

Basic Geometrical Ideas

Question 1.

A triangle has:

- (a) one element
- (b) two elements
- (c) 6 elements
- (d) none of these

Answer: (c) 6 elements

Question 2.

A point where three or more lines meet is called:

- (a) point of concurrence
- (b) meeting point
- (c) collinear point
- (d) non-collinear point

Answer: (a) point of concurrence

Question 3.

What are used to represent points?

- (a) Numerals.
- (b) Capital letters of alphabet.
- (c) Lower case letters of alphabet.
- (d) All of the above

Answer: (b) Capital letters of alphabet.

Question 4.

Which instrument is used to compare two line segments?

- (a) Compasses
- (b) A divider

- (c) Set squares
- (d) A protractor

Answer: (b) A divider

Question 5.

A _____ of a circle is a line segment joining any two points on the circle.

- (a) chord
- (b) diameter
- (c) radius
- (d) None of these

Answer: (a) chord

Question 6.

A quadrilateral has:

- (a) one vertex
- (b) two vertices
- (c) three vertices
- (d) four vertices

Answer: (d) four vertices

Question 7.

The meeting point of a pair of adjacent sides of a polygon is called its:

- (a) vertex
- (b) diagonal
- (c) adjacent angles
- (d) none of these

Answer: (a) vertex

Question 8.

An angle is made up of two _____ starting from common end point.

- (a) rays
- (b) vertices
- (c) lines
- (d) points

Answer: (a) rays

Question 9.

If two lines intersect each other then the common point between them is known as point of _____.

- (a) concurrence
- (b) intersection
- (c) vertex
- (d) contact

Answer: (b) intersection

Question 10.

What is a set of points extending infinitely in all directions on the same flat surface called?

- (a) A line
- (b) A plane
- (c) Ray
- (d) A point

Answer: (b) A plane

Question 11.

A quadrilateral has:

- (a) one diagonal
- (b) two diagonals
- (c) three diagonals
- (d) four diagonals

Answer: (b) two diagonals

Question 12.

Three or more points are collinear if they lie on the:

- (a) same line
- (b) two lines
- (c) same surface
- (d) none of these

Answer: (a) same line

Question 13.

Flat surface in which two points are joined by using straight line is classified as

- (a) line
- (b) plane
- (c) ray
- (d) intersecting line

Answer: (b) plane

Question 14.

What is the number of end points of a line?

- (a) Zero
- (b) Two
- (c) One
- (d) Three

Answer: (a) Zero

Question 15.

Angle which is less than 90° is called

- (a) reflex angle
- (b) obtuse angle
- (c) acute angle
- (d) right angle

Answer: (c) acute angle

Question 16.

The maximum number of points of intersection of three lines is:

- (a) one
- (b) two
- (c) three
- (d) four

Answer: (c) three

Question 17.

A polygon having four sides is called:

- (a) triangle
- (b) quadrilateral
- (c) circle
- (d) none of these

Answer: (b) quadrilateral

Question 18.

The centre of a circle:

- (a) lies in its interior
- (b) lies in its exterior
- (c) lies on the circle
- (d) none of these

Answer: (a) lies in its interior

Question 19.

Any line segment can be formed by joining

- (a) two points
- (b) three points
- (c) four points
- (d) more than three points

Answer: (a) two points

Question 20.

Angle which is equal to 90° is classified as

- (a) right angle
- (b) obtuse angle
- (c) acute angle
- (d) reflex angle

Answer: (a) right angle

Question 21.

A triangle has:

- (a) one vertex
- (b) two vertices
- (c) three vertices
- (d) none of these

Answer: (c) three vertices

Question 22.

A ray has:

- (a) one end point
- (b) two end points
- (c) three end points
- (d) none of these

Answer: (a) one end point

Question 23.

Out of following, one angle which is obtuse is

- (a) $\frac{11}{21}$ of a right angle
- (b) $\frac{8}{20}$ of a complete rotation
- (c) $\frac{11}{21}$ of a complete rotation
- (d) $\frac{8}{20}$ of a right angle

Answer: (b) $\frac{8}{20}$ of a complete rotation

Question 24.

Two lines meeting at a point are called _____ .

- (a) intersecting lines
- (b) concurrent lines
- (c) parallel line
- (d) None of these

Answer: (a) intersecting lines

Question 25.

A triangle has:

- (a) one median
- (b) two medians
- (c) three medians
- (d) four medians

Answer: (c) three medians

Question 26.

