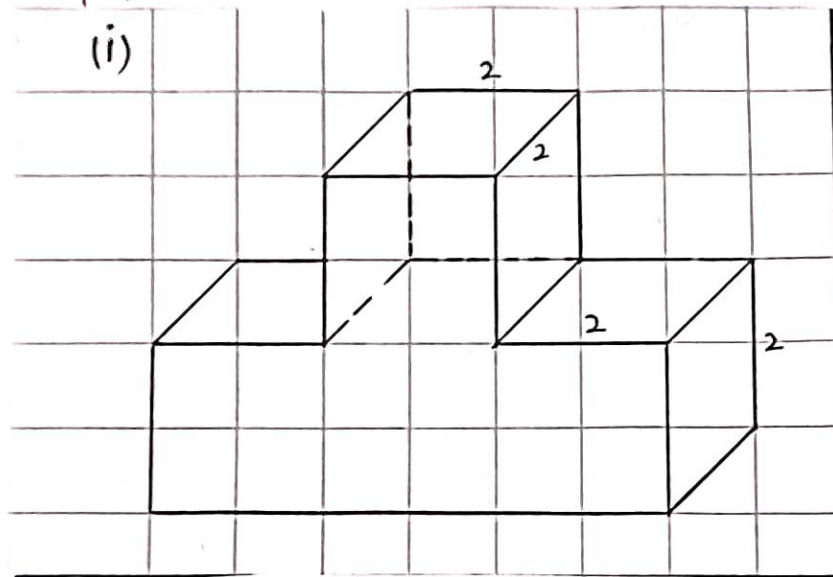


1

Chapter 15 (Visualising Solid Shapes)

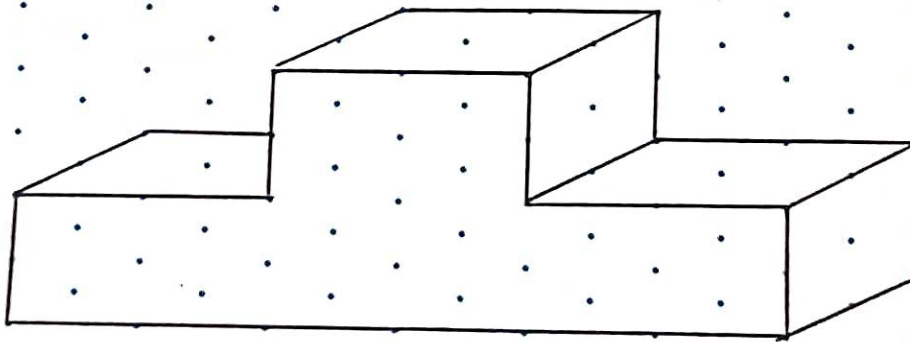
Exercise 15.2

1. Make isometric sketches of following diagrams by using isometric dot papers:

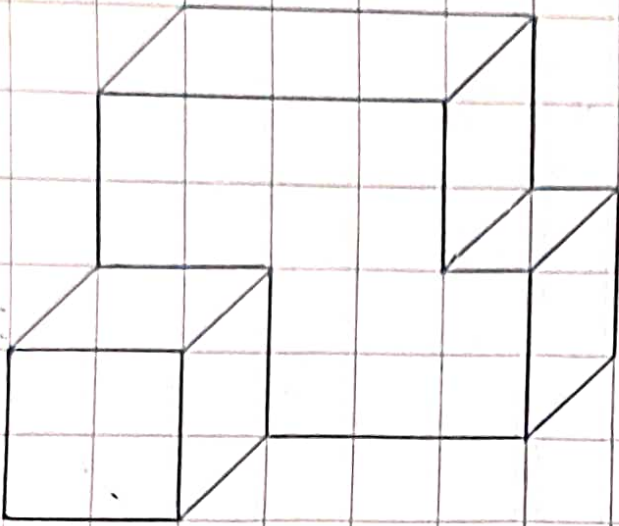


Soln.

