Mathematics – Class 6

PRACATIAL GEOMETRY

1.   Points that don't lie on the same line are called _____
      A) Collinear points   B) Non-Collinear points
      C) Coplaner points   D) Non-Coplanar points
ANS : B

2.   If two different lines in a plane have a point in common, then the lines are called
      A) Concurrent lines   B) Intersecting lines
      C) Coplanar lines   D) both (B) & (C)
ANS : D

3.   Which of the following statement is true?
      A) A line segment is a set of points
      B) A line segment is always a part of a line
      C) A line segment has two end points
      D) All of the above
ANS : D

4 .   Of three collinear points A,B, and C), if AB + BC = AC, then we say that
      A) A is between B and C   B) B is between A and C
      C) C is between A and B   D) none of these
ANS : B

5.   If A, B and C are three collinear points then which of the following
      A) AB + BC + AC   B) AC – BC = AB
      C) AC – AB = BC   D) All of the above
ANS : D

6.   Which of the following statement is false _____
      A) A ray is a part of a line   B) A ray has two end points
      C) A ray is a set of points   D) None of these
ANS : B

7.   During the rotation, at one stage two rays becomes opposite rays. Then the angle so formed is
      called
      A) Zero angle   B) Straight angle   C) Reflex angle   D) No angle can form
ANS : B

8.   If the terminal ray coincide with the initial ray without any rotation then the angle formed is
      A) zero angle   B) straight angle   C) complete angle D) reflex angle

ANS : A

9. An angle whose measure is 90^0 is called
    A) An acute angle   B) Obtuse angle
    C)) Right angle   D) Reflex angle
ANS : C

10. An angle whose measure is 180^0 is called
    A) Right angle   B) Reflex angle   C) Straight angle   D) Obtuse angle
ANS : C

11. Two angles in a plane have the common vertex, a common side and their interiors do not have a common point. Such angles are called
    A) Congruent angles   B) Adjacent angles
    C) Linear angles   D) Supplementary angles
ANS : C

12. If the sum of the measure of two angles is equal to 90^0 they are called
    A) Adjacent angles   B) Complementary angles
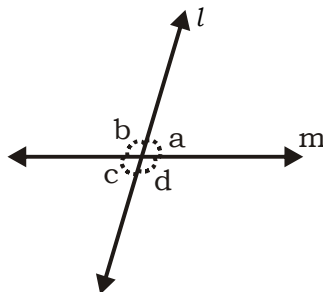   C) Supplementary angles   D) vertically opposite angles
ANS : B

13. If two complementary angles have equal measures, the measure of each angle is
    A) 90^0 B) 45^0 C) 60^0 D) 0^0
ANS : B

14. The measure of an angle is 20^0 more than the measure of its supplement s
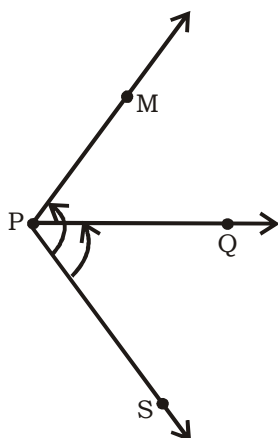   A) 80^0 B) 100^0 C) 70^0 D) 110^0
ANS : B

15. In the given figure, lines 1 and m intersect at a point. If $\angle a = 50^\circ$, then the measure of $\angle c$ is

    A) 50^0 B) 30^0 C) 60^0 D) 140^0

ANS : A

16. In the adjacent figure, $\angle SPM = 110°$ & $\angle SPQ = 55°$ the measure of $\angle MPQ$ is
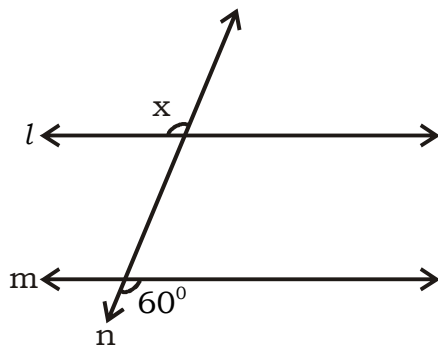

