

Name: _____ Class & Sec: _____ Roll No. _____ Date: __.08.2020

LINEAR EQUATION IN ONE VARIABLE

1. Solve the following Equations (2 marks each)

a) $(2x - 5)/(3x - 1) = (2x - 1)/(3x + 2)$

b) $(3 - 7x)/(15 + 2x) = 0$

c) $(0.4y - 3)/(1.5y + 9) = -7/5$

d) $2/(3x - 1) + 3/(3x + 1) = 5/3x$

e) $2/(x - 3) + 1/(x - 1) = 5/(x - 1) - 2/(x - 2)$

f) $15(x - y) - 3(x - 9) + 5(x + 6) = 0$

g) $y/2 - 1/2 = y/3 + 1/4$

h) $(0.5y - 9)/0.25 = 4y - 3$

i) (t) $[17(2 - y) - 5(y + 12)]/(1 - 7y)$

ANSWERS

(a) $-11/6$

(b) $3/7$

(c) $-96/25$

(d) $5/3$

(e) $7/3$

(f) $-1/6$

(g) $9/2$

(h) -16.5

(i) 1

Multiple choice questions

Linear Equation in One Variable

1. What do we get when we transpose $\frac{5}{2}$ to RHS in the equation $\frac{x}{4} + \frac{5}{2} = -\frac{3}{3}$?

- I. $\frac{x}{4} = -\frac{3}{4} + \frac{5}{2}$
- II. $\frac{x}{4} = -\frac{5}{2} + \frac{3}{4}$
- III. $\frac{x}{4} = -\frac{3}{4} + (-\frac{5}{2})$
- IV. none of these

2. In the equation $3x = 4 - x$, transposing $-x$ to LHS we get

- I. $3x - x = 4$
- II. $3x + x = 4$
- III. $-3x + x = 4$
- IV. $-3x - x = 4$

3. If $\frac{x}{3} + 1 = \frac{7}{15}$, then which of the following is correct?

- I. $\frac{x}{3} = \frac{7}{15} - 1$
- II. $\frac{x}{3} = -\frac{7}{15} + 1$
- III. $\frac{x}{3} = -\frac{7}{15} - 1$
- IV. none of these

4. If $7x+15 = 50$, then which of the following is the root of the equation?

- I. -5
- II. $65/7$
- III. 5
- IV. $1/5$

5. If $2x/5 = 4$, the value of x is-

- I. 10
- II. -10
- III. $-8/5$
- IV. $8/5$

6. If the sum of two consecutive numbers is 71 and one number is x , then the other number is-

- I. $x + (x+1) = 71$
- II. $x + (x+2) = 71$
- III. $x + x = 71$
- IV. none of these

7. Two year ago my age was x years, then what was my age 5 years ago?

- I. $X + 7$
- II. $X - 2 - 5$
- III. $X - 5$
- IV. $X - 3$

8. How old will I be after 10 years, if my age before 10 years was 'x' years?

- I. $X + 20$
- II. $X - 20$
- III. $X + 10$
- IV. $X - 10$

9. If x is an even number, which is the next odd number?

- I. $X + 1$
- II. $X + 2$
- III. $X - 1$
- IV. $X - 2$

✿ANSWERS ✿

- 1. iii
- 2. ii
- 3. i
- 4. iii (soln/root)
- 5. i
- 6. i
- 7. iv
- 8. i
- 9. i