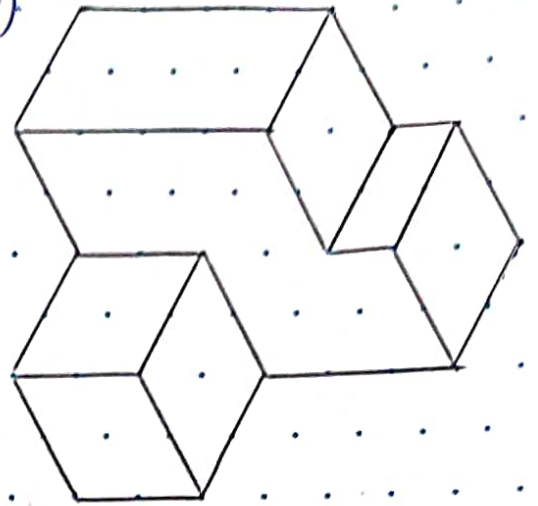
り



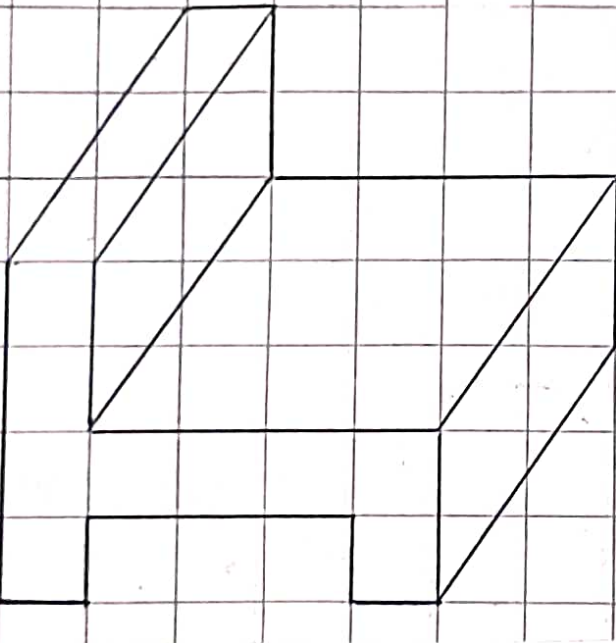
(ii)



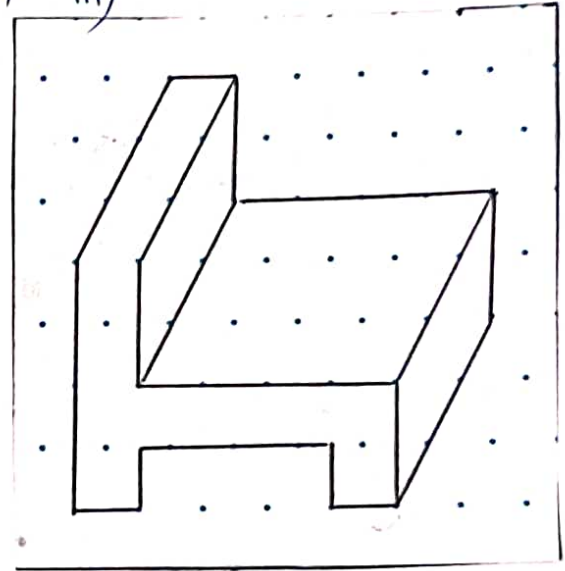
Soln. ii)



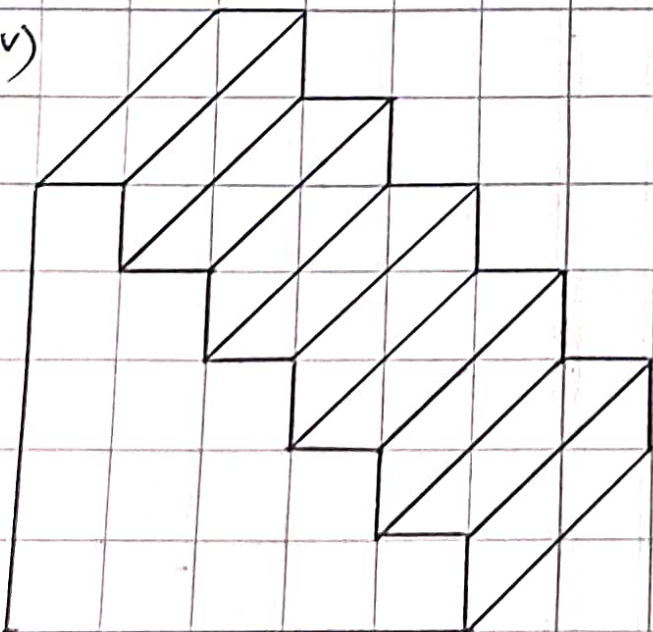
iii)



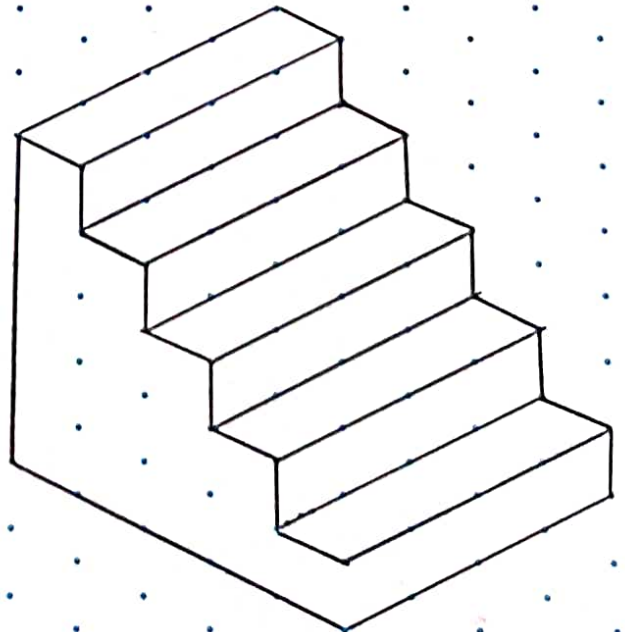
Soln. iii)



iv)



