

Chapter—10

Visualising Solid Shapes

1. Draw the following 3-D shapes :
 - (i) Cuboid (ii) Cube (iii) Triangular Pyramid
 - (iv) Triangular Prism
2. What is the least number of planes that can enclose a solid? What is the name of the solid?
3. Fill in the blanks:
 - (i) A cube hasverices,edges and.....faces.
 - (ii) The point at which three faces of a 3-D figure meet is known as its.....
 - (iii) A cuboid is also known as a rectangular.....
 - (iv) A triangular pyramid is also called as.....
 - (v) A square prism is same as a.....

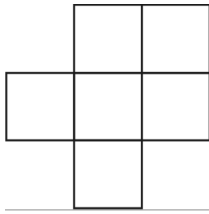
4. Complete the following table:

Name of solid	No. of Faces (F)	No. of Vertices (V)	No. of Edges (E)
Cuboid			
Triangular prism			
Triangular pyramid		4	6
Square Pyramid			
Rectangular pyrmid	5 $\left\{ \begin{array}{l} 1 \text{ rectangular} \\ 4 \text{ triangular} \end{array} \right.$		

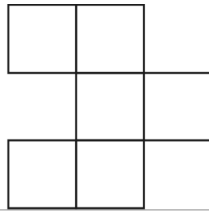
5. Give example of any three 3-D shapes that are non — polyhedron.
6. Using Euler's formula, complete the following.

Faces (F)	6	5	8
Vertices (V)	$V_1 = \underline{\hspace{2cm}}$	$V_2 = \underline{\hspace{2cm}}$	12
Edges (E)	12	8	$E_1 = \underline{\hspace{2cm}}$

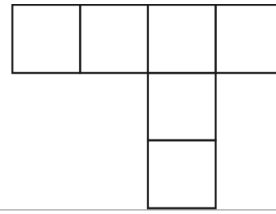
7. Which among the following are nets for a cube?



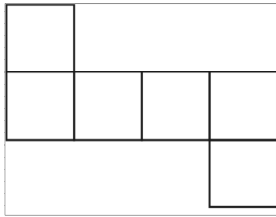
(i)



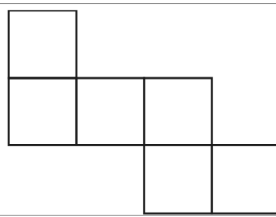
(ii)



(iii)

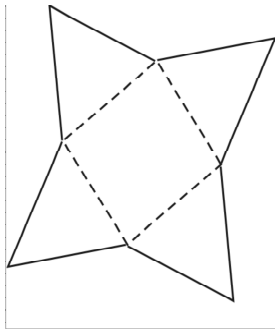


(iv)

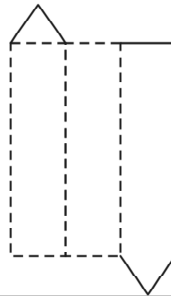


(v)

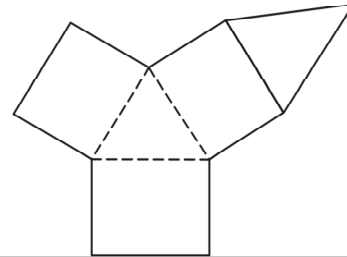
8. Name the polyhedron that can be made by folding each net:



(i)

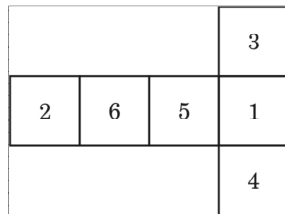


(ii)

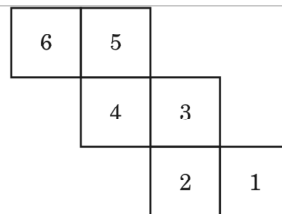


(iii)

