

I. Choose the correct answer. (15×1=15)

1. The value of y in the equation $y-9 = (-5)+7$ is
a) 7 b) 11 c) 13 d) 15
2. The linear equation in one variable has _____ solution.
a) One b) Two c) No solution d) Infinite solution
3. The value of P in the equation $\frac{2P}{3} = 10$ is _____
a) 5 b) 10 c) 15 d) 20
4. The shifting of a number from one side of an equation to other is called _____
a) Linear b) Transposition c) Expression d) Quadratic
5. The value of x in the equation $x + 5 = 7$ is _____
a) 5 b) -5 c) 2 d) -7
6. The solution of the equation $ax + b = 0$ is _____
a) $\frac{a}{b}$ b) $\frac{b}{a}$ c) $-\frac{a}{b}$ d) $-\frac{b}{a}$
7. In an equation $a+b=23$. The value of a is 14 then the value of b is _____
a) 8 b) 9 c) 10 d) 11
8. If the angles of a triangle are in the ratio 2: 3: 4 then the different between the greater and the smallest angle is _____
a) 40° b) 60° c) 65° d) 70°
9. One sixth of a number when subtracted from another number itself gives 25. The number is _____
a) 22 b) 24 c) 30 d) 32
10. x-axis and y-axis intersect at _____
a) (-2,-1) b) (2,3) c) (0, 0) d) (5, 4)

11. The Co-ordinates of the point in third quadrant

are always _____

- a) Zero b) Positive c) Negative d) None of these
12. (0, -5) point lies on _____ axis
a) x-axis b) y-axis c) origin d) None
13. (-10, 20) lies in _____ quadrant.
a) I b) II c) III d) IV
14. The value of m in the equation $8m = 56$ is
a) 5 b) 6 c) 7 d) 8
15. The Co-ordinate axes divide the plane of the graph in to four regions called _____
a) Origin b) Abscissa c) Ordinate d) Quadrant

II. Answer the following. (Any 9) (9×3=27)

Question No. 27 a or b is compulsory.

16. Find : $\frac{2x}{3} - 4 = \frac{10}{3}$
17. Solve : $-3(4x + 9) = 21$
18. Solve the equation : $x - 7 = 6$
19. One number is seven times another if their difference is 18. Find the numbers.
20. The sum of three consecutive odd number is 75. Which is the largest among them?
21. Solve the equation : $5(3x + 2) = 3(5x - 7)$
22. The length of a rectangle is $\frac{1}{3}$ of its breadth. If its perimeter is 64m, then find the length and breadth of the rectangle.
23. Find the quadrants of the given point
(i) (4, -3) (ii) (-3, -4) (iii) (5, 7)

24. Solve : $y + \frac{1}{6} - 3y = \frac{2}{3}$

25. "Sum of a number and two times that number is 48". Write the equation and find the number.

26. Write the Abscissa and Ordinate for the following points, (-8, 0), (-9, 50) (-3, -5), (-7, 2) and (-5, 7)

27. Solve the equation.

a) $3x = 51$ (or) b) $2x + 5 = 9$

III. Answer the following in 5 mark question (Any Five).

Question No 'a' or 'b' is compulsory. (5 × 5 = 25)

28. Find the value of m ; $\frac{m+9}{3m+15} = \frac{5}{3}$

29. Match the following.

a) $\frac{x}{2} = 10$ - $x = 4$

b) $20 = 6x - 4$ - $x = 1$

c) $2x - 5 = 3 - x$ - $x = 20$

d) $7x - 4 - 8x = 2$ - $x = \frac{8}{3}$

e) $\frac{4}{11} - x = \frac{-7}{11}$ - $x = -64$

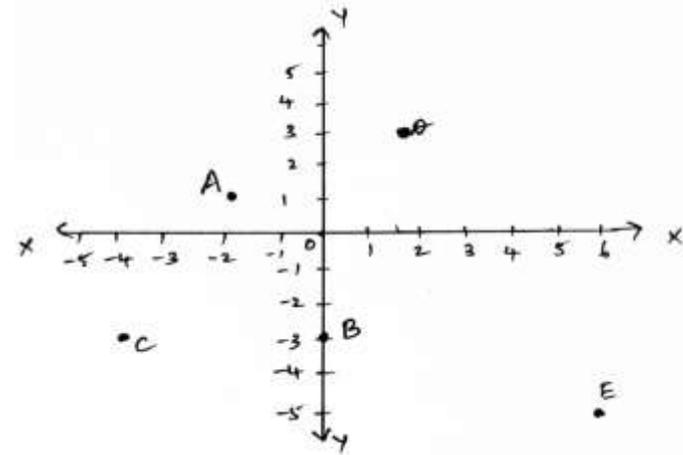
30. Find : $(7x - 5) - 4(2 + 5x) = 10(2 - x)$

31. A total of 90 currency notes, consisting only of Rs. 5 and Rs.10 denominations, amount to Rs. 500. Find the number of notes in each denomination.

32. The denominator of a fraction exceeds its numerator by 8. If the numerator is increased by 17 and the denominator is decreased by 1, we get $\frac{3}{2}$. Find the original fraction.

33. At present, Thenmozhi's age is 5 years more than that of Murali's age. Five years ago, the ratio of Thenmozhi's age to Murali's age was 3: 2. Find their present age.

34. From the given graph determine the Co-ordinates and mention its Quadrant.



35. Find x : $\frac{3x-2}{4} - \left(\frac{x-3}{5}\right) = -1$

36. a) The sum of two numbers is 36 and one number exceeds another by 8. Find the number. (or)

b) The length of a rectangular field exceeds its breadth by 9m. If the perimeter of the field is 154m, find the length and breadth of the field.

IV. Answer the following. (Any one) (1 × 8 = 8)

37. Plot the following points in a graph sheet.

a) A (5, 2) B (-7, -3) C (-2, 4) D (-1, -1) E (0, -5)

(or)

b) U (2, 0) V (7, -4) W (2, 3) X (8, -4) Z (0, 7)