Soln. iv)

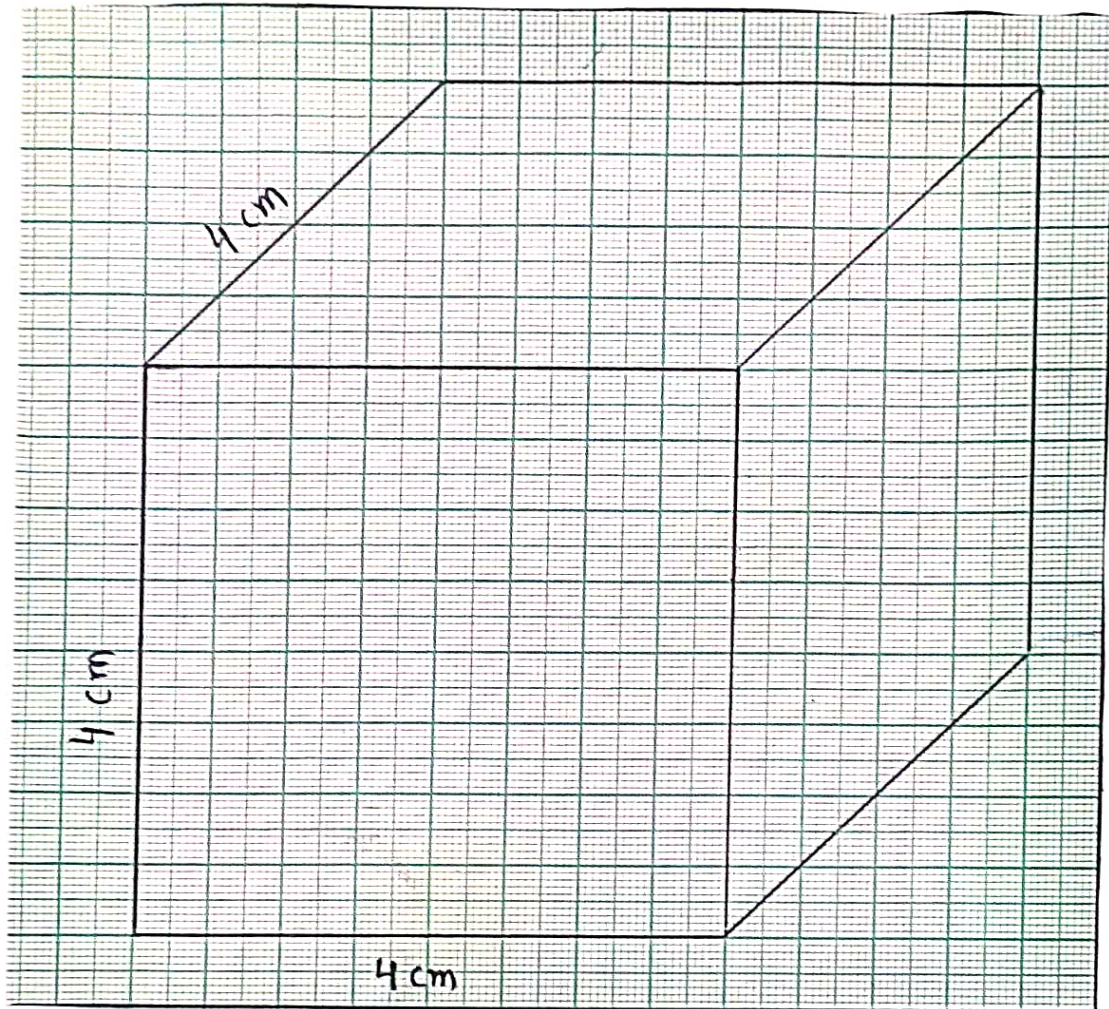


2. Draw i) an oblique sketch ii) Isometric sketch for
- A cube with an edge of 4 cm long.
 - A cuboid of length 6 cm, breadth 4 cm and height 3 cm.

Soln.

