10. Visualizing Solid Shapes

Q 1 What is a hexogonal prism?

Mark (1)

Q 2 How many vertices are there in a pyramid with a square base?

Mark (1)

Q 3 How many edges are there in a cuboid?

Mark (1)

Q 4 How many edges are there in a triangular pyramid?

Mark (1)

Q 5 How many vertices are there in a triangular pyramid?

Mark (1)

Q 6 How many faces are there in a triangular prism?

Mark (1)

Q 7 What are the three views in a solid?

Mark (1)

Q 8 What are regular polyhedrons?

Mark (1)

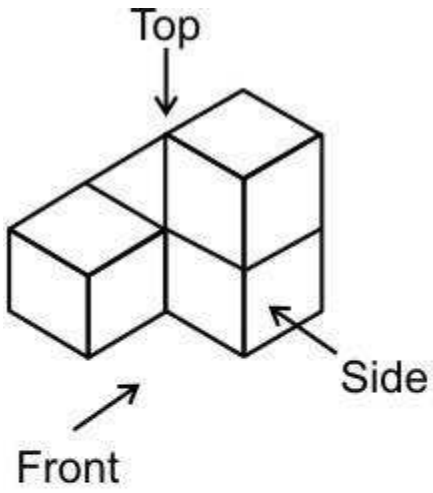
Q 9 A pyramid with square base has 5 faces and 8 edges. By Euler's formula, find the vertices of the pyramid.

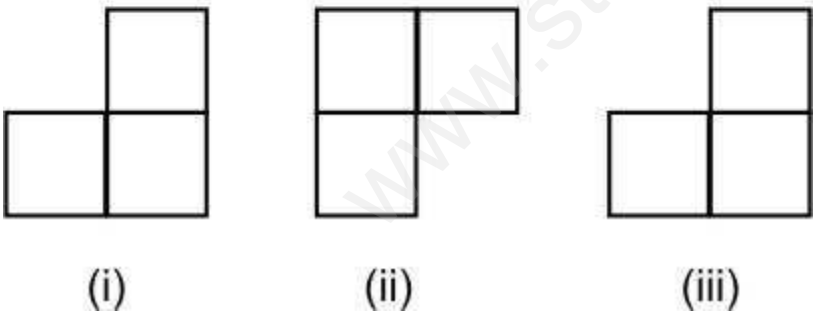
Marks (2)

Q 10 Can a polyhedron have 20 faces, 40 edges and 30 vertices?

Marks (2)

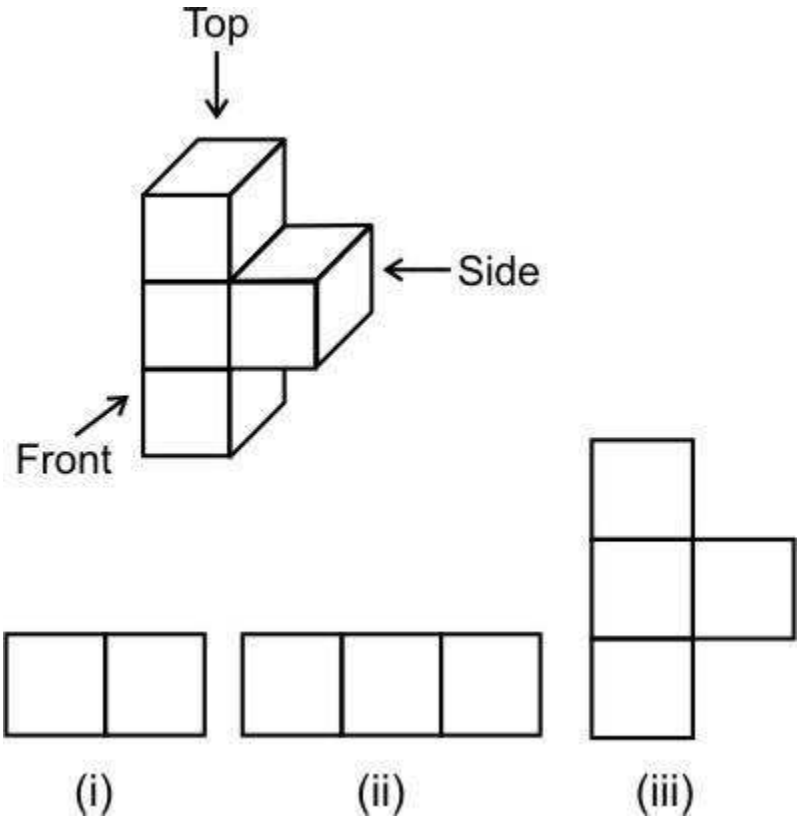
Q 11 For the given solid, identify the top view, front view and side view.





