

INTERNATIONAL INDIAN SCHOOL
BURAI DAH

Worksheet For The Academic Year 2024-25

CLASS: VIII SUBJECT: Mathematics DATE: 26/04/2024

LESSON-2 Linear Equations In One Variable

1) Solve:

a) $13x + 10 = 23$ b) $\frac{y}{5} + 1 = 3$ c) $\frac{x}{2} - 1 = \frac{1}{5}$

2) A number when multiplied by 9 and then reduced by 4 gives 77. Find the number.

3) Solve:

a) $4p - 9 = 3p - 5$ b) $4n = 3(n + 2)$ c) $2x + 1 = \frac{2}{3} + 3x$ d) $\frac{y}{3} + \frac{1}{3} = \frac{y}{4} - \frac{1}{8}$

4) Arjun is twice as old as Shreya. Five years ago his age was three times Shreya's Age. Find their present ages.

5) Solve:

a) $p - 3 = \frac{3}{4}(p - 1)$ b) $2(3x - 1) + \frac{7}{2} = 5x - 2(2x - 7)$

c) $\frac{3t-2}{3} + \frac{3t+3}{2} = \frac{6t+7}{6}$ d) $\frac{6x-8}{2x} = 2$ e) $\frac{5y+4}{2y-4} = \frac{3}{4}$

f) $(4z + 1) - \frac{3z+10}{2} = \frac{10z-8}{12}$

6) Present ages of Deepak and Raj are in the ratio 2 : 3. Four years from now the ratio of their ages will be 3 : 4. Find their present ages.

7) Solve: $5(x - 1) - 2(x + 8) = 0$

8) If $\frac{1}{2}$ is subtracted from a number and the difference is multiplied by 4, the result is 5. What is the number?

9) Solve: a) $\frac{5x-4}{8} - \frac{x-3}{5} = \frac{x+6}{4}$ b) $0.7x + 0.3x = 0.5x + 6$ c) $\frac{2x}{3} + 6 = \frac{x}{5} - 2$

ANSWERS

1) a) 1 b) 10 c) $\frac{12}{5}$ 2) 9 3) a) 4 b) 6 c) $\frac{1}{3}$ d) $\frac{-11}{2}$ 4) 20yrs, 10yrs

5) a) 9 b) $\frac{5}{2}$ c) $\frac{1}{3}$ d) 4 e) -2 f) 2 6) 8yrs, 12yrs 7) 7 8) $\frac{7}{4}$

9) a) 8 b) 12 c) $\frac{-120}{7}$