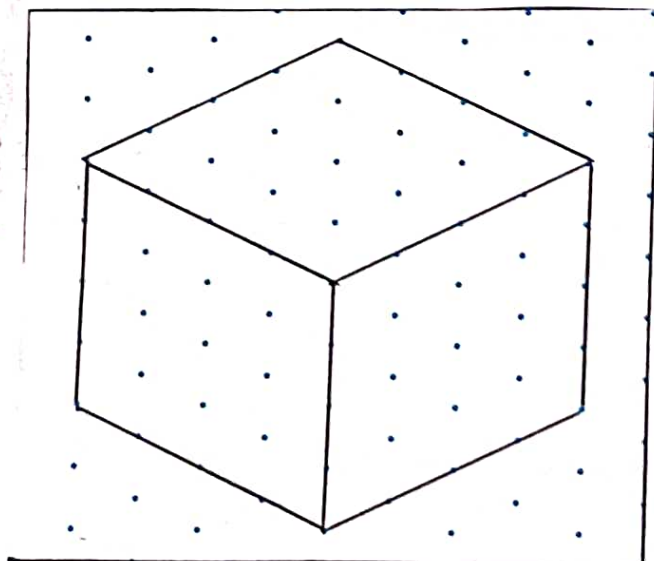
a)

i) An
Oblique
Sketch
of a
Cube

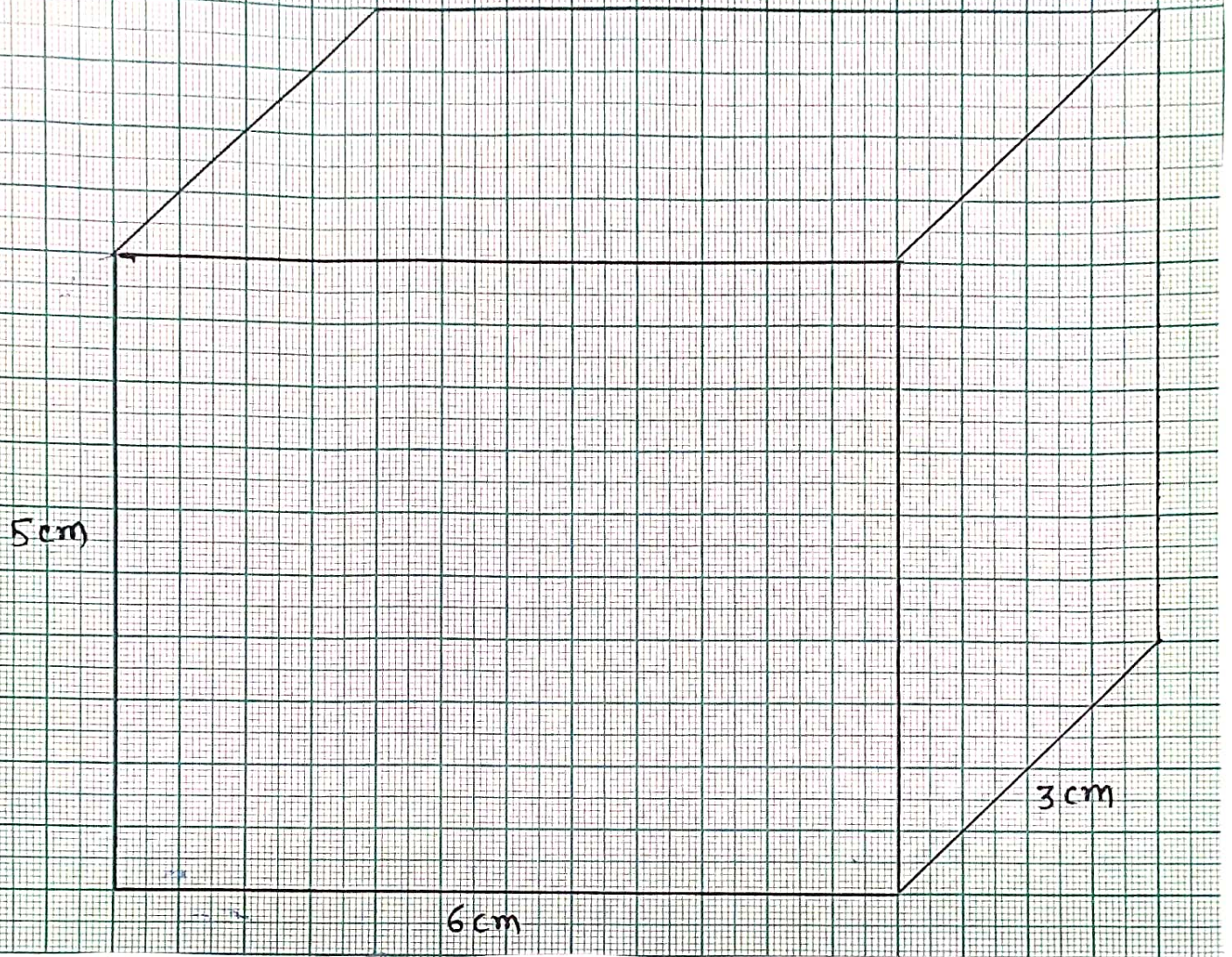


a)