A) 45^0 B) 110^0 C) 55^0 D) 65^0

ANS : C

17. In the given figure $\angle 1 = 70°$. If $\overline{AB} || \overline{CD}$ then $\angle 2 =$
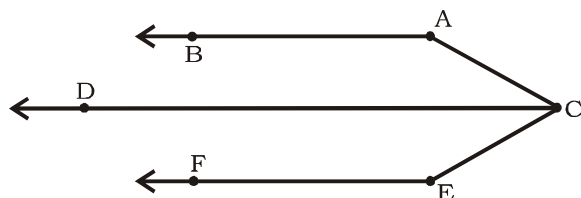

A) 70^0 B) 20^0 C) 110^0 D) 90^0

ANS : C

18. If l||m and n is the transversal then the value of x is

A) 60^0 B) 120^0 C) 70^0 D) 130^0

ANS : A

19. In the adjacent figure, $\overline{AB}||\overline{CD}$ and $\overline{CD}||\overline{EF}$. $\overline{CD}$ is the bisector of . $\angle ACE$ If $\angle ACE = 80^0$ then the value of $\angle BAC + \angle ACE + \angle CEF$ is

A) 160^0 B) 240^0 C) 180^0 D) 360^0

ANS : D

20. In the following figure . $\overline{DE}||\overline{AB}$ If $\angle A = 60^0$ & $\angle B = 80^0$, then $\angle ACE + \angle ACB + \angle BCD$ is
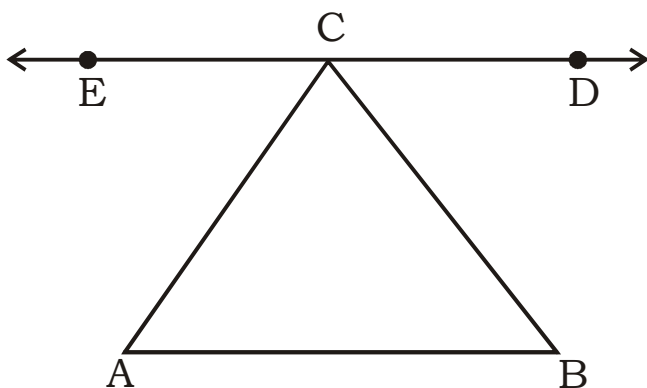
A) 40^0 B) 180^0 C) 60^0 D) 80^0

ANS : B

21. In the adjacent figure a b and c is their transversal. If $\angle I = 45^0$ then $\angle 8=$

A) 35^0 B) 45^0 C) 145^0 D) 135^0
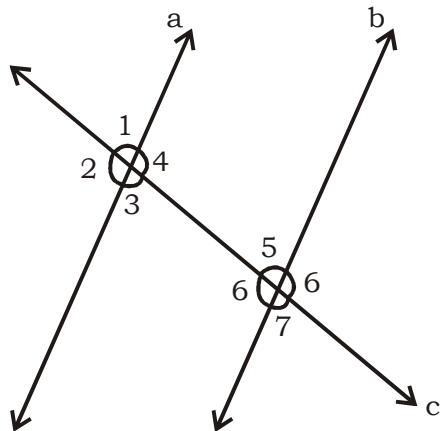
ANS : D

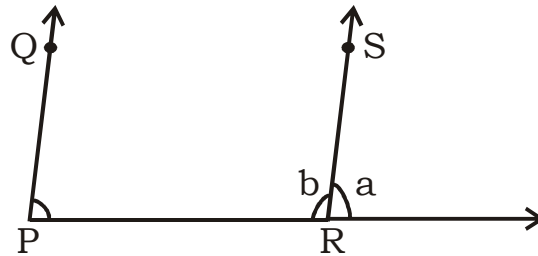22. In the adjacent figure $\overline{PQ} || \overline{RS}$. If, $\angle QPR = 60^0$ then $\angle b - \angle a =$

