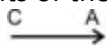Basic Geometrical Ideas

<1M>
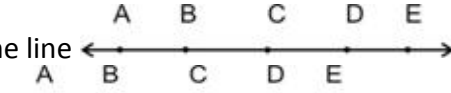1.Fill in the blanks
1) The boundary of a circle is _____.
2) The interior of a triangle along with its boundary is called _____.
3) A _____ has its end - point on the circle
4) Lines which never meet are _____ lines
5)Closed figure made of line segments _____.

2.1. What are the end points of the line segment $\overline{B \quad D}$

2. Is C the end point of ray $\overset{C \quad A}{\longrightarrow}$

3. Which of the points lie on the line $\overset{A \quad B \quad C \quad D \quad E}{\longleftrightarrow}$

4. Fill in the blank. If given line $\overset{A \quad B \quad C \quad D \quad E}{\longleftrightarrow}$
(i) AC = AB +____ (ii) BC = BD -___.
5). How many points are there actually in a line $\overset{A \quad E}{\longleftrightarrow}$

3.Circumference of a circle is equal to

(A) πr B) $2\pi r$ (C) π (D) $2+\frac{\pi r}{2} r$

4.Symbol to represent an arc is
(A) $\perp$ (B) $||$ (C) $\frown$ (D) $\square$

5.Value of π is equal to (approximately)
(A) 3.41   (B) 3.14   (C) $\frac{23}{7}$ (D) $\frac{21}{7}$

6.A line PQ is symbolically written as
(A) $\overline{PQ}$ (B) $\overleftrightarrow{PQ}$ (C) PQ   (D) $P\hat{Q}$

7.If the diameter of a circle is 14 cm, then its circumference is
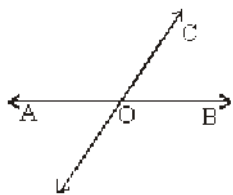(A) 66 cm   (B) 44 cm   (C) 33 cm   (D) 55 cm

8.Diameter of a circle is 7.12 cm, then its radius is
(A) 35.6 cm   (B) 3.56 cm   (C) 356 cm   (D) 0.356 cm

9.3 cm; $\overline{RS}$ = 6.2 cm, then the measure of line segment whose length is equal to sum of $\overline{PQ}$ and $\overline{RS}$ is
(A) 3.2 cm   (B) 4 cm   (C) 4.2 cm   (D) 9.2 cm

10.In the given figure, points A, O and B are called

(A) collinear   (B) non-collinear   (C) concurrent   (D) None of these

11.An area bounded by chord and major arc is called
(A) minor segment   (B) major arc   (C) major segment   (D) semicircle

12.Each half equal part of the circle is called
(A) semicircle (B) major circle   (C) minor circle   (D) none

13.Number of radii that can be drawn on a circle are
(A) 2   (B) more than 1 but less than 7   (C) many   (D) None of these

14.Number of arcs made by a chord on a circle are
(A) 3   (B) 2   (C) one   (D) none

15.Longest chord of the circle is
(A) Diameter   (B) Chord   (C) Radius   (D) None of these

16.The interior and boundary of a triangle is called
(A) exterior   (B) interior   (C) triangular region   (D) plane

17.Line n is parallel to line m. Symbolically, above statement is written as
(A) n - m   (B) n || m   (C) n = m   (D) none

18.The common end point of an angle is called
(A) vertex   (B) Zero   (C) end point   (D) None of these

19.Which of the following statement is true?
(A) Every ray has a definite length.   (B) Every line has a definite length.
(C) Every line segment has a definite length. (D) None of these.

