

SUBJECT –MATHEMATICS
CLASS-VIII
CHAPTER-9 (LINEAR EQUATIONS IN ONE VARIABLE)
WORKSHEET(STANDARD)

1. Three fourth of a number exceeds its one third by 60. Find the number.
2. What should be subtracted from thrice the rational number $-\frac{8}{3}$ to get $\frac{5}{2}$.
3. Find a number which when added to 10 times itself gives 264.
4. Find a number which is as much greater than 36 as is less than 86.
5. A number 351 is divided into two parts in the ratio 2:7. The product of the numbers is -----
6. Choose the correct alternative
The Perimeter of a rectangle is numerically equal to its area. If the width of the rectangle is $2\frac{3}{4}$ cm, then its length is –
(i) $\frac{11}{3}$ cm (ii) $\frac{22}{3}$ cm (iii) 11cm (iv) 10cm
7. The sum of the digits of a 2-digit number is 10. The number obtained by interchanging the digits exceeds the original number by 36. Find the original number.
8. Solve and verify your answer
$$\frac{x^2 - (x+2)(x+3)}{7x+1} = \frac{2}{3}$$
9. Find the positive value of the variable for which the equation
$$\frac{3-x^2}{8+x^2} = -\frac{3}{4}$$
10. A steamer, going downstream in a river, covers the distance between two towns in 15 hours. Coming back upstream, it covers this distance in 20 hours.
The speed of the water is 3 km/hr. Find the distance between two towns.
11. A money box contains one-rupee and two-rupee coins in the ratio of 5:6. If the total value of the coins in the money box is Rs. 85, find the number of two rupees coins.

12. Solve $\frac{p-\frac{2}{5}}{p+\frac{2}{5}}=5$

13. Five years ago, a mother was seven times as old as her daughter. Five years hence, she will be three times as old as her daughter. Find their present ages.

14. The numerator of a rational number is 3 less than its denominator. If the numerator is increased by 1 and the denominator is increased by 3, the number becomes $\frac{1}{2}$. Find the rational number.

15. solve $\frac{x^2 - (x+2)(x-2)}{x+3} = \frac{1}{2}$

16. A race-boat covers a distance of 60 km downstream in one and a half hour. It covers this distance upstream in 2 hours. The speed of the race-boat in still water is 35 km/hr. Find the speed of the stream.

17. Selina had 60 flowers. She offered some flowers in a temple and found that the ratio of the remaining flowers to that of flowers in the beginning is 3:5. Find the number of flowers offered by her in the temple.

18. The perimeter of a rectangle is 240cm. If the length is increased by 10% and its breadth is decreased by 20%, we get the same perimeter. Find the length and breadth of the rectangle.

19. Solve and verify your answer

$$x - \frac{x-1}{2} = 1 - \frac{x-2}{3}$$

20. Solve and verify:

$$\frac{y-(7-8y)}{9y-(3+4y)} = \frac{2}{3}$$