

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

1. Solve $5x-9=8$

2. What should be subtracted from 3 to get -4?

3. Choose the correct alternative

Solution of a linear equation in one variable is always-

(a) a natural number (b) a whole number

(c) a real number (d) an integer

4. In a linear equation the highest power of the variable is

5. Find the value of x which satisfies the equation :

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

6. solve $\frac{x}{2} - \frac{1}{5} = \frac{x}{3} + \frac{1}{4}$

7. The sum of three consecutive multiples of 7 is 63.

Find these multiples.

8 Perimeter of a rectangle is 100cm. If its width is 15cm, find its length.

9 .solve $\frac{a-8}{3} = \frac{a-3}{2}$

10 .Four-Fifth of a number is more than three-fourth of the number by

4. Find the number.

11. The ages of sonu and monu are in the ratio 5:7. Ten years hence ,the ratio of their ages will be 9:7. Find their present ages.

12. The sum of the digits of a two digit number is 8. The number obtained by interchanging the digits exceeds the given number by 18. Find the given number.

13 Solve the equation $\frac{7-x}{5x+1} = 3$ and verify your answer.

14. Find the Positive value of the variable for which the the equation

$$\frac{y^2 + 6}{8y^2 + 3} = \frac{1}{5} \text{ is satisfied.}$$

15.If the sum of two numbers is 30 and their ratio is 2:3 then find the numbers.

16.Show that $x=4$ is a solution of the equation $x+7-\frac{8x}{3} = \frac{17}{6} - \frac{5x}{8}$

17.The numerator of a fraction is 2 less than the denominator. If one is added to its denominator, it becomes $\frac{1}{2}$. Find the rational number.

18.Three numbers are in the ratio 4:5:6.If the sum of the largest and smallest exceeds the third number by 55, find the number.

19.The sum of three consecutive multiples of 7 is 777.Find these multiples.

20.The difference between two positive integers is 30.The ratio of these integers is 2:5.Find the integers.

21.Solve the equation $\frac{p+7}{p-6} = \frac{1}{3}$ and verify your answer.

22. solve $\frac{2x-3}{3x+2} = -\frac{2}{3}$ and verify your answer.

23.Solve $\frac{2x}{3x-1} = -3$

24.The sum of two positive integers is 105. The integers are in the ratio 2:3.Find the integers.

25.Present ages of Anu and Raj are in the ratio 4:5. Eight years from now there ages will be in ratio 5:6. Find their present ages.

26.Solve $\frac{3-x^2}{8+x^2} = -\frac{3}{4}$

27.The numerator and denominator of a rational number are in the ratio 3:4.If the denominator is increased by 3 , the ratio becomes 3:5.Find the rational number.

28.Solve and verify your answer.

$$\frac{2x+5}{3} = 3x-10$$

29.Divide 184 into two parts such that one-third of one part may exceed one-seventh of another part by 8.

30.Solve the equation $\frac{3k+5}{4k-3} = \frac{4}{9}$ and verify your answer.