20.A line segment has two end points .How many lines can be drawn that pass through two different points?
(A) 1   (B) 2   (C) 3   (D) Infinite

21.A line segment has _____ end points
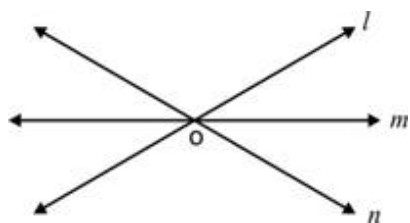(A) one   (B) two   (C) three   (D) none

22.Number of lines that can be drawn from two distinct points on a plane
(A) two   (B) one   (C) zero   (D) infinite

23.Number of end points in a line segment are
(A) three   (B) none   (C) two   (D) one

24. A set of points with one end point and can be extended in other direction is
(A) line segment   (B) line   (C) ray   (D) none

25. A Figure having no length, breadth or height

26. A Figure which can extend endlessly in both direction?

27. A portion of a line having two end-points.

28. A Figure Having one end- point and the other portion can extends infinitely.

29. Lines which have a point in Common

30. Lines which have no points in common.

31. is the longest Chord of the Circle

32. All the Radii of circles are _____

33. A Triangle has _____ angles.

34. The boundary of a circle is _____.

35. The interior of a triangle along with its boundary is called _____.

36. A _____ has its end - points on the circle.

37. Closed figure made of line segments is called _____.

38. Intersection point of two diameters of a circle is called.

39. If the radius of the circle is 7cm. then the circumference of that circle is…
(A) 22cm.   (B) 44cm.   (C) 44m.   (D) 44dm.

40. A point has
(A) A length   (B) A breadth   (C) Both   (D) No length, breadth or no thickness

41. How many points are on a line?
(A) 2   (B) Infinite   (C) 3   (D) 0

42. A line segment has definite
(A) Breadth   (B) Thickness   (C) Length   (D) None

43. In the given figure, lines l, m andn intersect at point O. Can we draw any more lines through O? If yes, how many?

(A) No   (B) 1   (C) Infinite   (D) None of these.

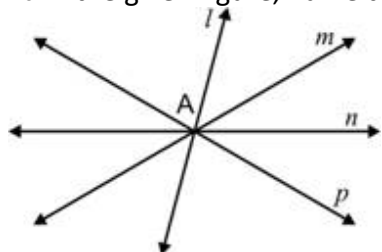44. How many lines can be drawn passing through two distinct points?
(A) Two lines   (B) Three lines   (C) One unique line   (D) Infinite

45. How many lines can be drawn passing through four collinear points?
(A) Infinite   (B) Two   (C) Three   (D) One

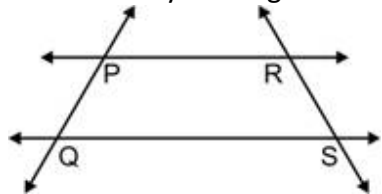46. In the given figure, name the lines which are concurrent.

(A) l, m, n   (B) l, m, n and p   (C) l, m   (D) None of these.

47. The diameter of the circle is-
(A) Twice the radius.   (B) Half the radius.   (C) Equal to the radius.   (D) None.

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

(A) 4   (B) 3   (C) 2   (D) 1

49. Which out of the following statements is true?
(A) A line segment has no length.   (B) A line segment has one end only.
(C) A line segment has breadth.   (D) A line segment has length.

50. Two line segments of the same length are said to be………….
(A) Parallel.   (B) Congruent.   (C) Both.   (D) None.

51. The difference between a line and a line segment is-
(A) A line has indefinite length and a line segment has definite length.
(B) A line has definite length and a line segment has indefinite length.
(C) A line has no length and a line segment has breadth.
(D) No difference between line and line segment.

52. In the given figure, interior points are…….
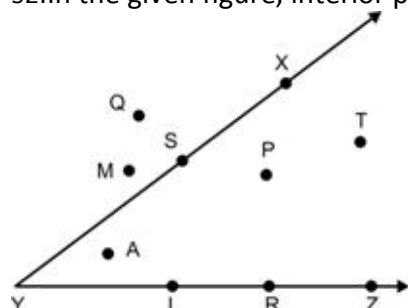
(A) M, S, X   (B) L, R, Z   (C) A, P, T   (D) None of these.

53. An angle which is greater than a straight angle but less than a complete angle is called a/an-
(A) Acute angle.   (B) Obtuse angle.   (C) Straight angle.   (D) Reflex angle.

