Basic Geometrical Ideas

Test

Time – 45 minutes **Maximum Marks - 20**

Important Instructions

- This test contains 20 questions.
- Each questions has FOUR options (1), (2), (3) and (4). ONLY ONE of these four options is correct.
- For each question, marks will be awarded in one of the following categories.
  Full Mark : +1 : If only correct answer is given.
  Zero Mark : 0 : If no answer is given.
  Negative Marks : There is no negative marking.

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1. A _____ can be extended indefinitely in both the directions.

(1) line segment (2) point (3) ray (4) line

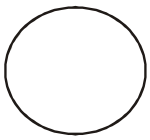
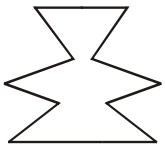
2. A quadrant is _____ part of a circle.

(1) $\frac{1}{2}$ (2) $\frac{1}{3}$ (3) $\frac{1}{4}$ (4) $\frac{1}{8}$

3. A triangle has _____ parts. (sides and angles)

(1) 4 (2) 5 (3) 6 (4) 3

4. Which of the following figure has linear boundaries?

(1)  (2)  (3)  (4) 

5. Which of the following has two end points ?

(1) $\overleftrightarrow{AB}$ (2) $\overline{CD}$ (3) $\overrightarrow{BC}$ (4) None of these

6. Every diameter of a circle is also a _____ of the circle.

(1) Chord (2) Sector (3) Radius (4) Arc

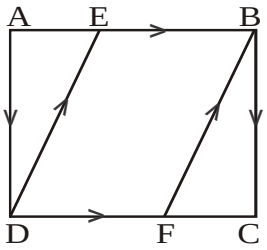
7. How many maximum lines can be drawn through one point?

(1) One (2) Two (3) Zero (4) Infinite

8. Which of the following is another name for $\angle ABC$?

(1) $\angle A$ (2) $\angle CBA$ (3) $\angle ACB$ (4) $\angle CAB$

9. Which of the following pair of segments are not parallel, as shown in the figure?



(1) AD, BC (2) DE, BF (3) AE, FC (4) AB, BC

10. Centre of circle always lies in ____ of the circle.

(1) Interior (2) Exterior (3) Circumference (4) None of these

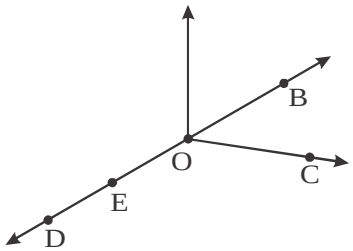
11. In a triangle, a line segment joining a vertex to the mid-point of its opposite side is called _____ of a triangle.

(1) Altitude (2) Median (3) Both (1) & (2) (4) None of these

12. A line has/have _____ points.

(1) Infinite (2) Zero (3) One (4) Two

13. How many points are shown in the following figure ?



(1) 6 (2) 5 (3) 4 (4) 3

14. Two intersecting planes intersect in a _____.

(1) line (2) plane (3) point (4) none of these

15. A quadrilateral has _____ diagonals.

(1) 1 (2) 2 (3) 3 (4) 4

16. A _____ can be measure.

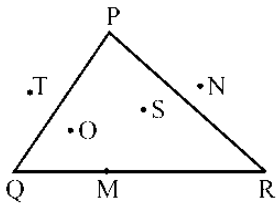
(1) line segment (2) ray (3) line (4) point

17. Three or more lines which passes through same point are called?

(1) Concurrent lines (2) Parallel lines

(3) Intersecting lines (4) Perpendicular lines

18. In given figure, points lying in the interior of the triangle PQR are _____, and that in the exterior are _____ .



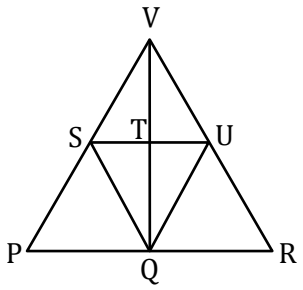
(1) P, Q and R; N and T (2) O and S; N and T

