

Visualising Solid Shapes

Exercise 15.1

1.

i) \rightarrow (f)

ii) \rightarrow (e)

iii) \rightarrow (b)

iv) \rightarrow (a)

v) \rightarrow (c)

vi) \rightarrow (d)

2.

i) Does not form cube

ii) Forms cube

iii) Forms cube

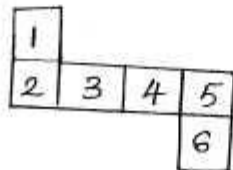
iv) Forms cube

v) Does not form cube

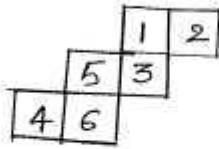
vi) Forms cube

3.

i)



ii)



4.

i) Yes

ii) No, Because ~~one~~

Pairs of opposite faces are

$$1, 4 \Rightarrow 1 + 4 = 5 \neq 7$$

$$2, 5 \Rightarrow 2 + 5 = 7 = 7$$

$$3, 6 \Rightarrow 3 + 6 = 9 \neq 7$$

All don't have sum 7! So given die is not showing for die

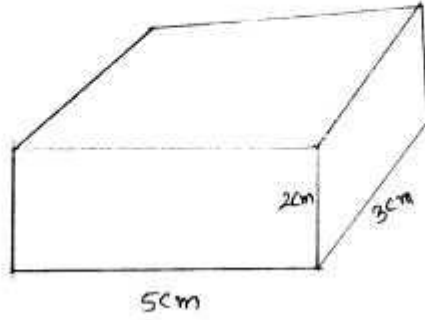
5.



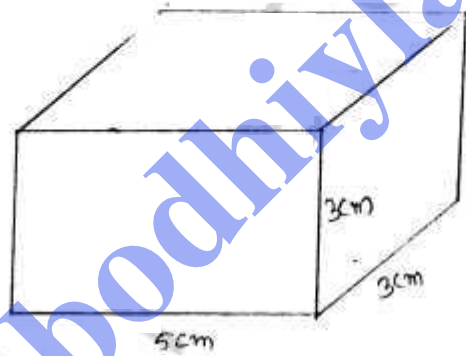
Exercise 15.2

1.

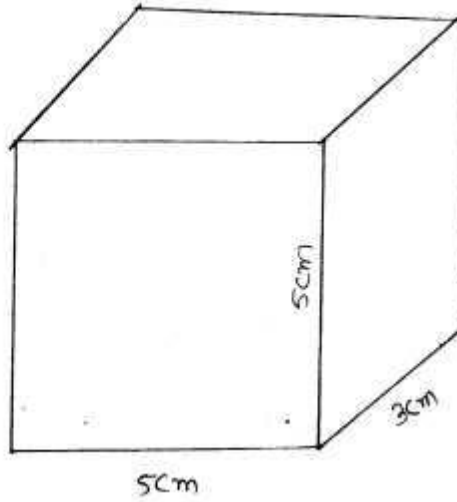
i) Height - 2cm



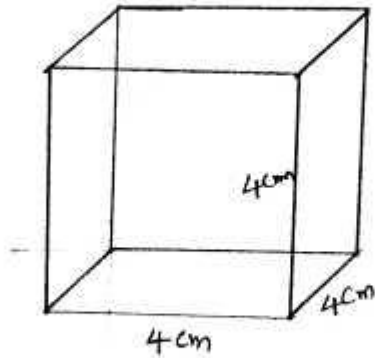
ii) Height 3cm.



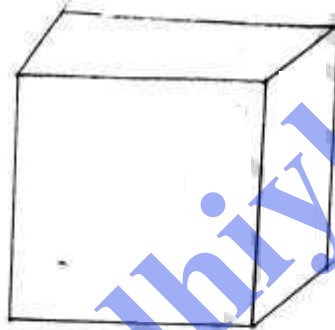
iii) Height 5cm.