ii) An isometric
sketch of a cube

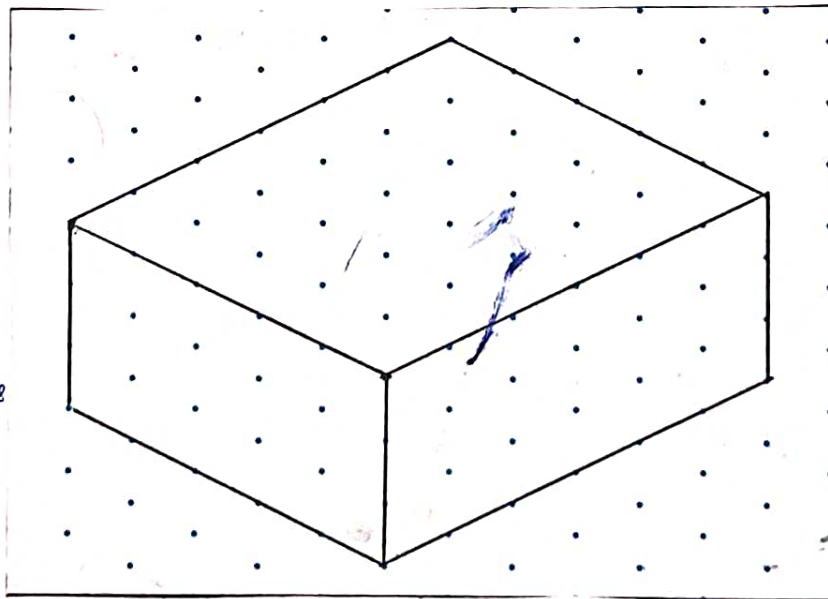


b) i) Oblique sketch of cuboid with given dimensions



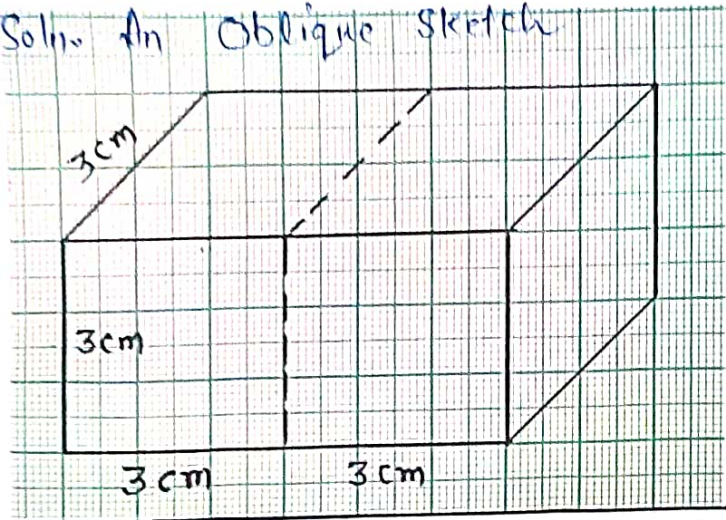
b) ii)

An isometric sketch of cuboid with given dimensions

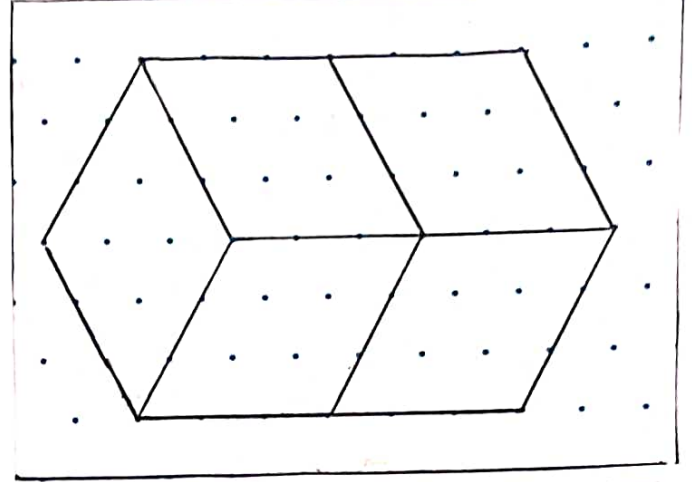


3. Two cubes each with edge 3 cm are placed side by side to form a cuboid, sketch oblique and isometric sketches of this cuboid.

