1) x^2-2x+1 is a polynomial in:

a. One Variable

b. Two Variables

c. Three variable

d. None of the above

2) The coefficient of x^2 in $3x^3+2x^2-x+1$ is:

a. 1

b. 2

c. 3

d. -1

3) A binomial of degree 20 in the following is:

a. 20x + 1

b. x/20 + 1

c. x^{20} +1

d. x^2+20

4) The degree of $4x^3-12x^2+3x+9$ is

a. 0

b. 1

c. 2

d. 3

5) $x^2 - x$ is _____ polynomial.

a. Linear

b. Quadratic

c. Cubic

d. None of the above

6) The name of the horizontal line in the cartesian plane which determines the position of a point is called:

a. Origin

b. X-axis

c. Y-axis

d. Quadrants

7) The name of the vertical line in the cartesian plane which determines the position of a point is called:

a. Origin

b. X-axis

c. Y-axis

d. Quadrants

8) The section formed by horizontal and vertical lines determining the position of the point in a cartesian plane is called:

a. Origin

b. X-axis

c. Y-axis

d. Quadrants

9) The point of intersection of horizontal and vertical lines determining the position of a point in a cartesian plane is called:

a. Origin

b. X-axis

c. Y-axis

d. Quadrants

10) If the coordinates of a point are (0, -4), then it lies in:

a. X-axis

b. Y-axis

c. At origin

d. Between x-axis and y-axis

11) The linear equation 3x-11y=10 has:

a. Unique solution

b. Two solutions

c. Infinitely many solutions

d. No solutions

12) 3x+10 = 0 will have:

a. Unique solution

b. Two solutions

c. Infinitely many solutions

d. No solutions

13) The solution of equation x-2y = 4 is:

a. (0,2)

b. (2,0)

c. (4,0)

d. (1,1)

14) Find the value of k, if x = 1, y = 2 is a solution of the equation 2x + 3y = k.

a. 5

b. 6

c. 7

d. 8

15) Point (3, 4) lies on the graph of the equation 3y = kx + 7. The value of k is:

a. 4/3

b. 5/3

c. 3

d. 7/3

16) A straight angle is equal to:

a. 0°

b. 90°

c. 180°

d. 360°

17) Two angles whose sum is equal to 180° are called:

a. Vertically opposite angles

b. Complementary angles

c. Adjacent angles

d. Supplementary angles

18) Intersecting lines cut each other at:

a. One point

b. Two points

c. Three points

d. Null

19) Two parallel lines intersect at:

a. One point

b. Two points

c. Three points

d. Null

20) If two lines intersect each other, then the vertically opposite angles are:

a. Equal

b. Unequal

c. Cannot be determined

d. None of the above

21) In △ PQR, ∠R = ∠P and QR = 4 cm and PR = 5 cm. Then the length of PQ is

(a) 2 cm

(b) 2.5 cm

(c) 4 cm

(d) 5 cm

22) If AB = QR, BC = PR and CA = PQ, then

(a) △ PQR ≅ △ BCA

(b) △ BAC ≅ △ RPQ

(c) △ CBA ≅ △ PRQ

(d) △ ABC ≅ △ PQR

23) If △ ABC ≅ △ PQR, then which of the following is not true?

(a) AC = PR

(b) BC = PQ

(c) QR = BC

(d) AB = PQ

24) In △ ABC, BC = AB and ∠B = 80°. Then ∠A is equal to

(a) 40°

(b) 50°

(c) 80°

(d) 100°

25) Two sides of a triangle are of lengths 5 cm and 1.5 cm. The length of the third side of the triangle cannot be

(a) 3.4 cm

(b) 3.6 cm

(c) 3.8 cm

(d) 4.1 cm

26) In △ ABC, AB = AC and ∠B = 50°. Then ∠C is equal to

(a) 40°

(b) 50°

(c) 80°

(d) 130°

27) In △ PQR, if ∠R > ∠Q, then

(a) QR < PR

(b) PQ < PR

(c) PQ > PR

(d) QR > PR

28) If ABCD and EFGH are two parallelograms between same parallel lines and on the same base, then:

a. ar (ABCD) > ar (EFGH)

b. ar (ABCD) < ar (EFGH)

c. ar (ABCD) = ar (EFGH)

d. None of the above

29) A median of a triangle divides it into two

a. Congruent triangles

b. Isosceles triangles

c. Right triangles

d. Equal area triangles

30) In a triangle ABC, E is the mid-point of median AD. Then:

a. ar(BED) = 1/4 ar(ABC)

b. ar(BED) = ar(ABC)

c. ar(BED) = 1/2 ar(ABC)

d. ar(BED) = 2 ar(ABC)

31) If D and E are points on sides AB and AC respectively of ΔABC such that ar(DBC) = ar(EBC). Then:

a. DE is equal to BC

b. DE is parallel to BC

c. DE is not equal to BC

d. DE is perpendicular to BC

32) If Diagonals AC and BD of a trapezium ABCD with AB || DC intersect each other at O. Then,

a. ar (AOD) = ar (BOC)

b. ar (AOD) > ar (BOC)

c. ar (AOD) < ar (BOC)

d. None of the above

33) If there are two separate circles drawn apart from each other, then the maximum number of common points they have:

a. 0

b. 1

c. 2

d. 3

34) The angle subtended by the diameter of a semi-circle is:

a. 90

b. 45

c. 180

d. 60

35) Which of these angles we cannot construct it using a ruler and compasses?

a. 120°

b. 70°

c. 60°

d. All can be constructed

36) Which of these angles cannot be constructed using a ruler and compasses?

a. 120°

b. 60°

c. 140°

d. 135°

37) If a, b and c are the lengths of three sides of a triangle, then:

a. a+b>c

b. a-b>c

c. a+b=c

d. a-b=c

38) Which of the following set of lengths can be the sides of a triangle?

a. 2 cm, 4 cm, 1.9 cm

b. 1.6 cm, 3.7 cm. 5.3 cm

c. 5.5 cm, 6.5 cm, 8.9 cm

d. None of the above

39) The side lengths 4cm, 4cm and 4cm can be sides of:

a. Scalene Triangle

b. Isosceles Triangle

c. Equilateral Triangle

d. None of the above

40) To construct a bisector of a given angle, we need:

a. A ruler

b. A compass

c. A protractor

d. Both ruler and compass

41) To construct an angle of 60 degrees, we need to draw first:

a. A ray

b. An arc

c. Two rays

d. A straight line

42) The base of a right triangle is 8 cm and the hypotenuse is 10 cm. Its area will be

(a) 24 cm^2

(b) 40 cm^2

(c) 48 cm^2

(d) 80 cm^2

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43) The edges of a triangular board are 6 cm, 8 cm and 10 cm. The cost of painting it at the rate of 9 paise per cm^2 is

(a) Rs 2.00

(b) Rs 2.16

(c) Rs 2.48

(d) Rs 3.00

44) The sides of a triangle are 56 cm, 60 cm and 52 cm long. Then the area of the triangle is

(a) 1322 cm²

(b) 1311 cm²

(c) 1344 cm²

(d) 1392 cm²

45) If the area of an equilateral triangle is 16√3 cm², then the perimeter of the triangle is

(a) 48 cm

(b) 24 cm

(c) 12 cm

(d) 36 cm

Answer:

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