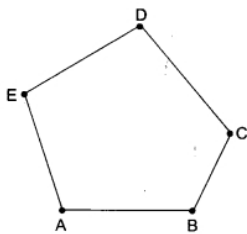


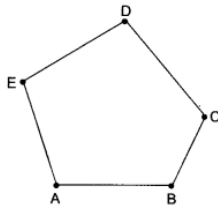
Mathematics -Class 6

Basic Geometrical Ideas

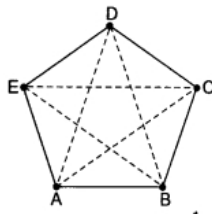
1. How many points are enough to fix a line?
2. Two intersecting lines intersect in
3. How many lines can pass through one given point?
4. How many lines can pass through two given points?
5. How many vertices are there in the following figure?



6. How many sides are there in the following figure?



7. How many diagonals are there in the following figure?

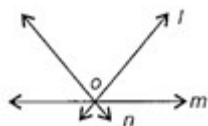


8. How many vertices are there in a triangle?
9. How many sides are there in a triangle?
10. How many angles are there in a triangle?
11. How many vertices are there in a quadrilateral?

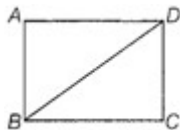
12. How many sides are there in a quadrilateral? @1@2@3@4@0001
13. How many angles are there in a quadrilateral?@1@2@3@4@0001
14. How many pairs of adjacent sides are there in a quadrilateral?@1@2@3@4@0001
15. How many pairs of opposite angles are there in a quadrilateral? @1@2@3@4@0100
16. How many pairs of opposite sides are there in a quadrilateral?@1@2@3@4@0100
17. How many pairs of adjacent angles are there in a quadrilateral?@1@2@3@4@0001
18. Which of the following statements is false?@Two diameters of a circle will necessarily intersect.@The centre of a circle is always in its interior.@Every diameter of a circle is also a chord.@Every chord of a circle is also a diameter.@0001
19. A triangle has:@one element@two elements@6 elements@none of these@0010
20. A point where three or more lines meet is called:@point of concurrence@meeting point@collinear point @non-collinear point@1000
21. What are used to represent points?@Numerals @Capital letters of alphabet@Lower case letters of alphabet. @All of the above@0100
22. Which instrument is used to compare two line segments? @Compasses@A divider@Set squares@A protractor@0100
23. A _____ of a circle is a line segment joining any two points on the circle.@chord@diameter@radius@None of these@1000
24. A quadrilateral has:@one vertex@two vertices@three vertices@four vertices@0001
25. The meeting point of a pair of adjacent sides of a polygon is called its:@vertex@diagonal@adjacent angles @none of these@1000
26. An angle is made up of two _____ starting from common end point.@rays@vertices@lines@points@1000
27. If two lines intersect each other then the common point between them is known as point of _____.@concurrence@intersection@vertex @contact@0100
28. What is a set of points extending infinitely in all directions on the same flat surface called?@A line@A plane@Ray@A point@0100
29. A quadrilateral has:@one diagonal@two diagonals@three diagonals@four diagonals@0100
30. Three or more points are collinear if they lie on the:@same line@two lines@same surface@none of these@1000
31. Flat surface in which two points are joined by using straight line is classified as@line@plane @ray@intersecting line@0100
32. What is the number of end points of a line?@Zero@Two@One@Three@1000
33. Angle which is less than 90° is called @reflex angle@obtuse angle@acute angle@right angle@0010