   A) 60^0 B) 120^0 C) 180^0 D) 30^0

ANS : A

23. A line has _____ end points
   A) One   B) Two   C) No   D) None of these

ANS : C

24. A line extends definitely in _____ directions.
   A) Both   B) Only one direction
   C) Right   D) Left

ANS : A

25. Name the given line :

   A) $\overline{AB}$ B) $\overline{BC}$ C) $\overline{BC}$ D) All of the above

ANS : D

26. Points lying on the same line are called _____
   A) Collinear points   B) Similar points
   C) Coplanar points   D) All

ANS : A

27. No. Of lines can be drawn passing through two different points in a plane is
   A) One   B) Two   C) Infinite   D) No line

ANS : A

28. No. Of curves that can be drawn passing through two points in a plane
   A) One   B) Two   C) Infinite   D) Finite

ANS : C

29. No. Of lines that can be drawn passing through three non collinear points taking two at a time
   A) One   B) Two   C) Three   D) Six

ANS : C

30. No. Of lines that can be drawn passing through three non collinear points taking two at a time
   A) One   B) Two   C) Three   D) Six

ANS : A

31. No. Of lines can we draw passing through three collinear points
     A) One   B) Two   C) Three   D) Infinite
ANS : B

32. The formula for the number of lines joining two points at a time is
     A) $\dfrac{n(n+1)}{2}$ B) $\dfrac{n(n-1)}{2}$ C) $\dfrac{n(n-3)}{2}$ D) $\dfrac{n(n+3)}{2}$
ANS : A

33. A flat surface extending indefinitely in all directions is called
     A) Plane   B) Line   C) Parallelogram   D) Triangle
ANS : C

34. A plane is a flat surface extending indefinitely in   directions
     A) One   B) Two   C) All   D) None
ANS : A

35. No. Of lines can be drawn passing through a given point in a plane.
     A) An Unlimited   B) Only one
     C) Finite   D) None of these
ANS : B

36. Two lines are in the same plane and they are not intersecting. Such lines are calleD)
     A) Intersecting lines   B) Parallel lines
     C) Non- parallel lines   D) None of these
ANS : B

37. Points belonging to the same plane are called
     A) Collinear points   B) Co-planar points
     C) Non collinear points   D) Intersecting points
ANS : D

38. Lines belonging to the same plane are called
     A) Parallel lines   B) Non - intersecting lines
     C) Intersecting lines   D) Co-planar lines
ANS : B

39. The point through which the concurrent lines pass is called the
     A) Intersecting point   B) Point of concurrence
     C) Collinear point   D) All of the above
ANS : B

40. The set of all points is called   _____
     A) Plane   B) Space   C) Surface   D) All

ANS : B

41. Space is ____ set of points.
 A) Finite
 B) An Infinite
 C) Collection of
 D) None of the above
ANS : B

42. Lines and planes are subsets of
 A) Plane   B) Space   C) Surface Area   D) All
ANS : D

43. Two segments having the same length are called
 A) Equal segments   B) Similar Segments
 C) Congruent segments   D) All of the above
ANS : D

44. If AB = 4.5cm and CD = 2.5cm then the value of 2AB – 3CD is
 A) 2.5cm   B) 2cm   C) 1cm   D) 1.5cm
ANS : C

45. If AB = 8cm and CD = 4.2cm then the value of 4AB + CD/3 is
 A) 3,4cm   B) 16.2cm   C) 18.2cm   D) 33.4cm
ANS : C

46. The line divided into two parts called
 A) Line   B) Line segment   C) Rays   D) All
ANS : A

47. A ray has _____ end point(s)
 A) One   B) Two   C) No end points   D) Infinite
ANS : B

48. Two rays are extending indefinitely in the opposite directions of the same line. Such rays are called
 A) Intersecting rays   B) Opposite rays
 C) Such type of rays does not exist D) None of these
ANS : C

49. An angle whose measure is greater than 90^0 and less than 180^0 is called
 A) An acute angle   B) An Obtuse angle
 C) Right angle   D) Reflex angle
ANS : B

50. One complete angle = ——— Right angles
 A) 2   B) 4   C) 3   D) 5
ANS : B

51. The magnitude of the angle between the hands of a clock when the time is 3'0 clock
    A) 120^0 B) 150^0 C) 180^0 D) 90^0
ANS : D