A quadrilateral is a polygon having:

- (a) two sides
- (b) three sides
- (c) four sides
- (d) none of these

Answer: (c) four sides

Question 27.

Two distinct lines meeting at a points are called _____.

- (a) intersecting lines
- (b) parallel lines
- (c) collinear lines
- (d) None of these

Answer: (a) intersecting lines

Question 28.

Out of following options, two angles that are together classified as complementary angles are

- (a) 120° and 60°
- (b) 50° and 30°
- (c) 65° and 25°
- (d) 70° and 30°

Answer: (c) 65° and 25°

Question 29.

A triangle has:

- (a) one side
- (b) two sides
- (c) three sides
- (d) four sides

Answer: (c) three sides

Question 30.

A circle is a:

- (a) polygon
- (b) an open curve
- (c) a closed curve
- (d) none of these

Answer: (c) a closed curve

Question 31.

If two angles are said to be supplementary angles and one of angle is of 122° then other angle is of

- (a) 35°
- (b) 32°
- (c) 60°
- (d) 58°

Answer: (d) 58°

Question 32.

How many lines pass through two given points?

- (a) one
- (b) two
- (c) three
- (d) many

Answer: (a) one

Question 33.

The minimum number of points of intersection of three lines is:

- (a) zero
- (b) one
- (c) two
- (d) three

Answer: (a) zero

Question 34.

A line has:

- (a) fixed length
- (b) infinite length
- (c) 100 cm length
- (d) none of these

Answer: (b) infinite length

Question 35.

Two non-parallel lines always intersect:

- (a) in a line
- (b) in a point
- (c) in two lines
- (d) none of these

Answer: (b) in a point

Question 36.

Angle which is less than 360° and larger than 180° is classified as

- (a) acute angle
- (b) obtuse angle
- (c) reflex angle
- (d) right angle

Answer: (c) reflex angle

Question 37.

Three or more points lying on the same line are known as _____ points.

- (a) collinear
- (b) intersecting
- (c) non-collinear
- (d) None of these

Answer: (a) collinear

Question 38.

Through one given point:

- (a) one line can be drawn
- (b) two lines can be drawn
- (c) many lines can be drawn
- (d) none of these

Answer: (c) many lines can be drawn

Question 39.

A point has:

- (a) infinite length
- (b) 1 mm length

- (c) no length
- (d) all of these

Answer: (c) no length

Question 40.

How many lines pass through one given point?

- (a) Three
- (b) One
- (c) Countless
- (d) Two

Answer: (c) Countless

Question 41.

What is a set of points which extend infinitely in both directions called?

- (a) A line
- (b) A plane
- (c) A line segment
- (d) A point

Answer: (a) A line

Question 42.

A quadrilateral has:

- (a) one side
- (b) two sides
- (c) three sides
- (d) four sides

Answer: (d) four sides

Question 43.

An angle has:

- (a) one vertex and one arm
- (b) one vertex and two. arms
- (c) two vertices and two arms
- (d) none of these

Answer: (b) one vertex and two. arms

Question 44.

A flat surface which extends indefinitely in all directions is called _____ .

- (a) plane
- (b) lines
- (c) point
- (d) line segment

Answer: (a) plane

Fill in the blanks:

1. A triangle has medians.

Answer: three

2. Radius is of the diameter.

Answer: half

3. A quadrilateral has diagonals.

Answer: two

4. All the radii of a circle are

Answer: equal

5. How many chords of a circle are there?

Answer: infinite

6. A point equidistant from all the points on a circle is called of the circle.

Answer: center

7. The diameter of a circle is the chord of the circle.

Answer: longest

8. Name all the sides of a polygon ABCD

Answer: AB, BC, CD, DA

9. A quadrilateral has vertices.

Answer: four

10. How many centres does a circle have?

Answer: one

11. A triangle has vertices.

Answer: three

12. The distance between any two points on the circle is called of the circle.

Answer: chord

13. A triangle has sides.

Answer: three

14. A quadrilateral has sides.

Answer: four

Match the following:

1.

(a) A triangle	(i) Line segment joining two points on the circle

(b) A quadrilateral	(ii) Has one center
(c) A chord of a circle	(iii) Has three sides
(d) Diameter of a circle	(iv) Has four sides
(e) A circle	(v) Longest chord

Answer:

(a) A triangle	(iii) Has three sides
(b) A quadrilateral	(iv) Has four sides
(c) A chord of a circle	(i) Line segment joining two points on the circle
(d) Diameter of a circle	(v) Longest chord
(e) A circle	(ii) Has one center