Subject: - Mathematics
Topic: - Linear Equations

PRACTICE PAPER

CBSE-8th

1. Solve $\frac{x}{2} - \frac{1}{5} = \frac{x}{3} + \frac{1}{4}$ **Ans.** $\frac{27}{10}$

2. Solve: $\frac{3t-2}{4} - \frac{2t+3}{3} = \frac{2}{3} - t$ **Ans. t = 2**

3. Solve: $(2x+3)^2 + (2x-3)^2 = (8x+6)(x-1) + 22$ **Ans. – 1**

4. Solve: $\frac{0.5(x-0.4)}{0.35} - \frac{0.6(x-2.71)}{0.42} = x + 6.1$ **Ans. -2.8**

5. Solve: $\frac{x+b}{a-b} = \frac{x-b}{a+b}$ **Ans. – a**

6. Find the positive value of x for which the given equation is satisfied:

i) $\frac{x^2-9}{5+x^2} = -\frac{5}{9}$ **Ans. 2**

7. A number is 56 greater than the average of its third, quarter and one-twelfth. Find it. **Ans. 72**

8. A number consists of two digits whose sum is 8. If 18 is added to the number, its digits are reversed. Find the number. **Ans. 35**

9. the numerator of a fraction is 4 less than the denominator. If 1 is added to both, its denominator and numerator, its becomes $\frac{1}{2}$. Find the fraction. **Ans.** $\frac{3}{7}$

10. Saurabh has Rs. 34 consisting of fifty paisa and twenty-five paisa coins. If the number of twenty-five paise coins be twice the number of 50 paisa coins. How many coins of each kind does he have?
Ans. 50 p coins- 34 & 25 p coins- 68

11. After 12 years I shall be 3 times as old as I was 4 years ago. Find my present age. **Ans. 12**

12. Hamid has three boxes of different fruits. Box A weighs $2\frac{1}{2}$ kg more than Box B and Box B weighs $10\frac{1}{4}$ kg more than box B. The total weight of the boxes is $48\frac{3}{4}$ kg. How many kg does box A weigh? **Ans.** $14\frac{1}{2}$

13. How much pure alcohol be added to 400 ml of a 15% solution to make its strength 32%. **Ans. 100ml**

14. 50 kg of an alloy of lead and tin contains 60% lead. How much lead must be melted into it to make an alloy containing 75% lead? **Ans. 30 kg**

15. The sum of two numbers is 2490. If 6.5% of one number is equal to 8.5% of the other. Find the numbers? **Ans. 1411 & 1079**

16. The length of the rectangle exceeds its breadth by 4 cm. If length and breadth are each increased by 3cm, the area of the new rectangle will be 81 cm^2 more than that of the given rectangle. Find the length and breadth? **Ans. L = 14cm. B = 10cm.**