52. A ray which divides an angle into two congruent angles is called   of the angle
    A) Bisector B) Congruent   C) Measure   D) None
ANS : A

53. The pair of adjacent angles, whose non common arms are opposite rays is called
    A) A linear pair   B) Adjacent angles
    C) Complementary angles   D) Supplementary angles
ANS : A

54. If two lines intersect, then the angles formed having no common side are called angles
    A) Adjacent angles   B) Complementary angles
    C) Vertically opposite   D) Supplementary
ANS : C

55. The supplementary angle of 31° is
    A) 59^0 B) 139^0 C) 149^0 D) 69^0
ANS : C

34. The complementary angle of 30° is
    A) 60^0 B) 150^0 C) 140^0 D) 50^0
ANS : A

56. Angle between two parallel lines is
    A) 0^0 B) 90^0 C) 180^0 D) 360^0
ANS : A

57. Angle between two perpendicular lines is
    A) 0^0 B) 90^0 C) 270^0 D) 180^0
ANS : B

58. The coplanar lines which do not intersect are called
    A) Pa rallel lines   B) Perpendicular lines
    C) Non Intersecting lines   D) none
ANS : A

59. A line which intersects two or more given lines at different points is called to the given lines.
    A) Parallel   B) Perpendicular   C) Transversal   D) Equal
ANS : C

60. 1, m and n are lines n a plane if $l||m$ and $m||n$ then
   A) $l||n$ B) $n||l$ C) $l||n||m$ D) All
ANS : D

61. If $l \perp n$ and then
   A) $l \perp n$ B) $l \perp m$ C) Both 1 & 2   D) None
ANS : B

62. In a triangle ABC, and AB = AC then the triangle ABC is _____
   A) Equilateral   B) Isosceles   C) Both a & b   D) None
ANS : A

63 A simple closed figure bounded by line segment is called a
   A)) SegmentB) polygon   C) line   D) ray
ANS : B

64. A polygon with three sides is called
   A) Parallelogram   B) pentagon
   C) decagon   D) triangle
ANS : D

65. A point lies on a triangle if it lies on any one of its
   A) Sides   B) angles   C) both (A) and (B)   D) neither (A) or (B)
ANS : A

66. A triangle divides a plane in   sets of points
   A) Two   B) three   C) four   D) one
ANS : B

67. A triangle has six components namely
   A) 4 sides, 4 angles   B) 2 sides, 2 angles
   C) 5 sides, 5 angles   D) 3 sides, 3 angles
ANS : D

68. Sum of the angles of a triangle.
   A) 360^0 B) 180^0 C) 540^0 D)1080^0
ANS : B

69. A triangle in which all sides are equal
   A) E equilateral   B) Isosceles
   C) scalene   D) none of these
ANS : A

70. A Triangle in which two sides are equal is called an
    A) Equilateral   B) Isosceles   C) scalene   D) none of these
ANS : B

71. In isosceles triangle the unequal side is called _____ of triangle
    A) Base   B) angle   C) both (A) and (B)   D) height
 ANS : A

72. The base angles of a Isosceles triangle are
    A) congruent   B) not congruent   C) both (A) & (B)   D) unequal
ANS : A

73. If each angle of a triangle is less than 90° it is called   angled triangle
    A) Acute   B) obtuse   C) right   D) none
ANS : A

74. In a triangle if one of the angles is 90° it is called   angled triangle
    A) acute   B) Right   C) obtuse   D) none
ANS : B

75. In triangle ABC , , = ?
    A) 30^0 B) 40^0 C) 20^0 D)50^0
ANS : A

76. No. of obtuse angles can triangle have
    A) one   B) two   C) Three   D) Four
ANS : A

77. Can a triangle have two right angles?
    A) No   B) Yes   C) both   D) None
ANS : A

78. A triangle having 90^0, 45^0 angles, then the triangle is
    A) Right angled isosceles triangle   B) acute angled
    C) obtuse angled   D) None
ANS : A

79. A triangle having 100^0.60^0.20^0 angles then the triangle is
    A) obtuse angled   B) Right angled
    C) acute angled   D) None
ANS : A

