MATHEMATICS

VISUALISING SOLID SHAPES

1	The net of a solid consists of three rectangles and two triangles. This may be the net of a:			is may be the net of a:
	(A) Cuboid	(B) Pyramid	(C) Triangular Prism	(D) None of these
ANS .	С			
2	A rectangular pyrami	d has:		
	(A) 2 faces	(B) 4 faces	(C) 5 faces	(D) 6 faces
ANS	. C			
3	The other name of a t	etrahedron is:		
	(A) Triangular Pyram (C) Square Pyramid	id	(B) Triangular Prism(D) None of these	
ANS	. A			
4	A square prism has:			
	(A) 5 edges	(B) 8 edges	(C) 12 edges	(D) 15 edges
ANS	. C			
5	Circle is a:			
	(A) Plane figure	(B) Solid figure	(C) Both (A) and (B)	(D) None of these
ANS	. A			
6	The net for a cylinder	without top and botto	m is a:	
	(A) Rectangle	(B) Circle	(C) Triangle	(D) None of these
ANS	. A			
7	A cone has:			
	(A) 1 face	(B) 2 faces	(C) 3 faces	(D) 5 faces

8	The name of the figure which has 6 vertices, 9 edges and 5 faces is:			5:
	(A) Cuboid	(B) Cube	(C) Cone	(D) Triangular Prism
ANS .	. D			
9	Name the solid figure	which has no vertex a	and no edge:	
	(A) Cylinder	(B) Cone	(C) Sphere	(D) Tetrahedron
ANS	. C			
10	A petagonal pyramid	has:		
	(A) 3 vertices	(B) 4 vertices	(C) 6 vertices	(D) None of these
ANS	. C			
11	A line where two fac	es of a solid meet is ca	alled its	
	(A) Face	(B) Edge	(C) Vertex	(D) None of these
ANS .	. В			
12	A square pyramid has	striangula	ar faces.	
	(A) 4	(B) 3	(C) 2	(D) 1
ANS .	. A			
13	A cube has	vertices and	surfaces.	
	(A) 6, 3	(B) 8, 4	(C) 8, 6	(D) 7, 5
ANS . 14	C Number of vertices in	a cone is :		
	(A) 1	(B) 2	(C) 0	(D) None of these
ANS .	. A			

ANS . B

15 Shape of the base of tetrahedron is

(A) Triangular	(B) Square	(C) Rectangle	(D) Circular
----------------	------------	---------------	--------------

ANS . A

- 16 Using Euler's formula find the number of faces in a polyhedron having 6 vertices and 12 edges?
 - (A) 6 (B) 7 (C) 8 (D) 9

ANS . C

17 The figure shows a solid.



Which of the following is net of the solid?



ANS . C

- 18 Which of the following is 3-d figure?
 - (A) Rectangle (B) Cylinder (C) Circle (D) Octagon

ANS . B

19 The figure shows a solid.



Which of the following is a net of the solid?



The figure shows a solid.

Which of the following is a net of the solid?







ANS : (C) sphere

The name of the solid shape is 23







30 The number of faces of the solid shape is









33 The number of faces of the solid shape is



34 The number of edges of the solid shape is



35 Two cubes of edge length 2 cm are placed side by side. The length of the resulting cuboid is
(A) 2 cm
(B) 4 cm
(C) 1 cm
(D) none of these