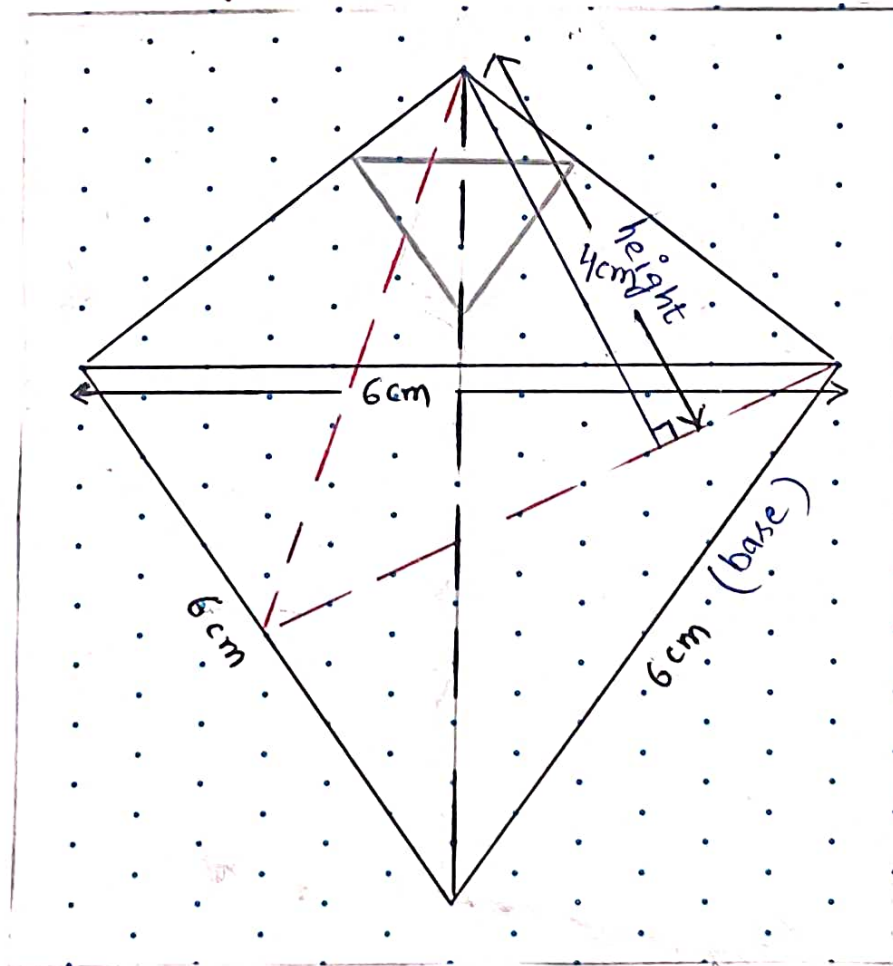
Soln. An Oblique sketch



An isometric sketch



4. Draw an isometric sketch of triangular pyramid with base as equilateral triangle of 6 cm and height 4 cm.

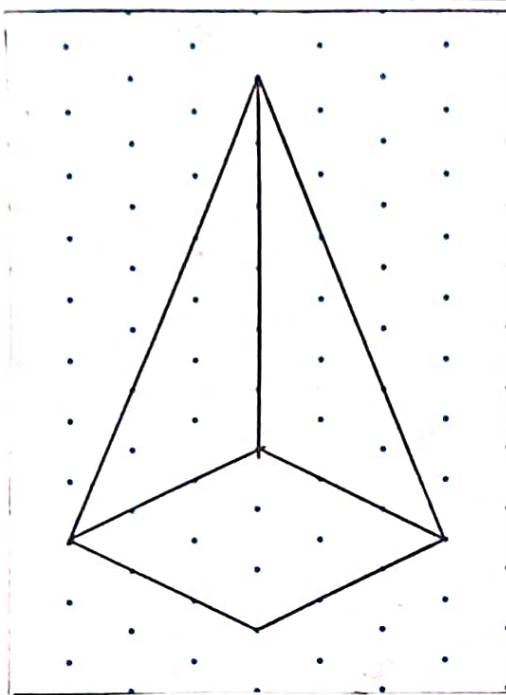


5. Draw an isometric sketch of square pyramid.

Soln's

An isometric

