

1. Which of the following is Natural number?

- a) 3.5
- b) 7
- c) 0
- d) -2

2. Integer numbers set is denoted by which letter?

- a) N
- b) W
- c) Q
- d) Z

3. Find the incorrect option (Assume conventional notations).

- a) $Q = p/q$ where p and q are integers and $q=0$
- b) $N = \{1, 2, 3, \dots\}$
- c) $W = \{0, 1, 2, 3, \dots\}$
- d) $Z = \{\dots-2, -1, 0, 1, 2, \dots\}$

4. Zero is a rational number.

- a) False
- b) True
- c) both
- d) none

5. There are _____ rational numbers between 2 and 3.

- a) zero
- b) two
- c) infinite
- d) data is insufficient

6. Which of the following option is true based on the below statements?

- i) All integers are rational numbers.
- ii) All rational numbers are integers.
- a) Both statements are true
- b) Statement (i) is true and Statement (ii) is false
- c) Statement (i) is false and Statement (ii) is true
- d) Both statements are false

7. Which of the following is not rational number?

- a) $\frac{8}{9}$
- b) $\frac{5}{7}$
- c) $-\frac{3}{2}$
- d) $\sqrt{2}$

8. How many whole numbers are there between -3 and 3 (Including -3 and 3)?

- a) Four
- b) Zero
- c) Seven
- d) Three

9. N is subset of W, Z and Q. (Assume conventional notations)

- a) True
- b) False
- c) both
- d) none

10. Rational numbers are denoted by _____

- a) N
- b) Z
- c) Q
- d) W

11. What is the coefficient of x^3 in a polynomial $6x^4 + 3x^2 + 8x + 5$?

- a) 6
- b) 3
- c) 8
- d) 0

12. What is the degree of a polynomial of $4x^7 + 9x^5 + 5x^2 + 11$?

- a) 7
- b) 4
- c) 5
- d) 2

13. What is the degree of a polynomial 7?

- a) 7
- b) 1
- c) 0
- d) 2

14. What is the degree of 0?

- a) Not defined
- b) 1
- c) 2
- d) 0

15. A quadratic polynomial can have at most _____ terms.

- a) 1
- b) 4
- c) 2
- d) 3

16. Point where XX' and YY' intersect, is called _____

- a) abscissa
- b) ordinate
- c) origin
- d) coordinate

17. How many parts does the axes divide the plane into?

- a) One
- b) Two
- c) Three
- d) Four

18. Which of the following are positive directions?

- a) OX' and OY'
- b) OX and OY'
- c) OX' and OY
- d) OX and OY

19. If a point is in 2nd quadrant, then it is in _____ form.

- a) (+, +)
- b) (+, -)
- c) (-, +)
- d) (-, -)

20. Point (6, 9) and (9, 6) are same.

- a) True
- b) False
- c) both
- d) none

21. Why is coordinate geometry used?

- a) To find square root of a number
- b) To locate a point in a plane precisely
- c) To create different shapes
- d) To multiply numbers

22. Linear equations are of _____ form.

- a) $ax^2+bx+c = 0$
- b) $ax+by+c = 0$
- c) $x^2+y^2 = a^2$
- d) $x^2-y^2 = a^2$

23. How many solutions does a linear equation have?

- a) One
- b) Two
- c) Three
- d) Four

24. Which of the following is the correct way to represent the equation $3x=9$ in $ax+by+c = 0$ form?

- a) $3x = -0y + 9$
- b) $3x + 0y = 9$
- c) $3x + 0y - 9 = 0$
- d) $3x + 0y = 9$

25. Find the solution for the linear equation $2.5x=5$?

- a) $x=-2$
- b) $x=5$
- c) $x=3$
- d) $x=2$

26. What does geometry mean?

- a) Measurement of land
- b) Measurement of physical objects
- c) Measurement of velocity
- d) Measurement of Pressure

27. How many dimensions does a point have?

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

28. How many dimensions does a line have?

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

29. A line with two endpoints is called _____

- a) line
- b) ray
- c) line-segment
- d) triangle

30. How many endpoints does a ray have?

- a) One
- b) Two
- c) Three
- d) Four

31. If x is an acute angle, then what is true for x ?

- a) $x = 90^\circ$
- b) $0^\circ < x < 90^\circ$
- c) $90^\circ < x < 180^\circ$
- d) $180^\circ < x < 360^\circ$

32. If x is an obtuse angle, then what is true for x ?

- a) $x = 90^\circ$
- b) $180^\circ < x < 360^\circ$
- c) $0^\circ < x < 90^\circ$
- d) $90^\circ < x < 180^\circ$

33. If x is a right angle, what is true for x ?

- a) $x = 90^\circ$
- b) $180^\circ < x < 360^\circ$
- c) $0^\circ < x < 90^\circ$
- d) $90^\circ < x < 180^\circ$

34. What is the angle formed by a line?

- a) 90°
- b) 180°
- c) 270°
- d) 360°

35. If $180^\circ < x < 360^\circ$, then x is a _____ angle.

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

36. The sum of complimentary angles is _____

- a) $> 90^\circ$
- b) $< 90^\circ$
- c) $= 90^\circ$
- d) $= 180^\circ$

37. The sum of two supplementary angles is _____

- a) $> 90^\circ$
- b) $< 90^\circ$
- c) $= 90^\circ$
- d) $= 180^\circ$

38. A triangle has _____ vertices.

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

39. Which one is true if triangle ABC is congruent to triangle PQR?

- a) $AB = PQ$
- b) $AB = QR$
- c) $BC = QR$
- d) $\angle A = \angle Q$

40. If three out of four points are collinear, we get _____

- a) line
- b) square
- c) triangle
- d) rectangle

41. Quadrilateral has _____ sides.

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

42. The sum of four angles of quadrilateral is equal to _____

- a) 90°
- b) 360°
- c) 180°
- d) 270°

43. A rectangle is a parallelogram.

- a) True
- b) False
- c) both
- d) none

44. Two figures having the same area are always congruent.

- a) True
- b) False
- c) both
- d) none

45. The collection of all the points in a plane, which are at a fixed distance from a fixed point in the plane, is called _____

- a) square
- b) triangle
- c) rectangle
- d) circle

Answer:

1.b	2.d	3.a	4.b	5.c	6.b	7. d
8.a	9.a	10.c	11.d	12.a	13.c	
14.a	15.d	16.c	17.d	18.d	19.c	
20.b	21.b	22.b	23.a	24.c	25.d	
26.a	27.d	28.b	29.c	30.a	31.b	
32.d	33.a	34.b	35.c	36.c	37.d	
38.c	39.a	40.c	41.d	42.b	43.a	
44.b	45.d					