Marks (2)

Q 12 Identify the top view, front view and side view for the given solid.



Marks (2)

Q 13 Give two basic differences between a prism and a pyramid.

Marks (2)

Q 14 Can a polyhedron have for its faces

a) 3 triangles?

b) a square and four triangles?

Marks (2)

Q 15 Give the importance of the scale in a map.

Marks (2)

Q 16 Give two differences between a picture and a map.

Marks (2)

Q 17 State and verify the Euler's Formula for a rectangular prism.

Marks (2)

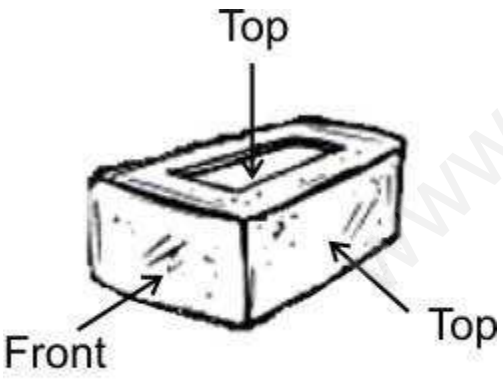
Q 18 Find the number of edges, vertices and faces in a cylinder.

Marks (2)

Q 19 State and verify the Euler's Formula for a cube.

Marks (2)

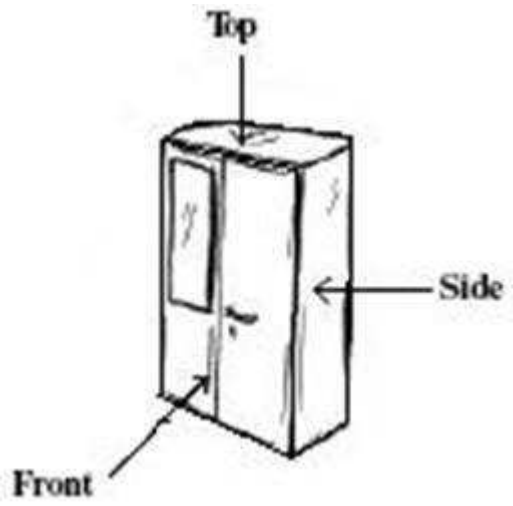
Q 20 Draw the three views of a brick.



A brick

Marks (3)

Q 21 Draw the front, side and top view of an almirah.

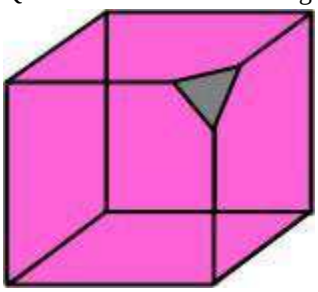


Marks (3)

Q 22 Find the number of edges, vertices and faces in a rectangular pyramid.

Marks (3)

Q 23 Find the number of edges, vertices and faces in a given solid.

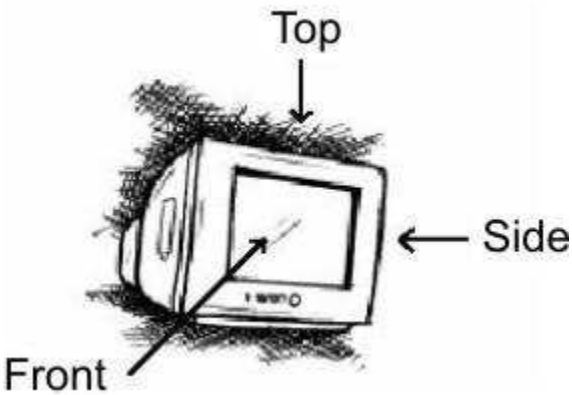


Marks (3)

Q 24 State and verify the Euler's Formula for a triangular pyramid.

Marks (3)

Q 25 Draw the front, side and top view of a television.



Marks (3)

Q 26 By using Euler's formula find the unknown.