sketch



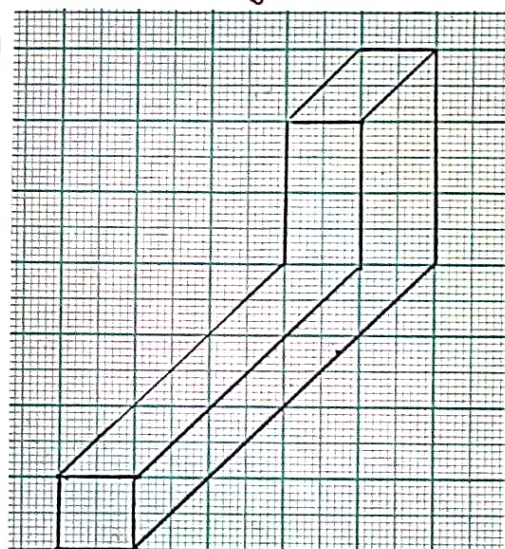
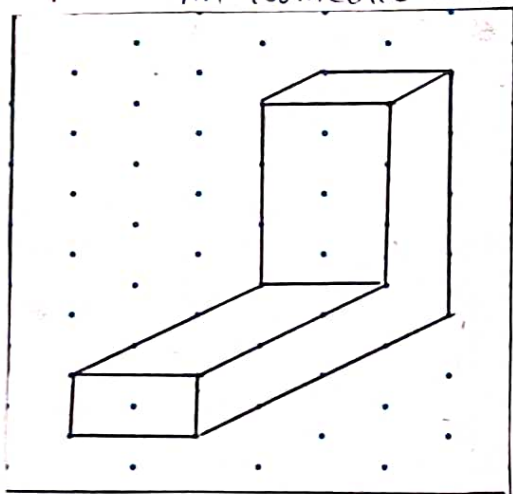
6. Make an oblique sketch for each of the given isometric

shapes:

Soln. i)

An isometric sketch

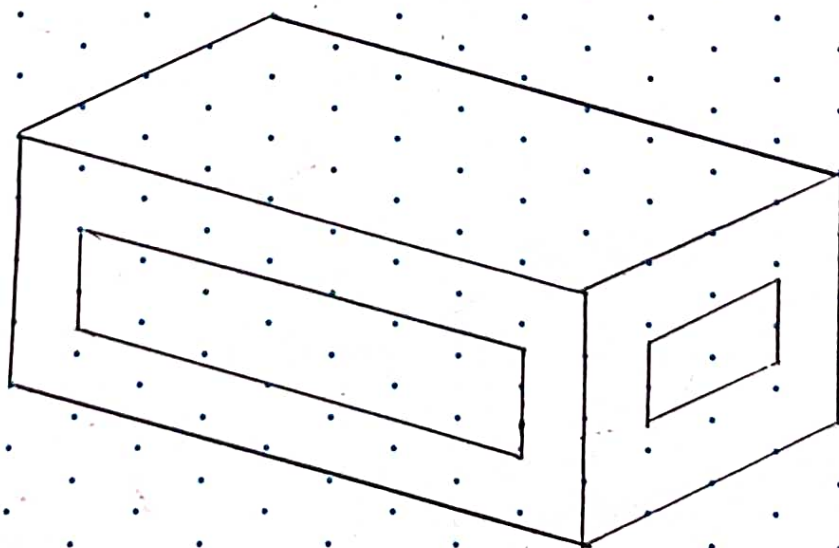
i)



An
oblique
sketch

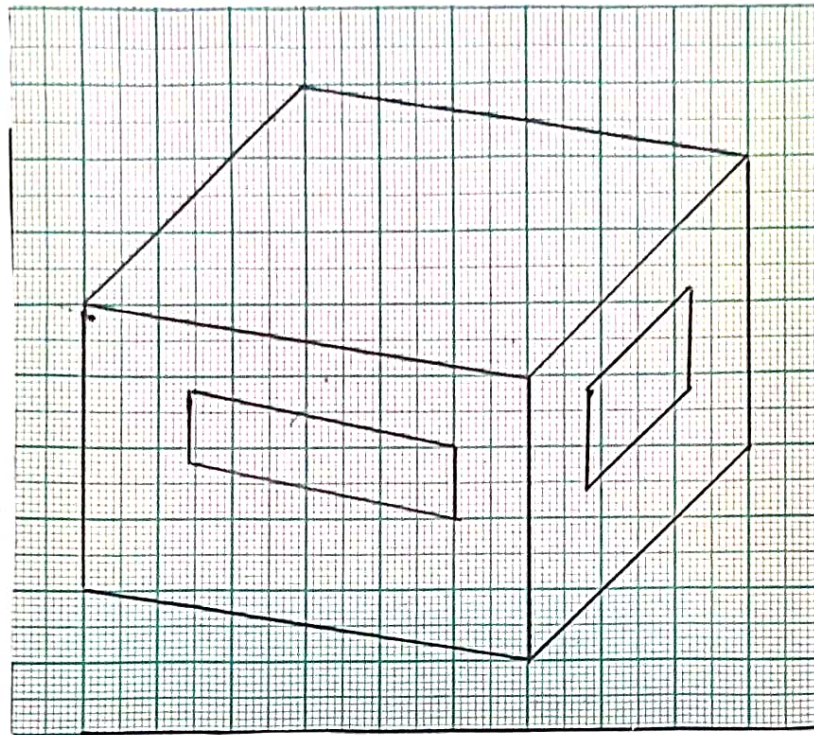
ii)

