BasicGeometrical 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 intersects 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

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2. Radius is …… of the diameter.

Answer: half

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3. A quadrilateral has ……. diagonals.

Answer: two

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4. All the radii of a circle are ……..

Answer: equal

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5. How many chords of a circle are there? …….

Answer: infinite

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

Answer: center

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

Answer: longest

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8. Name all the sides of a polygon ABCD ……..

Answer: AB, BC, CD, DA

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9. A quadrilateral has ……. vertices.

Answer: four

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10. How many centres does a circle have? ……

Answer: one

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11. A triangle has …….. vertices.

Answer: three

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

Answer: chord

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13. A triangle has …… sides.

Answer: three

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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