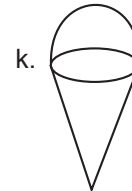
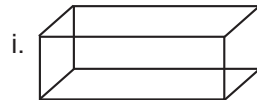
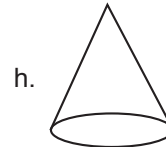
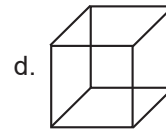
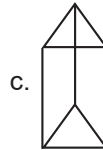
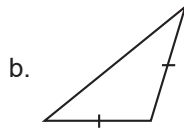


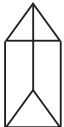
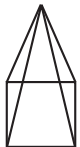


Worksheet

1. Represent a cuboid of length 8 cm, breadth 6 cm and height 4 cm on a sheet of paper. Fold it along its edges to make a cuboid. Provision should be made for flaps.
2. Draw a net of a square pyramid.
3. Take a sheet of cardboard of size 22 cm × 35 cm. Fold it to make a cylinder of height 35 cm. Find the diameter of the cylinder so formed.
4. Draw a net of a cube of side 6 cm.
5. Classify the following shapes as two-dimensional or three-dimensional. Also write the name of the shape.



6. Verify Euler's formula:

Solids	Faces	Vertices	Edges	$F + V - E$
				
				
				
				

7. Fill in the blanks.
- A square pyramid has ____ faces, ____ vertices and ____ edges.
 - The intersection of two adjacent faces of a solid is called an ____.
 - A plane surface enclosed by a number of edges is called a ____.
 - A point where three or more edges meet is called a ____.
 - A triangular pyramid having all faces as equilateral triangles of the same size is called ____.
 - For a polyhedron, if F is the number of faces, V is the number of vertices and E is the number of edges, then $F + V = 2 +$ ____ . It is called ____.

Answers to Worksheet

5. a. Circle b. Isosceles triangle c. Prism d. Cube
 e. Triangular pyramid f. Square pyramid g. Cube h. Cone
 i. Cuboid j. Rectangle k. Cone surmounted by hemisphere

6.

Solids	F	V	E	$F + V - E$
Cube	6	8	12	$6 + 8 - 12 = 2$
Tetrahedron	4	4	6	$4 + 4 - 6 = 2$
Triangular prism	5	6	9	$5 + 6 - 9 = 2$
Square pyramid	5	5	8	$5 + 5 - 8 = 2$
It is observed that $F + V - E$ is always 2.				

Euler's formula is verified.

7. a. 5, 5, 8 b. edge c. face d. vertex
 e. Tetrahedron f. E , Euler's formula