9. Dice are cubes where the numbers on the opposite faces must total 7 which of the following are dice?



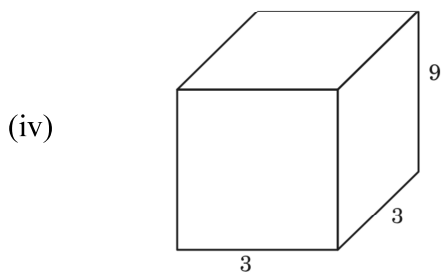
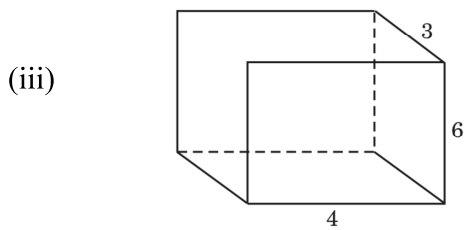
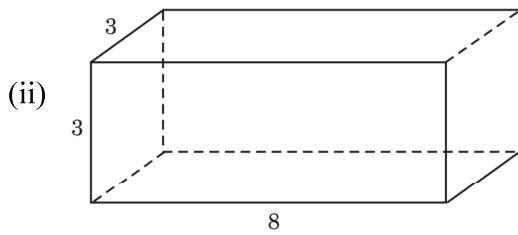
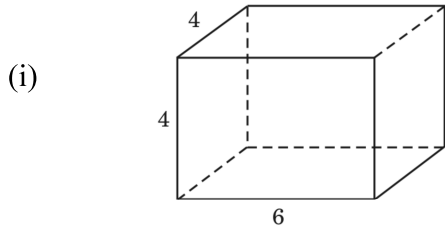
(i)



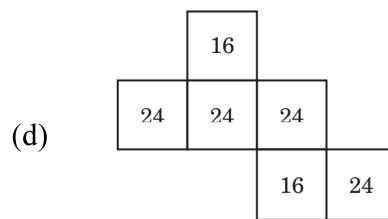
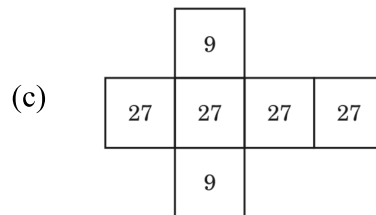
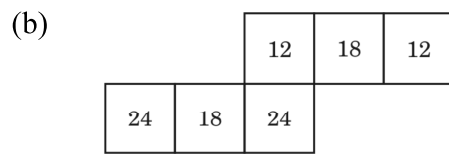
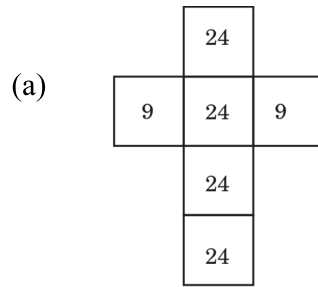
(ii)

10. Match the following

Prisms



Net with areas of faces

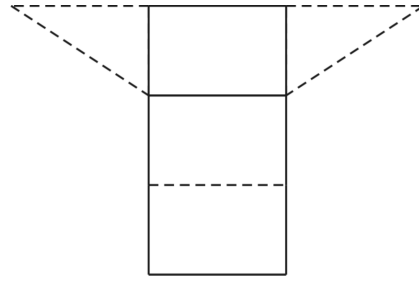


11. Choose the correct option :

- (i) An iron almirah is an example of a
 (A) Cuboid (B) Cube (C) Cylinder (D) Rectangular pyramid
- (ii) What is the minimum number of faces a pyramid can have?
 (A) 1 (B) 3 (C) 5 (D) 4

(iii) The net given alongside is of

- (A) Triangular pyramid
- (B) Triangular prism
- (C) Square Pyramid
- (D) Pentagonal pyramid



(iv) Which of the following solids has the maximum number of vertices?

- (A) Tetrahedron
- (B) Cuboid
- (C) Octahedron
- (D) Cylinder

(v) The number of faces in a rectangular prism is :

- (A) 6
- (B) 4
- (C) 8
- (D) 12

12. Can a polyhedron have 8 faces, 14 edges and 6 vertices? Specify reason.