54. Two angles are said to be adjacent if they have……
(A) Same vertex and a common arm.
(B) Same vertex, a common arm and the other two arms on the opposite sides of the common arm.
(C) Neither same vertex nor a common arm.
(D) None of these.

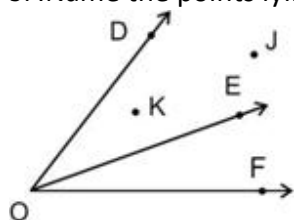55. Which out of the following statements is true?
(A) A ray has two end-points.   (B) Every ray has finite length.
(C) The ray AB is same as the ray BA.   (D) The ray OA extends endlessly towards A.

<2M>
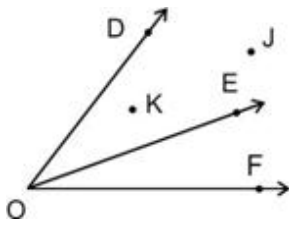56. Which is the common arm of $\angle$ DOE & $\angle$ FOE
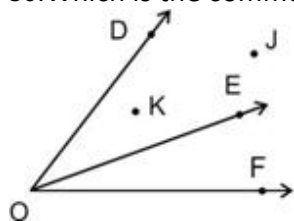
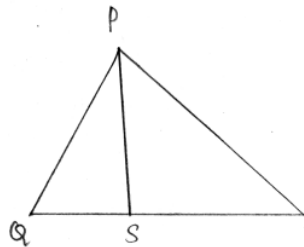57. Name the points lying in the interior and exterior of $\angle$ DOE.
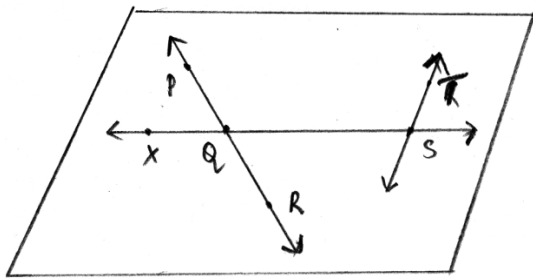

<3M>
58. In the following figure identify

1) Any three angles.
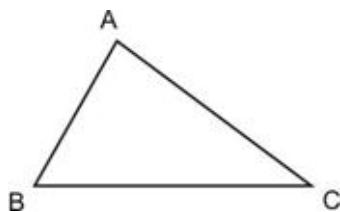
2) Name the common Vertex

3) Name the three rays

<5M>

59.(a) Identify three triangles in the given figure

(b) Write the names of seven angles

(c) Write then names of 6 line segments

60.(a) line containing point 's'

(b) lines passing through X

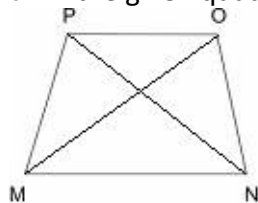(c) Line on nwhich 'R' lies

(d) Two pairs of intersecting lines

61.In the given figure

1) Name the figure formed   2) Name the three vertices

3) Name the three sides   4) Name the three angles

5) Name the side opposite to vertex A and the side opposite to vertex C

62. In the given quadrilateral MNOP identify.

    a) Two pairs of opposite sides   b) Four pairs of adjacent sides

    c) 2 pairs of opposite angles   d) 2 diagonals

e) Any two pair of adjacent angles

63. The given figure is a circle with centre 'O'. Identify
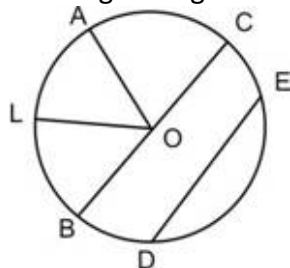
    (i) Radius(any four)   (ii) Diameter of the circle   (iii) 2 chords

    (iv) Sector of the circle   (v) Segment of the circle.

64. Define and Explain with figures.

    1. POINT   2. LINE   3. LINE SEGMENT   4. RAY 5. INTERSECTING LINES