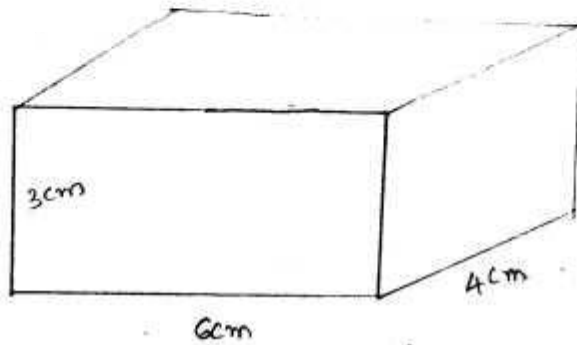
- a) A cube with an edge 4cm long
→ oblique sketch



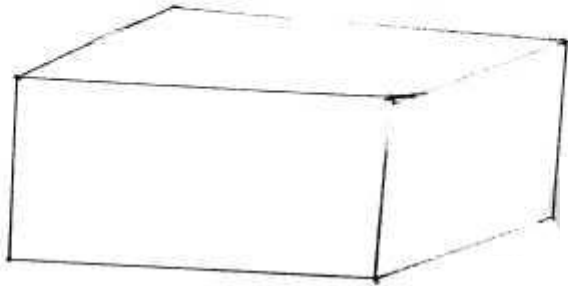
- ii) Isometric View.



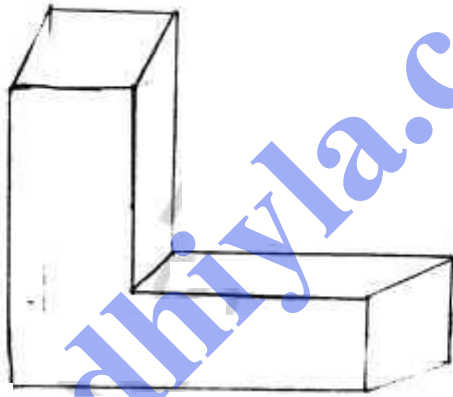
- b) Cuboid with length 6cm, breadth 4cm and height 3cm.
→ oblique sketch



ij) isometric sketch

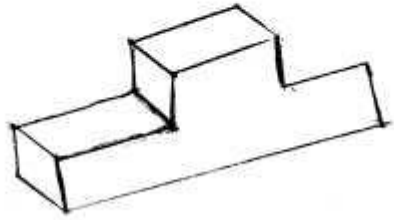


3.

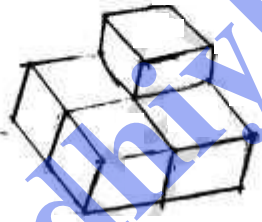


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4.
(i)



(ii)



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Exercise 15.3

1.

i) 30

ii) 27

iii) 46

2.

a) A brick → i) Vertical cut: Rectangle ii) Horizontal cut: Rectangle

b) A round apple → i) Circle ii) Circle

c) A die → i) Square ii) Square

d) A circular pipe → i) Circle ii) Rectangle

e) An ice cream cone → i) Triangle ii) Circle

f) A square pyramid → i) Triangle ii) Square

3.

⊗ (1) (2) (3)

a) Side View Top View Front View

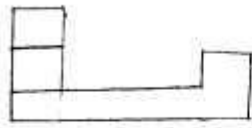
b) Front (or) Top Side View Top (or) Front

c) Top View Side View Front View

d) Front (or) Side Side (or) Front Top View

e) Top View Side View Front View

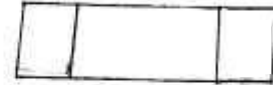
4.
(i)



Front View

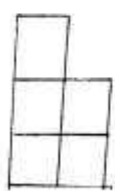


Side View

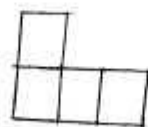


Top View

(ii)



Front View



Side View



Top View

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