36	What cross-section do	you get when you giv	e a horizontal cut to a	die?
	(A) Square	(B) Rectangle	C) Triangle	(D) Circle
ANS	: (A) Square			
37	What cross-section do	you get when you giv	e a vertical cut to a bri	ck?
ANS	(A) Square : (A) Square	(B) Rectangle	(C) Triangle	D) Circle
38	What cross-section do	you get when you giv	e a horizontal cut to a	brick?
	(A) Triangle	(B) Circle	(C) Square	(D) Rectangle
ANS	: (D) Rectangle			
39	What cross-section do	you get when you giv	e a vertical cut to a rou	and apple?
	A) Circle	(B) Triangle	(C) Square	(D) Rectangle
ANS	: (A) Circle			
40	What cross-section do	you get when you giv	e a horizontal cut to a	round apple?
ANIC	(A) Circle	(B) Square	(C) Rectangle	(D) Triangle
ANS	(A) Circle			
41	What cross-section do	you get when you giv	e a vertical cut to an ic	e-cream cone?
ANG	(A) Triangle	(B) Circle	(C) Rectangle	(D) Square
ANS	. (A) mangie			
42	What cross-section do	you get when you giv	e a horizontal cut to ar	ice-cream cone?
ANS	(A) Triangle (B) Circle	(B) Circle	(C) Rectangle	(D) Square
1110				
43	The shadow of the lan (A)	np of an a cube when s (D) similar	een under overhead pr	ojector is
ANS	(A) square : (A) square	(B) circle	(C) triangle	(D) rectangle
	. ()			
44	The number of faces (A) 4	of a rectangular prism i	$s_{(C)}$.	(D) None of these
ANS	(A) 4 : (B) 6	(B) 0	(C) 3	(D) None of these
45	Opposite faces of at c	the always have a total $(B) 5$	of dots on them : (C) 7	(D) None of these
ANS	: (C) 7	(D) 5	(\mathbf{C}) /	(D) None of these
	Observe a die and see			
46	The number of edges	of a square pyramid is		
	(A) 4	(B) 6	(C) 8	(D) None of these
ANS	: (C) 8			

47	The number of faces of	of a triangular pyramid	or tetrahedron is	·
	(A) 4	(B) 6	(C) 5	(D) 1024
ANS	: (A) 4			
48	Three cubes each wit	h 2 cm edge are placed	l side by side to form a	cuboid. Its length will
ANS :	(A) 4 cm (C) 6 cm	(B) 2 cm	(C) 6 cm	(D) None of these
	Each cube has one sid	e 2 cm, therefore sum	of three sides is 6 cm.	
49	The number of triangular (A) 2	ular faces of a triangula (\mathbf{P}) 1	ar prism is	(D) None of these
ANS :	(A) 2 (A) 2	(B) I	(C)4	(D) None of these
50	Which of the followint $(A) 0$	$(\mathbf{P})_{1}$ is the number of ver	tices of sphere?	(\mathbf{D}) 4
ANS :		(B) I	(\mathbf{C}) 2	(D) 4
51.	There are	. edges in a cube.		
ANS :	(A) 8 (B) 12	(B) 12	(C) 4	(D) None of these
	There are 12 line segn	nents that form the ske	lton of the cube.	
52	A die is cut horizontal	llv. What is the cross-s	ection obtained?	
ANS :	(A) A triangle(C) A square	(B) A rectangle	(C) A square	(D) A cube
53	The number of faces of	of a cube is		
ANS :	(A) 4 (B) 6	(B) 6	(C) 8	(D) None of these
54	If two cubes of dimendimensions of resulting	nsions 2 cm by 2 cm ar	re placed side by side,	what would the
ANS ·	(A) 4, 2, 2 (A) $4, 2, 2$	(B) 2, 4, 2	(C) 2, 2, 4	(D) Noun of these
AND .	When two cubes are k increases, it becomes The breadth = 2, cm a	tept side by side the left $2 + 2 = 4$ cm. nd the height $= 2$ cm.	ngth is the only measur	rement which
55	The number of faces of	of a triangular prism is	·	
ANS :	(A) 5 (C) 4	(B) 6	(C) 4	(D) None of these
56.	There are	faces in a cube.		
	(A) 8	(B) 4	(C) 6	(D) None of these