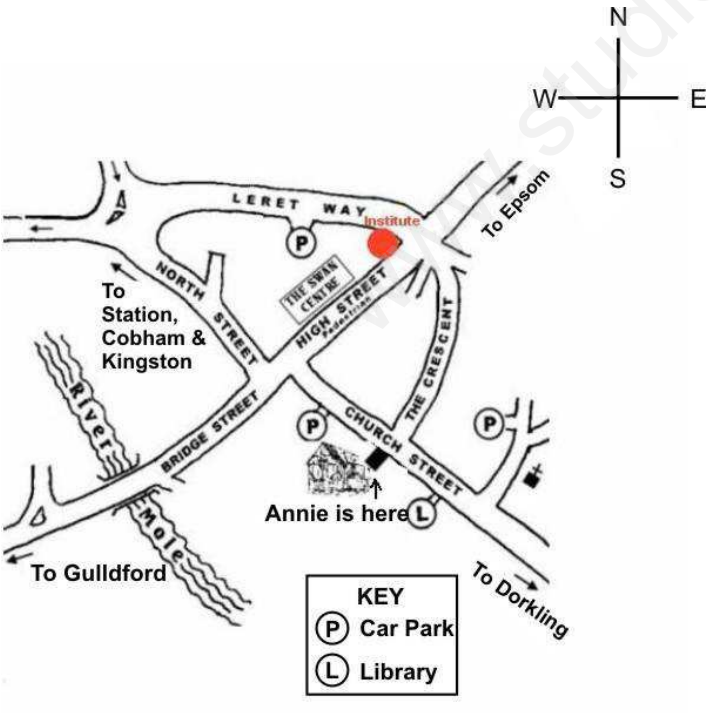
a) Vertices = 12 , Faces = 4, Edges = ?

b) Faces = 5 , Edges = 8, Vertices = ?

c) Edges = 2 , Vertices = 3, Faces = ?

Marks (3)

Q 27 Look at the map given below:



Answer the following:

(a) Mark a green 'X' at the intersection of Church Street and High Street and a blue 'Y' at the intersection of North Street and Leret Way.

(b) Highlight the shortest street route followed by Annie from her current position to the Institute in pink.

(c) Which is further east, The Swan Centre or Institute?

Marks (5)

Most Important Questions

Q 1 What are two-dimensional shapes?

Q 2 What are three-dimensional shapes?

Q 3 T/F.

If we add the dimension 'height' to a rectangle(with certain length & breadth),we obtain a cuboid.

Q 4 A three dimensional shape is _____ object.(solid/plane)

Q 5 A two dimensional shape is _____ shape.(solid/plane)

Q 6 The three views in a solid are:

Q 7 The most important part of a map is the _____.(scale, location)

Q 8 _____ are used to depict different objects/places in a map.(Symbols/landmarks)

Q 9 T/F:

In a map, places that are far & those that are near,will be of the same size to an observer.

Q 10 State the Euler's Formula for polyhedrons.

Q 11 Give two examples of 2d & 3d shapes each.

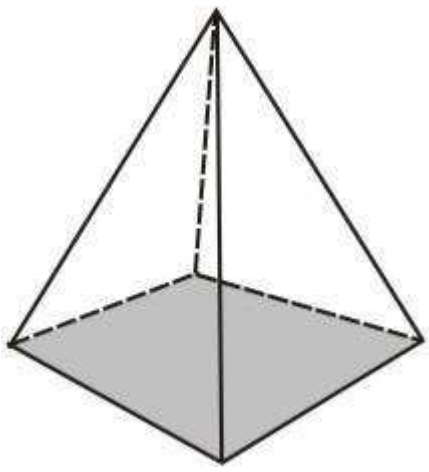
Q 12 Give two differences between a picture & a map.

Q 13 Give the importance of the scale in a map.

Q 14 What are polyhedrons? Give two exs.

Q 15 Give two basic differences between a prism & a pyramid.

Q 16 Verify the Euler`s formula for a Square-pyramid:



Q 17 Draw the three views of a brick.

Q 18 Define :

a) Face b) Edge c) Vertex

Q 19 A pentagonal prism has _____ faces, _____ edges & _____ vertices.

Q 20 A hexagonal pyramid has _____ faces, _____ edges & _____ vertices.

Q 21 Match the front, side & top views of the following :