

Ch-10 Visualising Solid Shapes

1. Fill in the blanks:

- (i) An object with no thickness is called a _____ shape.
- (ii) The objects that have thickness and occupy space are called _____ shapes.
- (iii) The solids made up of polygons are called _____.
- (iv) The surfaces of a solid shape are called its _____.
- (v) A _____ is a polyhedron whose base and top are congruent polygons and other faces i.e. lateral faces are parallelograms in shape.
- (vi) A square pyramid has four _____ faces and one _____ face.
- (vii) A triangular prism has three _____ shaped faces.
- (viii) A cuboid is known as a rectangular _____.
- (ix) A _____ pyramid is called a tetrahedron.
- (x) The minimum number of faces that a polyhedron can have is _____.

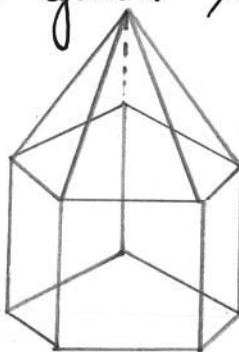
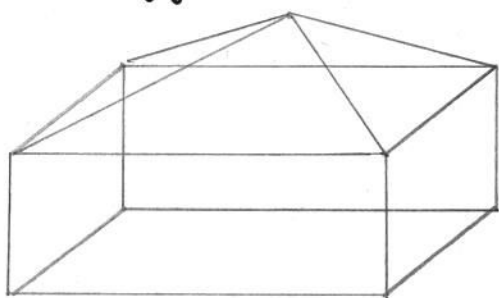
2. Complete the following table & verify Euler's formula for each solid

Solid	No. of faces F	No. of vertices V	No. of edges E
(a) Cuboid			
(b) Triangular Prism			
(c) Square pyramid			
(d) Pentagonal Prism			
(e) Hexagonal Pyramid			

3. What is a hexagonal prism?
4. Can a polyhedron have 22 faces, 38 edges and 40 vertices? Justify your answer.
5. Write down the number of faces, vertices and edges of a cylinder.
6. Find the missing values using Euler's formula:

	Vertices	Faces	Edges
(a)	12	8	?
(b)	?	5	8
(c)	10	?	15

7. Verify Euler's formula for given solids:



8. Draw Front View, Top View & Side View for each of the following

