, find the total volume of this shape.

_____
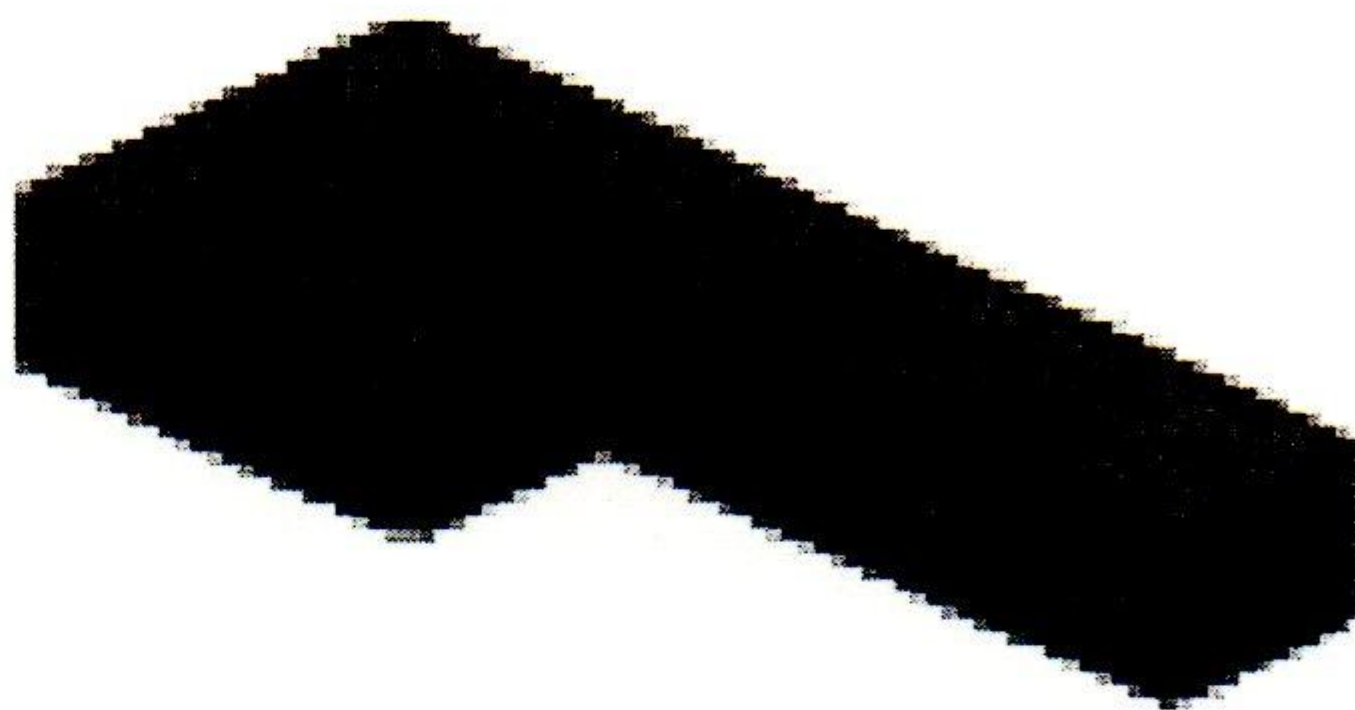
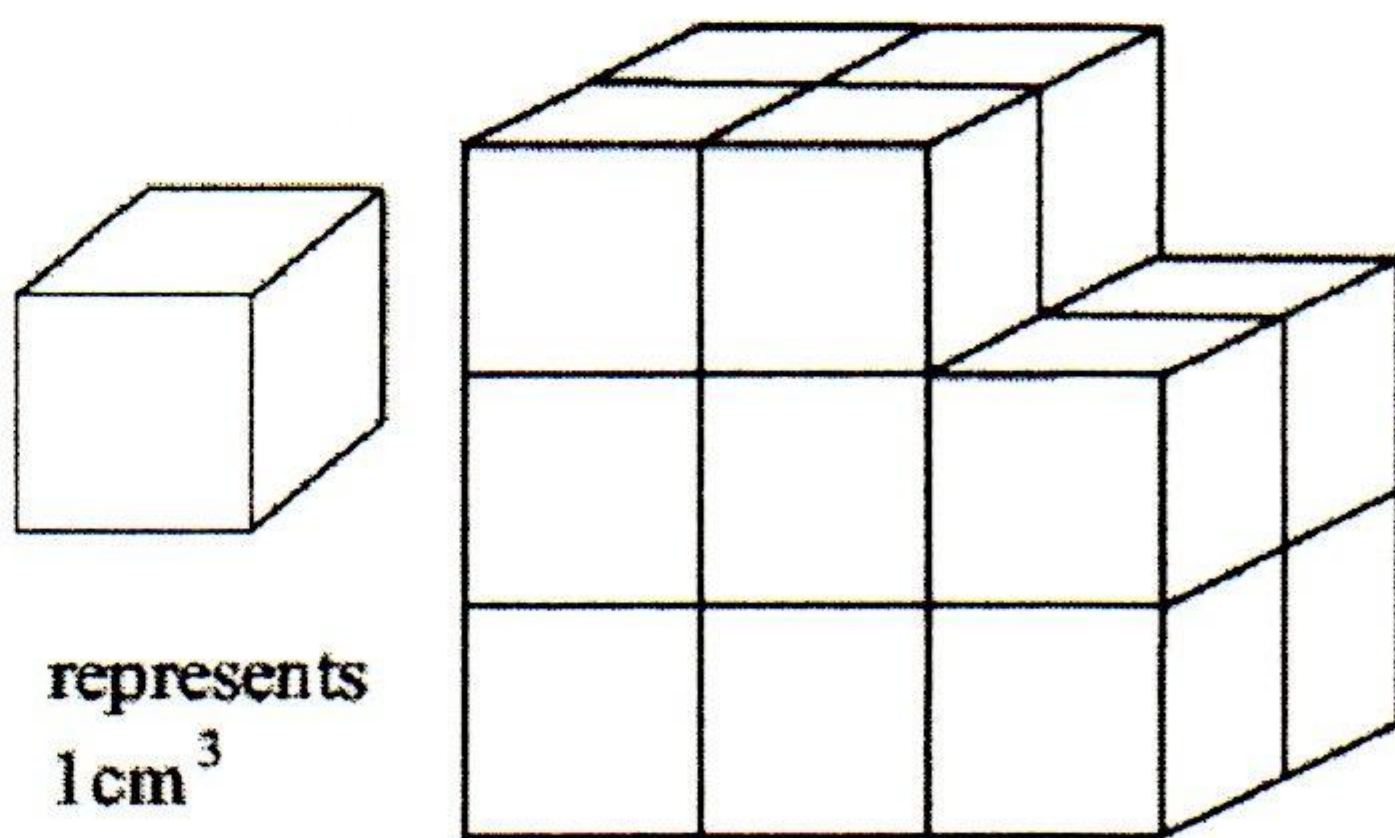Q14 How many small cubes are there in this shape and find the total volume of it.