An
isometric
sketch



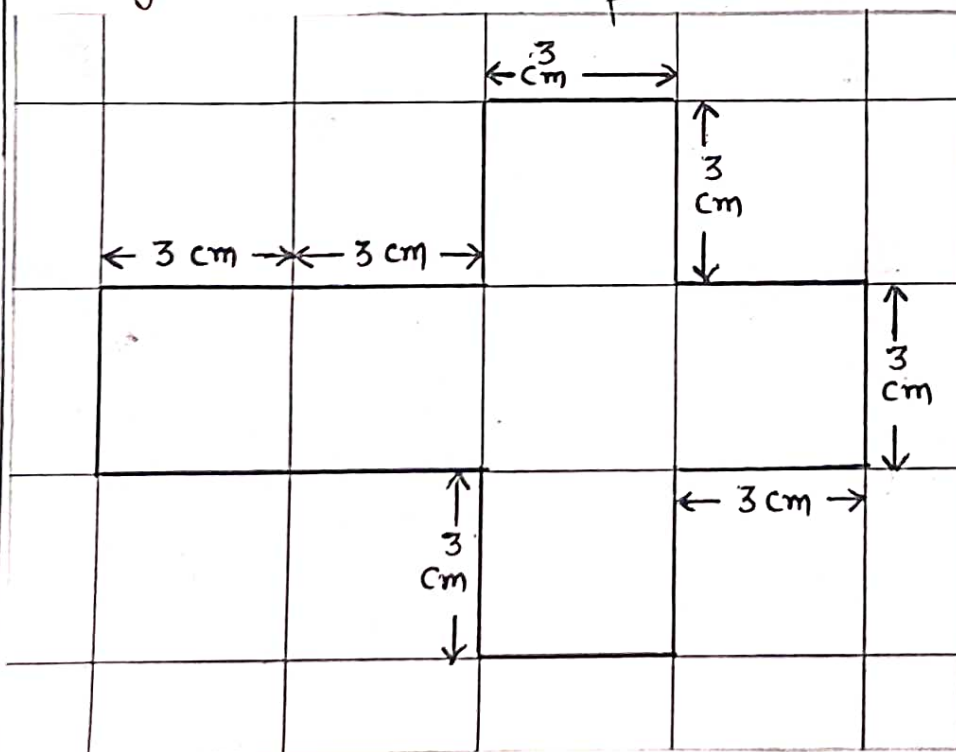
Soln. ii)

An oblique
sketch

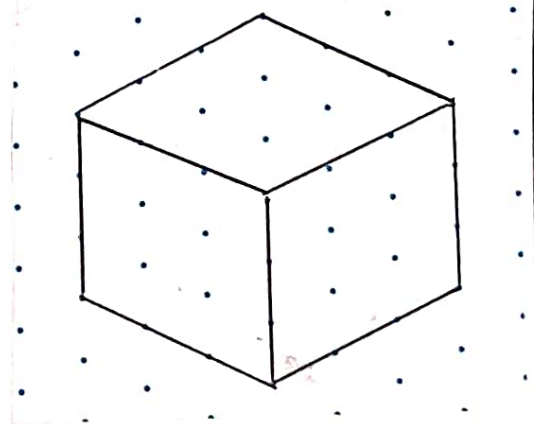


7. Using an isometric dot paper, draw the solid shape formed by the given net.

Net of a cube



Soln. An isometric
sketch of
Cube



8. Multiple choice questions

i) An oblique sheet is made up of

- (a) Rectangles (b) Squares
(c) Right angled triangles (d) Equilateral triangles
- Soln. b) Squares.

ii) An isometric sheet is made up of dots forming

- (a) Squares (b) Rectangles
(c) Equilateral triangles (d) Right angled triangles

Soln. (c) Equilateral triangles.

iii) An oblique sketch has

- a) Proportional lengths (b) Parallel lengths
c) Non proportional lengths d) Perpendicular lengths

Soln. (c) Non proportional lengths.

iv) An isometric sketch has

- a) Non proportional lengths (b) Parallel lengths
c) Perpendicular lengths d) Proportional lengths

Soln. (c) Perpendicular lengths.

v) Isometric sketches shows objects of

- a) Two dimensions (b) Shadows
c) Three dimensions d) One dimension

Soln. (c) Three dimensions.