(3) P, Q, R and M; O and S (4) None of these

19. Radius of circle is 1.4 cm. What is diameter of the circle?

(1) 2 cm (2) 4.2 cm (3) 5.6 cm (4) 2.8 cm

20. The number of triangles in the given figure below is



(1) 10 (2) 12 (3) 13 (4) 14

Test Solutions

Answer Key

Question	1	2	3	4	5	6	7	8	9	10
Answer	**4**	**3**	**3**	**3**	**2**	**1**	**4**	**2**	**4**	**1**
Question	11	12	13	14	15	16	17	18	19	20
Answer	**2**	**1**	**2**	**1**	**2**	**1**	**1**	**2**	**4**	**3**

1. **Option (4)**

A line can be extended indefinitely in both the directions.

2. **Option (3)**

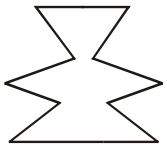
A quadrant is $\frac{1}{4}$ part of a circle.

3. **Option (3)**

A triangle has 6 parts. (3 sides and 3 angles)

4. **Option (3)**

Linear boundary is



5. **Option (2)**

$\overline{CD}$ is a line segment. It has two end points.

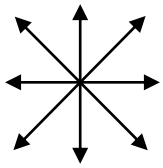
6. **Option (1)**

Every diameter of a circle is also a chord of the circle.

It is longest chord of a circle.

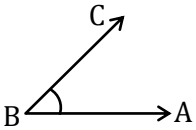
7. **Option (4)**

We can draw infinite lines from a point.

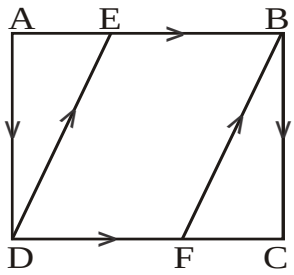


8. **Option (2)**

Another name of $\angle ABC$ is $\angle CBA$.



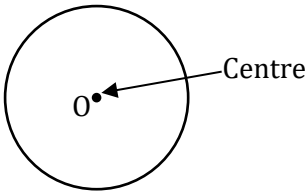
9. Option (4)



According to figure,

AB, BC are not parallel pair of segments.

10. Option (1)



The centre O of the circle always lies in the **interior** of the circle.

11. Option (2)

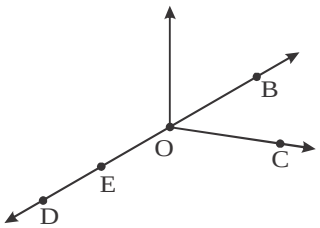
The line segment joining a vertex of a triangle to the mid-point of its opposite side is called a median of the triangle.

12. Option (1)

A line has infinite number of points.

13. Option (2)

5 points

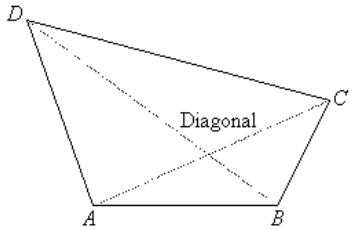


14. Option (1)

Intersecting planes are planes that are not parallel, and they always intersect in a line.

15. Option (2)

A quadrilateral has 2 diagonals.



16. Option (1)

A line segment can be measure.

17. Option (1)

If three or more line passes through same point, then they are called Concurrent lines.

18. Option (2)

Points lying in the interior of the triangle PQR are O and S and exterior points are N and T.

19. Option (4)

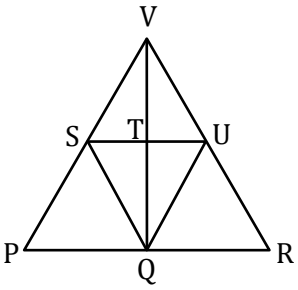
Length of diameter is twice the radius in a circle.

Diameter= 2(radius)

Diameter = 2(1.4)

Diameter = 2.8 cm

20. Option (3)



By observing the above figure, there are 13 triangles.

ΔPVR, ΔPSQ, ΔSQU, ΔSQT, ΔTQU, ΔQUR, ΔVSU, ΔVST, ΔVTU, ΔPQV, ΔRQV, ΔVSQ, ΔVUQ

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