PRACTICE QUESTIONS
CLASS – VII: CHAPTER – 4
SIMPLE EQUATIONS

1. Write the following statements in the form of equations:
(i) The sum of three times x and 11 is 32.
(ii) If you subtract 5 from 6 times a number, you get 7.
(iii) One fourth of m is 3 more than 7.
(iv) One third of a number plus 5 is 8.

2. Convert the following equations in statement form:

(i) $x - 5 = 9$ (ii) $5p = 20$ (iii) $3n + 7 = 1$ (iv) $\frac{m}{5} - 2 = 6$.

3. Write the following situation in the form of equations:
Raju's father's age is 5 years more than three times Raju's age. Raju's father is 44 years old. Set up an equation to find Raju's age.

4. A shopkeeper sells mangoes in two types of boxes, one small and one large. A large box contains as many as 8 small boxes plus 4 loose mangoes. Set up an equation which gives the number of mangoes in each small box. The number of mangoes in a large box is given to be 100.

5. Write equations for the following statements:
(i) The sum of numbers x and 4 is 9.
(ii) The difference between y and 2 is 8.
(iii) Ten times a is 70.
(iv) The number b divided by 5 gives 6.
(v) Three fourth of t is 15.
(vi) Seven times m plus 7 gets you 77.
(vii) One fourth of a number minus 4 gives 4.
(viii) If you take away 6 from 6 times y, you get 60.
(ix) If you add 3 to one third of z, you get 30.

6. Write the following statements in the form of equations:
(a) 11 added to $2m$ to get 40.
(b) 11 subtracted from $2m$ to 25
(c) 5 times y to which 3 is added to get 45
(d) 5 times y from which 3 is subtracted to get 33
(e) y is multiplied by – 8 to get 24
(f) y is multiplied by – 8 and then 5 is added to the result to get 29.
(g) y is multiplied by 5 and the result is subtracted from 16 to get 4
(h) y is multiplied by – 5 and the result is added to 16 to get 8.

7. The length of a rectangular hall is 4 meters less than 3 times the breadth of the hall. What is the length, if the breadth is b meters?

8. Solve: (a) $3n + 7 = 25$ (b) $2p - 1 = 23$ (c) $12p - 5 = 25$

9. Solve: (a) $3n - 2 = 46$ (b) $5m + 7 = 17$ (c) $10p = 100$ (d) $10p + 10 = 100$
(e) $3s = -9$ (f) $3s + 12 = 0$ (g) $2q - 6 = 0$ (h) $2q + 6 = 12$
(i) $\frac{20p}{3} = 40$ (j) $\frac{3p}{10} = 6$ (k) $\frac{3p}{4} = 6$ (l) $\frac{-p}{3} = 2$

10. Solve: (a) $4(m + 3) = 18$ (b) $-2(x + 3) = 5$

11. Solve the following equations.
(a) $4 = 5(p - 2)$ (b) $-4 = 5(p - 2)$ (c) $-16 = -5(2 - p)$
(d) $10 = 4 + 3(t + 2)$ (e) $28 = 4 + 3(t + 5)$ (f) $0 = 16 + 4(m - 6)$

16. The sum of three times a number and 11 is 32. Find the number.

17. Find a number, such that one fourth of the number is 3 more than 7.

18. When you multiply a number by 6 and subtract 5 from the product, you get 7. Find the number.

19. What is that number one third of which added to 5 gives 8?

20. Raju's father's age is 5 years more than three times Raju's age. Find Raju's age, if his father is 44 years old.

21. There are two types of boxes containing mangoes. Each box of the larger type contains 4 more mangoes than the number of mangoes contained in 8 boxes of the smaller type. Each larger box contains 100 mangoes. Find the number of mangoes contained in the smaller box?

22. The teacher tells the class that the highest marks obtained by a student in her class is twice the lowest marks plus 7. The highest score is 87. What is the lowest score?

23. In an isosceles triangle, the base angles are equal. The vertex angle is 40°. What are the base angles of the triangle? (Remember, the sum of three angles of a triangle is 180°).

24. Smita's mother is 34 years old. Two years from now mother's age will be 4 times Smita's present age. What is Smita's present age?

25. Sachin scored twice as many runs as Rahul. Together, their runs fell two short of a double century. How many runs did each one score?

26. Nine added to thrice a number a whole number gives 45. Find the number.

27. Four-fifths of a number is greater than three-fourths of the number by 4. Find the number.

28. Twice a number when decreased by 7 gives 45. Find the number.

29. Thrice a number when increased by 5 gives 44. Find the number.

30. Laxmi's father is 49 years old. He is 4 years older than three times Laxmi's age. What is Laxmi's age?

31. Maya, Madhura and Mohsina are friends studying in the same class. In a class test in geography, Maya got 16 out of 25. Madhura got 20. Their average score was 19. How much did Mohsina score?

32. People of Sundargram planted a total of 102 trees in the village garden. Some of the trees were fruit trees. The number of non-fruit trees were two more than three times the number of fruit trees. What was the number of fruit trees planted?

33. The sum of two consecutive multiples of 3 is 69. Find the numbers.

34. The length of a rectangular plot exceeds its breadth by 5 m. If the perimeter of the plot is 142 m, find the dimensions of the plot.

35. Raju is 19 years younger than his cousin. After 5 years, their ages will be in the ratio 2 : 3. Find their present age.

36. A father is 30 years older than his son. In 12 years, the man will be three times as old as his son. Find their present ages.

37. The ages of Arun and Rahul are in the ratio 7 : 5. Ten eyars hence, the ratio of their ages will be 9 : 7. Find their present ages.

38. In an examination, a student requires 40% of the total marks to pass. If Vandana gets 185 marks and fails by 15 marks, find the total marks.

39. Five years ago a man was seven times as old as his son. Five years hence, the father will be three times as old as his son. Find their present ages.

40. A sum of Rs. 500 is in the form of denominations of Rs. 5 and Rs. 10. If the total number of notes is 90, find the number of notes of each type.

41. The total cost of 3 tables and 2 chairs is Rs. 745. If a table costs Rs. 40 more than a chair, find the price of each.

42. After 12 years Uday will be 3 times as old as he was 4 years ago. Find his present age.

43. Two-third of a number less than the original number by 10. Find the original number.

44. Solve: $\frac{x+2}{x-2}=\frac{7}{3}$

45. Solve: $\frac{x}{2}+\frac{x}{4}=\frac{1}{8}$