

15. Visualising Solid Shapes

Question 1.

The number of faces of a rectangular prism is _____.

- (a) 4
- (b) 6
- (c) 3
- (d) None of these

Answer: (b) 6

Question 2. Opposite faces of a die always have a total of dots on them :

- (a) 6
- (b) 5
- (c) 7
- (d) None of these

Answer: (c) 7
Observe a die and see.

Question 4.

The number of edges of a square pyramid is _____.

- (a) 4
- (b) 6
- (c) 8
- (d) None of these

Answer: (c) 8

Question 5.

The number of faces of a triangular pyramid or tetrahedron is _____.

- (a) 4
- (b) 6
- (c) 5
- (d) 1024

Answer: (a) 4

Question 6. Three cubes each with 2 cm edge are placed side by side to form a cuboid. Its length will be :

- (a) 4 cm
- (b) 2 cm
- (c) 6 cm
- (d) None of these

Answer: (c) 6 cm

Each cube has one side 2 cm, therefore sum of three sides is 6 cm.

Question 7.

The number of triangular faces of a triangular prism is _____.

- (a) 2
- (b) 1
- (c) 4
- (d) None of these

Answer: (a) 2

Question 8.

Which of the following is the number of vertices of sphere?

- (a) 0
- (b) 1
- (c) 2
- (d) 4

Answer: (a) 0

Question 9. There are edges in a cube.

- (a) 8
- (b) 12
- (c) 4
- (d) None of these

Answer: (b) 12

There are 12 line segments that form the skeleton of the cube.

Question 10.

A die is cut horizontally. What is the cross-section obtained?

- (a) A triangle
- (b) A rectangle
- (c) A square
- (d) A cube

Answer: (c) A square

Question 11.

The number of faces of a cube is _____.

- (a) 4
- (b) 6
- (c) 8
- (d) None of these

Answer: (b) 6

Question 12. If two cubes of dimensions 2 cm by 2 cm are placed side by side, what would the dimensions of resulting cuboid be ?

- (a) 4, 2, 2
- (b) 2, 4, 2
- (c) 2, 2, 4
- (d) None of these

Answer: (a) 4, 2, 2

When two cubes are kept side by side the length is the only measurement which increases, it becomes $2 + 2 = 4$ cm.

The breadth = 2, cm and the height = 2 cm.

Question 13.

The number of faces of a triangular prism is _____.

- (a) 5
- (b) 6
- (c) 4
- (d) None of these

Answer: (c) 4

Question 14. There are faces in a cube.

- (a) 8
- (b) 4
- (c) 6
- (d) None of these

Answer: (c) 6

The six flat square surfaces that are the skin of the cube.

Question 15.

Cuboid is an example of

- (a) Both
- (b) 2-D shape
- (c) 3-D shape
- (d) None of these

Answer: (c) 3-D shape

Question 16.

The vertical cut of brick will show the cross-section is

- (a) circle
- (b) pentagon
- (c) rectangle
- (d) hexagon

Answer: (c) rectangle

Question 17. There are vertices in a cube.

- (a) 8
- (b) 6
- (c) 4
- (d) None of these

Answer: (a) 8

There are 8 vertices of the cube.

Question 18.

The number of edges of a rectangular pyramid is _____.

- (a) 21
- (b) 8
- (c) 7
- (d) None of these

Answer: (b) 8

Question 19.

The number of edges of a triangular pyramid is _____.

- (a) 8
- (b) 5
- (c) 6
- (d) None of these

Answer: (c) 6

Question 20. Three dimensional shapes have :

- (a) length, breadth, height
- (b) length, breadth
- (c) breadth height
- (d) None of these

Answer: (a) length, breadth, height

Which occupy space and have three demensions.

Question 21.

A cuboid has _____ rectangular faces.

- (a) 8
- (b) 2
- (c) 6
- (d) 4

Answer: (c) 6

Question 22.

Identify the correct statement from the following.

- (a) A triangle has 3 sides and 4 vertices.
- (b) A cylinder has 3 faces.

- (c) All sides of the rectangle are equal.
(d) A cuboid has 4 flat faces and 12 straight edges.

Answer: (b) A cylinder has 3 faces.

Question 23.

The number of faces of a square pyramid is _____.

- (a) 4
(b) 7
(c) 5
(d) None of these

Answer: (c) 5

Question 24.

Rakesh has 10 one rupee coins of similar kind. He puts them exactly one on the other. What shape will he get finally?

- (a) Circle
(b) Cylinder
(c) Cube
(d) Cone

Answer: (b) Cylinder

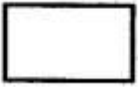
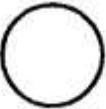
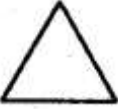
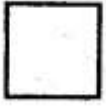
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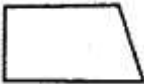
The number of faces of a cylinder is _____.

- (a) 2
(b) 1
(c) 3
(d) None of these

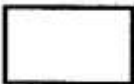
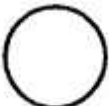
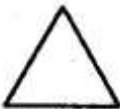
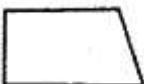
Answer: (a) 2

Match the 2-dimensional figures with the names :

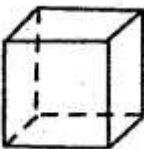
1. 	(a) Circle
2. 	(b) Rectangle
3. 	(c) Square
4. 	(d) Quadrilateral

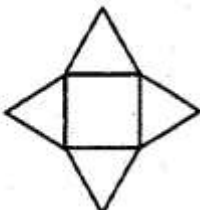
5. 	(e) Triangle
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Answer:

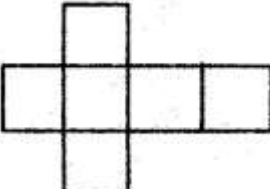
1. 	(b) Rectangle
2. 	(a) Circle
3. 	(e) Triangle
4. 	(c) Square
5. 	(d) Quadrilateral

Match the note with appropriate solids.

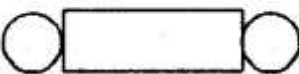
1. 

(a) 

2. 

(b) 

3. 

(c) 

4. 

(d) 

Answer:

1. (b)
2. (c)
3. (d)
4. (a)

Here are the shadows of some 3-D objects when seen under the lamp of an overhead projector. Identify the solid that match each shadow.

1. A circle	(a) a cube
2. A square	(b) a ball

3. A triangle	(c) a cylindrical pipe
4. A rectangle	(c) a cone

Answer:

1. A circle	(b) a ball
2. A square	(a) a cube
3. A triangle	(d) a cone
4. A rectangle	(c) a cylindrical pipe

State whether the given statements are True or False.

Question 1.

The cube can cast a shadow in the shape of a rectangle.

Answer: True

Question 2.

The cube can cast a shadow in the shape of a hexagon.

Answer: False

Fill in the blanks.

1. A net is a sort of skelton outline in 2-D, which when folded, results in a

Answer: 3D

2. The corners of a solid shapes are called its

Answer: vertices

3. Plane figures are of dimensions and solid shapes are of dimensions.

Answer: two, three

4. The line segment of a solid skelton are its

Answer: edges

5. The flat surfaces of solid are its

Answer: faces

6. The circle, the square the rectangle, the quadrilateral and the triangle are examples of figures.

Answer: plane

7. Two types of sketches of a solid are possible.

(i) (ii)

Answer: An delique, an isometric

8. The cube, the cuboid, the sphere, the cylinder, the cone and the pyramid are examples of shapes.

Answer: solid