80. A Triangle having 45^0,55^0,80^0 angles is called
    A) Acute angled   B) obtuse angled
    C) Right angled   D) None

ANS : A

81. The sides are 15cm, 8crn, 4cm. can you form a triangle?
    A) No   B) Yes   C) both   D) None
ANS : A

82. Sum of any two sides in a triangle is _____ than third side
    A) greater   B) less   C) equal   D) both (A)&(B)
ANS : A

83. If two sides of a triangle are unequal the measure of the angle opposite to the longer side is then the measure of an angle opposite to the shorter side
    A) greater   B) bigger   C) both (A) and (B)   D) smaller
ANS : C

84. If two angle of a triangle are unequal, then the side opposite to the greater angle is then the side opposite to smaller angle.
    A) longer   B) shorter   C) smaller   D) both (B) & (C)
ANS : A

85. Each angle of an equilateral triangle is _____
    A) Congruent   B) equal   C) unequal   D) both (A) & (B)
ANS : B

86. The side opposite to right angle is called _____
    A) hypotenuse   B) adjacent side   C) opposite side   D) small side
ANS : A

87. In the triangle PQR then the triangle PQR is
    A) scalene   B) isosceles   C) acute angled   D) equilateral
ANS : D

88. The sum of lengths of sides is called its
    A) perimeter   B) volume   C) area   D) both a & b
ANS : A

89. Perimeter of a triangle ABC is
    A) BC+CD+AB   B) a+b+c   C) both a & b   D) a b c
ANS : D

90. If measure of three angles of a triangle are $X - 2$, $X + 6$, $x + 8$ then the angles are
    A) $54^0, 62^0, 64^0$ B) $53^0, 63^0, 66^0$
    C) $53^0, 36^0, 64^0$ D) $57^0, 63^0, 60^0$
ANS : A

91. Which of the following are false?
    I) Every equilateral triangle is an Isosceles Triangle
    II) A triangle can have two obtuse angles
    III) A triangle must have three acute angles
    A) I & II   B) II & III   C) III & I   D) I, II, III
ANS : B

92. If 2x, x 3x are angles of a triangle, then the angles are
    A) 60^0, 30^0, 80^0 B) 60^0, 30^0, 90^0
    C) 50^0, 40^0, 90   D) 60^0,60^0,60^0
ANS : B

93. If 3x – 5, x + 10 4x + 5 are angles, find the angles ?
    A) $58\frac{3^0}{4}, 31\frac{1^0}{4}, 90^0$ B) $58^0, 32^0, 90^0$
    C) $90^0, 1^0, 90^0$ D) $49^0, 71^0, 60^0$
ANS : A

94 . Into what type of parts is a figure divided by bisecting it?
    A) Unequal   B) Equal   C) Triangular   D) Perpendicular

Ans: B

95. Identify the instruments used to bisect a given line segment.
    A) A scale and a protractor   B) Scale and compasses   C) Scale and setsquares   D) A scale
Ans : B

96. What do you call two lines intersecting at a point?
    A) Perpendicular lines   B) Parallel lines   C) Bisectors lines   D) Intersecting lines
 Ans: D

 97. An angle of 15 ◦ is drawn using a pair of compasses and a ruler. How is it done?
    A) Bisecting 60 ◦ angle.   B) Bisecting 60 ◦ and 120 ◦ angles.
    C) Bisecting 60 ◦ and then bisecting it again.   D) Bisecting a 60 ◦ and 180 ◦ angles.
Ans: C

98. Which of the following is an angle that can be constructed using compasses and a ruler?
    A) 20 ◦   B) 80 ◦   C) 60 ◦   D) 110 ◦
Ans: C

99. How do you draw a 90 ◦ angle?
    A) By drawing a perpendicular to a line from a point lying on it.
    B) By bisecting a 120 ◦ angle.   C) By bisecting a 60 ◦ angle.
    D) By drawing multiples of 45 ◦ angle.
Ans: A

100. An angle ∠XYZ=75 ∘ is bisected by an angular bisector YU−→−−. Then what is the measure of∠UYZ?

A) 37 ∘   B) 37.5 ∘   C) 47.5 ∘   D) 47 ∘

Ans: B