ANS	: (C) 6 The six flat square su	urfaces that are the skir	n of the cube.	
57	Cuboid is an example (A) Both	e of (B) 2-D shape	(C) 3-D shape	(D) None of these
ANS	: (C) 3-D shape			
58	The vertical cut of a	brick will show the cro	oss section is	
	(A) circle	(B) pentagon	(C) rectangle	(D) hexagon
ANS	: (C) rectangle			
59	There are	vertices in a cube.		
ANG	(A) 8	(B) 6	(C) 4	(D) None of these
ANS	There are 8 vertices of	of the cube.		
60	The number of edges	of a rectangular pyrar	nid is	
	(A) 21	(B) 8	(C) 7	(D) None of these
ANS	: (B) 8			
61.	The number of edges	of a triangular pyrami	id is	
	(A) 8	(B) 5	(C) 6	(D) None of these
ANS	: (C) 6			
62	Three dimensional sh	napes have :		
	(A) length, breadth, l	neight	(B) length, breadth	
ANG	(C) breadth height (A) longeth breadth h	aiaht	(D) None of these	
ANS	Which occupy space	and have three demen	sions.	
	Whiteh coupy space			
63	A cuboid has	rectangular faces.		
	(A) 8	(B) 2	(C) 6	(D) 4
ANS	: (C) 6			
64	Identify the correct s	tatement from the follo	owing.	
	(A) A triangle has 3	sides and 4 vertices.		
	(B) A cylinder has 3	taces.		
	(C) All sides of the r	ectangle are equal.	at adapa	
ANS	(D) A cubold has 4 I : (B) A cylinder has 3	faces.	it edges.	
65	The number of faces	of a square pyramid is		
	(A) 4	(B) 7	(C) 5	(D) None of these
ANS	: (C) 5	· /	. /	· /

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



Row	Three- Dimensional Figure	Horizontal / Vertical Cut	Cross- section Obtained
Ι		Horizontal	Circle





- 74. The given figure shows a bulb that is kept just above a can of soft drink. What is the shape of the shadow of the can?
 - A) Rectangle
 - B) Circle
 - C) Square
 - D) Triangle
- ANS : B



- 75. The number of cubes in figure below is:
 - A) 7
 - B) 8
 - C) 9
 - D) 10
- ANS : B



76. What is the view of the solid shown in the given figure as seen from the direction indicated by the arrow?





ANS: C

77. What is the view of the solid shown in the given figure as seen from the direction indicated by the arrow?





ANS : B

- 78. The given figure shows a cuboid drawn on the isometric dot sheet. How many cubes, each having a side of length 4 units, can be formed by cutting the given cuboid?
 - A) 1 B) 2
 - C) 3 D) 4



- ANS : B
- 79. The given figure shows the oblique sketch of a cuboid that has a width of 5 units.What is the sum of the areas of the faces of the given cuboid?
 - A) 83 square units B) 166 square units



(width not to scale)

C) 225 square units D) 332 square units

ANS : B

The given figure shows an isometric sketch of a three -80. dimensional

figure.

Which oblique sketch correctly represents the given figure?





How many edges does the following figure have? 81.

> A) 5 B) 8

D) 11

C) 10





ANS : B





86. A solid object when seen from one side, looks like this.



The same solid, when viewed from top, looks like this.



Which of these shapes could it be?



ANS : C

87. Identify the correct statement from the following.

- A) A triangle has 4 sides, three faces and 3 vertices.
- B) A cylinder has 3 faces.
- C) All sides of cuboid are equal.
- D) A cuboid has 4 flat faces and 12 straight edges.
- ANS : B
- 88. Ashok 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
-----------	-------------	---------	---------

ANS : B

89. Match the following.



A) (i) - (A), (ii) - (B), (iii) - (C), (iv) - (D)

B) (i) - (C), (ii) - (A), (iii) - (D), (iv) - (B)

ANS : B

90. Identify the false statement from the following.

A) A cuboid has 3 pairs of opposite faces.

B) The number of vertices of a cube is 6.

C) All sides of a square are equal.

D) A square pyramid is a three-dimensional figure.

ANS : B

91. How many corners does the shape given have?

A) 8 B) 9 C) 12 D) 11



ANS : C

92. What is the number on the face opposite to 4 on a die?

A) 0	B) 3	C) 2	D) 1
/	/	,	

ANS : B

93. If front view of a solid is



then what could be the shape of the solid?

A) A die	B) A match box	C) A pyramid	D) A ball
----------	----------------	--------------	-----------

ANS : C

94. The front, side and top views of an object is as shown.



Identify the possible object.



ANS : A

95. Observe the object given.



What is its side view indicated by the arrow?



ANS : A



ANS : C