

LINEAR EQUATION <VIII>

1. Solve the following-

a. $\frac{2}{5}x - 5x = \frac{1}{15}$

b. $(7 - 3x) - \frac{(4x-2)}{2} = 5 - 6x + \frac{(7x+14)}{3}$

c. $0.5x + \frac{x}{5} = 0.25x + 7$

d. $\frac{y-1}{3} - \frac{y-2}{4} = 1$

e. $\frac{2x}{3} = \frac{3x}{8} + \frac{7}{12}$

f. $0.6x = \frac{4}{5} - 0.28x + 1.16$

2. A number has 'a' its units digit and 'b' as its tens digit. What is the number.
3. Divide 60 into two parts so that one part is three times the other.
4. If 9 is added to thrice a number, it becomes 45. Find the number.
5. A number when added to its half, its two-third and one-seventh amount to 97. Find the original number.
6. The perimeter of a rectangle is 50m. If its length is larger than its width by 5m. Find the length and width of rectangle.
7. The sum of digits of two-digit number is 15. If the number is reversed, the new number is lesser than the original number by 27. Find the original number. Check your answer.
8. The perimeter of a rectangle is 100m. If length is decreased by 2m and breadth is increased by 3m, the area increases by 44m^2 .
9. The sum of the digits of a two-digit number is 11. The number obtained by interchanging the digits exceeds the original number by 27. Find the number.
10. The difference between two positive integers is 30. The ratio of these integers is 2:5. Find the integers.