2cm

_____
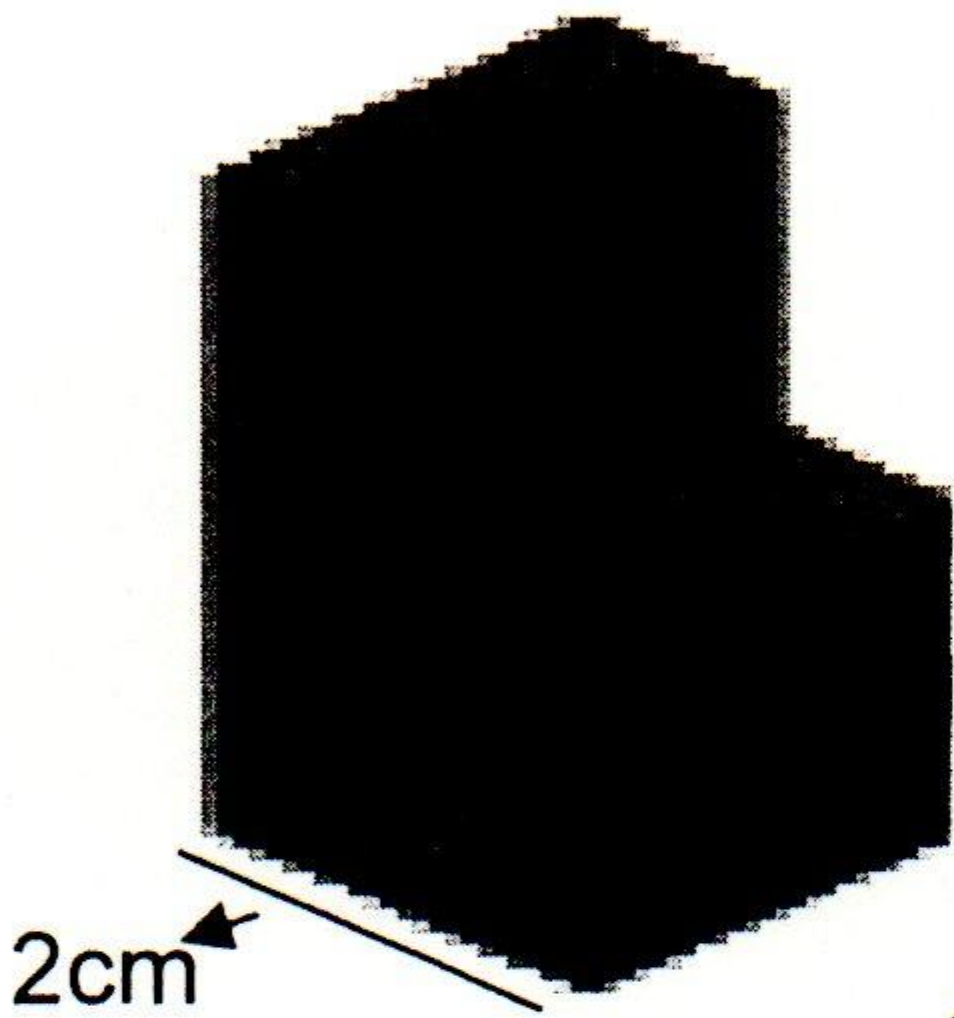
15. Here is a solid prism made of centimetre cubes. Find the volume of the solid prism.

a.   b.

represents
1cm^3

Volume=_____   Volume=_____