34. The maximum number of points of intersection of three lines is: @one @two @three @four @0010
35. A polygon having four sides is called: @triangle @quadrilateral @circle @none of these @0100
36. The centre of a circle: @lies in its interior @lies in its exterior @lies on the circle @none of these @1000
37. Any line segment can be formed by joining @two points @three points @four points @more than three points @1000
38. Angle which is equal to 90° is classified as @right angle @obtuse angle @acute angle @reflex angle @1000
39. A triangle has: @one vertex @two vertices @three vertices @none of these @0010
40. A ray has: @one end point @two end points @three end points @none of these @1000
41. Out of following, one angle which is obtuse is @ $11/21$ of a right angle @ $8/20$ of a complete rotation @ $11/21$ of a complete rotation @ $8/20$ of a right angle @0100
42. Two lines meeting at a point are called _____. @intersecting lines @concurrent lines @parallel line @None of these @1000
43. A triangle has: @one median @two medians @three medians @four medians @0010
44. A quadrilateral is a polygon having: @two sides @three sides @four sides @none of these @0010
45. Two distinct lines meeting at a point are called _____. @intersecting lines @parallel lines @collinear lines @None of these @1000
46. Out of following options, two angles that are together classified as complementary angles are @ 120° and 60° @ 50° and 30° @ 65° and 25° @ 70° and 30° @0010
47. A triangle has: @one side @two sides @three sides @four sides @0010
48. A circle is a: @polygon @an open curve @a closed curve @none of these @0010
49. If two angles are said to be supplementary angles and one of angle is of 122° then other angle is of @ 35° @ 32° @ 60° @ 58° @0001
50. How many lines pass through two given points? @one @two @three @many @1000
51. The minimum number of points of intersection of three lines is: @zero @one @two @three @1000
52. A line has: @fixed length @infinite length @100 cm length @none of these @0100
53. Two non-parallel lines always intersect: @in a line @in a point @in two lines @none of these @0100
54. Angle which is less than 360° and larger than 180° is classified as @acute angle @obtuse angle @reflex angle @right angle @0010
55. Three or more points lying on the same line are known as _____. @collinear @intersecting @non-collinear @None of these @1000
56. Through one given point: @one line can be drawn @two lines can be drawn @many lines can be drawn @none of these @0010

57. A point has: @infinite length@1 mm length@no length@all of these@0010
58. How many lines pass through one given point? @Three@One@Countless@Two@0010
59. What is a set of points which extend infinitely in both directions called? @A line@A plane@A line segment@A point@1000
60. A quadrilateral has: @one side@two sides@three sides@four sides@0001
61. An angle has: @one vertex and one arm@one vertex and two arms@two vertices and two arms@none of these@0100
62. A flat surface which extends indefinitely in all directions is called _____. @plane@lines@point @line segment@1000
63. A pair of lines which do not intersect at any point are called _____ lines. @ Perpendicular@Parallel @Concurrent @Intersecting@0100
64. A line segment passing through the centre of circle and whose end points lie on the circle is called _____. @Diameter@ Radius@ Sector@None of these@1000



65. In the given figure, lines l, m and n are called _____ lines. @Collinear@Parallel@Concurrent@Transversal@0010
66. A part of a circle is called the _____ of the circle. @Point@Line segment@Arc@None of these@0010
67. The basic elements of a quadrilateral are @4 vertices@4 sides@4 angles@All of these@0001
68. Which of the following statements is INCORRECT? @ Line \overline{AB} is same as line \overline{BA} @Line segment \overline{AB} is same as line segment \overline{BA} @ Ray \overline{AB} is the same as ray \overline{BA} @ AB perpendicular to CD is same as CD perpendicular to AB.@0010
69. The diameter of a circle divides it into _____ parts. @2@3@4@1@1000
70. In the given figure, there are _____ angles.



- @4@8@ 6@10@0100
71. The region bounded by chord and minor arc is called _____. @Minor segment@Major arc@Major segment@Semicircle@1000

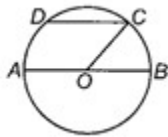
72. If the sum of two angles is greater than 180° , then which of the following is not possible for the two angles?
 @One obtuse angle and one acute angle
 @One reflex angle and one acute angle
 @Two obtuse angles
 @Two right angles

73. Three or more lines are _____, if they pass through a common point.
 @Parallel
 @Collinear
 @Concurrent
 @All of these

74. Set of points extending infinitely in all directions on the same flat surface is _____.
 @Line
 @Plane
 @Line segment
 @Point

75. The surface of a football is _____ surface.
 @Curved
 @Flat
 @Triangular
 @Can't be determined

76. How many line segments are there in the given figure?



77. A cuboidal box has _____ edges representing the portions of lines.

78. A set of points which extends infinitely in both the directions is called _____.
 @Line
 @Plane
 @Point
 @Line segment

