

INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2025-26

CLASS: VIII

SUBJECT: MATHEMATICS

DATE: 05 -05-2025

LESSON: 2 LINEAR EQUATIONS IN ONE VARIABLE

1. If $m-5 = 2$, then find the value of m
2. The value of x for which the expressions $3x - 4$ and $2x + 1$ become equal is ----
3. If $3x = 4x + 18$, then the value of x =-----
4. The solution of $2y + 9 = 4$ is -----
5. Solve:
 - a) $y + 3 = 12$
 - b) $6 = a + 2$
 - c) $5x = 25$
 - d) $\frac{x}{7} = 20$
 - e) $\frac{2x}{3} = 12$
 - f) $z - 6 = 10$
6. Solve the following equations:
 - a) $8x + 4 = 3(x - 1) + 7$
 - b) $9 - 2(x - 5) = x + 10$
 - c) $3(t - 3) = 5(2t + 1) + 7$
 - d) $(2x - 2) + (3x - 3) + 9x - 9 = 1$
7. Solve:
 - a) $\frac{7m+4}{m+2} = \frac{-4}{3}$
 - b) $\frac{4x+7}{9-3x} = \frac{-1}{4}$
 - c) $\frac{4x+7}{3} + \frac{2x}{5} = \frac{-1}{4}$
 - d) $\frac{2}{3x+2} = \frac{-1}{4+2x}$
 - e) $\frac{3t-2}{4} - \frac{2t+3}{3} = \frac{2}{3} - t$
8. Six times of a number is 48. Find the number?
9. Sum of two numbers is 96. If one exceeds by the other by 16. Find the numbers?
10. If 8 is subtracted from the product of x and 5, the result is 12. Find the value of x
11. The sum of the three consecutive odd numbers is 51. Find the numbers?

12. Arun is 6 years older than his younger sister. After 10 years, the sum of their ages will be 50 years. Find their present ages?
13. The three angles of a triangle are in the ratio 2:3:4. Find the angles.

Answers:

1. $m = 7$ 2. $x = 5$ 3. $x = -18$ 4. $y = \frac{-5}{2}$
5. a) $y = 9$ b) $a = 4$ c) $x = 5$ d) $x = 140$ e) $x = 18$ e) $z = 16$
6. a) $x = 0$ b) $x = 3$ c) $x = -3$ d) $x = \frac{15}{14}$
7. a) $m = \frac{-4}{5}$ b) $x = \frac{-37}{13}$ c) $\frac{-155}{104}$ d) $\frac{-10}{7}$ e) 2
8. 8 9. 40 & 56 10. $x = 4$ 11. 15, 17, 19
12. 12yrs & 18yrs 13. $40^\circ, 60^\circ, 80^\circ$