79. The number of arcs made by a chord on a circle is _____.
 @3
 @2
 @1
 @4

80. How many maximum number of lines can be drawn through one point?
 @One
 @Two
 @Zero
 @Infinite

81. What type of angle is angle X?



82. The total boundary length of circle is called
 @Area
 @Volume
 @Circumference
 @Diameter

83. Classify the following into open and closed curves.

(a)	(p)
(b)	(q)
(c)	(r)

@

Open	Closed
(b, p, r)	(a, c, q)

@

Open	Closed
(b, q, c)	(a, p, r)

@

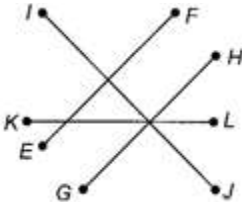
Open	Closed
(p, q, @)	(r, c, @)

@

Open	Closed
(r, b, @)	(p, q, c)

@A

85. Raghav drew the line segments shown here on a piece of paper. Which of the following pairs of line segments appears to be perpendicular?



@ \overline{GH} and \overline{KL} @ \overline{GH} and \overline{IJ} @ \overline{EF} and \overline{KL} @ \overline{EF} and \overline{GH} Answer:

86.Number of line segments in figure is

@5 @10 @15 @20 @100

87.The polygon which is made up of least number of sides is a _____.@Square
Triangle@Rectangle@None of these@100

88.How many lines can be drawn to pass through two points simultaneously?@One@Two@More than three@No line@1000

89. Fill in the blanks. Any drawing (straight or non-straight) done without lifting the pencil may be a P . A Q is the one that does not cross itself. A curve is said to be R . if its ends are joined. A S is a simple closed curve made up of line segments.

@

P	Q	R	S
Curve	Open curve	Closed	Line

@

P	Q	R	S
Line	Curve	Open	Line

@

P	Q	R	S
Curve	Simple curve	Closed	Polygon

@

P	Q	R	S
Curve	Closed curve	Open	Circle

@0010

90. Which of the following statements is CORRECT?

(i) A sector is the region in the interior of a circle enclosed by an arc on one side and a pair of radii on the other two sides.

(ii) A segment of a circle is region in the interior of the circle enclosed by an arc and a chord.
@Both (i) & (ii)@Only (i)@Only(ii)@Neither(i)nor(ii)@1000

91. State T for true and 'F' for false.

@Two distinct lines meeting at a point are called concurrent lines.
@The centre of a circle is always in its interior.
@A line has no end points.

@

((@	((@	(C)
F	T	F

@

((@	((@	(C)
F	T	T

@

((@	((@	(C)
T	F	F

@

((@	((@	(C)
T	T	T

@0001

92. Fill in the blanks. AP is the path of a point moving at the same distance from a fixed point. The fixed point is the Q, the fixed distance is the R and the distance around the circle is the S.

@

P	Q	R	S
Circle	Circumference	Centre	Radius

@

P	Q	R	S
Circle	Centre	Radius	Circumference

@

P	Q	R	S
Circle	Radius	Centre	Circumference

@

P	Q	R	S
Circle	Circumference	Radius	Centre

@0100

93. In the given circle, which of the following statements is INCORRECT?@AB is the diameter.@LQN is the minor segment@M is the centre of the circle.@ADB is the semicircle.@0010

94. What is the simplest of all geometrical figures which has no size but has a position?@A line@A line segment@A point@A plane@0010

95. What is a set of points which extend infinitely in both directions called?@A line@A plane@A line segment@A point@1000

96. Name the set of points which is a part of a line with two end points.@A line@A line segment@A ray@A point@0100

97. How is a line PQ symbolically written?@ \overline{PQ} @ \overrightarrow{PQ} @ \overleftarrow{PQ} @ \overleftrightarrow{PQ} @0100

98. How do you write a line segment AB symbolically?@ \overline{AB} @ \overrightarrow{AB} @ \overleftarrow{AB} @AB@1000

99. What is the symbolic representation of a ray OP?@ \overline{OP} @ \overrightarrow{OP} @ \overleftarrow{OP} @OP@0010

100. What are used to represent points?@Numerals.@Capital letters of alphabet.@Lower case letters of alphabet.@All of the above@0100