

EduSahara™ Learning Center Assignment**Grade : Class IX, ICSE****Chapter : Linear Equations and Simultaneous Linear Equations****Name : Linear Equations**

1. Which of the following is a linear equation in one variable?

(i) $(-2x + 1) = 0$

(ii) $(7x + 6y + 7) = 0$

(iii) $(8x^2 + 8xy + 22x - 16y^2 - 4y + 12) = 0$

(iv) $(4x + 9y - z + 5) = 0$

(v) $(-7x^2 + 37x + 30) = 0$

2. Which of the following is a linear equation in two variable?

(i) $(42x^2 + 50x + 12) = 0$

(ii) $(-2x + 3y - z - 7) = 0$

(iii) $(-9x - 7) = 0$

(iv) $(-3x^2 - 13xy - 18x - 4y^2 + 5y + 21) = 0$

(v) $(7x + 6y - 6) = 0$

3. Which of the following is a linear equation in three variable?

(i) $(-8x + 7) = 0$

(ii) $(-35x^2 + 28x + 7) = 0$

(iii) $(6x^2 - 33xy + 48x - 63y^2 + 123y - 54) = 0$

(iv) $(5x - 2y - 3z + 5) = 0$

(v) $(8x - 2y + 8) = 0$

4. Which of the following is a linear equation in one variable?

(i) $(5x + 9y + 3z - 1) = (-3x - 7y - z + 5)$

(ii) $(-5x + 2y + 8) = (-x - 9y + 3)$

(iii)

$$(-8x^2 - 7xy - 26x + 18y^2 + 48y + 24) = 0$$

$$(iv) (-8x^2 + 44x - 48) = (3x + 5)$$

$$(v) (8x + 7) = (-3x - 3)$$

5. Which of the following is a linear equation in two variable?

$$(i) (-42x^2 - 16xy - 50x + 10y^2 - 42y + 8) = 0$$

$$(ii) (8x^2 + 30x - 8) = (-4x + 1)$$

$$(iii) (8x + 6y + 7z - 2) = (-8x + 7y - 7z - 7)$$

$$(iv) (-4x + 3y + 8) = (5x + y + 3)$$

$$(v) (-7x + 2) = (5x + 4)$$

6. Which of the following is a linear equation in three variable?

$$(i) (7x^2 - 37xy + 38x - 30y^2 + 7y + 15) = 0$$

$$(ii) (-16x^2 + 20x + 24) = (-5x + 8)$$

$$(iii) (3x + 9y + 7) = (-9x - 8y - 3)$$

$$(iv) (5x - 2y - 3z) = (-6x + 7y + 6z + 2)$$

$$(v) (3x + 3) = 4x$$

7. The linear equation $(8x + 2) = (9x + 3)$ is equivalent to

$$(i) (8x + 2) = (9x + 6)$$

$$(ii) (-x - 1) = 0$$

$$(iii) (8x + 2) = 9x$$

$$(iv) (-1) = 0$$

$$(v) (-2x - 1) = 0$$

8. The value of x in terms of other variables and constant in $(-3x) = (-6x + 2)$ is

$$(i) = \frac{4}{5} \quad (ii) = \frac{2}{5} \quad (iii) = 0 \quad (iv) = \frac{2}{5} \quad (v) =$$

$$x^2 + x^2 + x^2 + x^2 + x^2 + x^2$$

9. The L.H.S of the equation $(9x - 8) = 0$ is

- (i) $(8x - 8)$ (ii) $(9x - 6)$ (iii) 0
 (iv) $(9x - 11)$ (v) $(9x - 8)$

10. The R.H.S of the equation $(7x + 9) = 0$ is

- (i) (-3) (ii) (-1) (iii) 0
 (iv) 2 (v) $(7x + 9)$

11. The L.H.S of the equation $(-2x - 7) = (-4)$ is

- (i) $(-3x - 7)$ (ii) $(-2x - 5)$ (iii) $(-2x - 9)$
 (iv) $(-2x - 7)$ (v) (-4)

12. The R.H.S of the equation $6x = (-4)$ is

- (i) (-4) (ii) $6x$ (iii) (-5)
 (iv) (-7) (v) (-1)

13. The L.H.S of the equation $(2x - 2) = (-4x + 9)$ is

- (i) $(2x - 4)$ (ii) $(2x + 1)$ (iii) $(x - 2)$
 (iv) $(-4x + 9)$ (v) $(2x - 2)$

14. The R.H.S of the equation $(2x + 8) = (-x + 6)$ is

- (i) $(-2x + 6)$ (ii) $(-x + 8)$ (iii) $(-x + 6)$
 (iv) $(-x + 4)$ (v) $(2x + 8)$

15. The additive inverse of the expression $(3x + 2)$ is

- (i) $(-3x)$ (ii) $(-4x - 2)$ (iii) $(3x + 2)$
 (iv) $(-3x - 4)$ (v) $(-3x - 2)$

16. The additive inverse of the expression (-8) is

- (i) 5 (ii) 7 (iii) 8

(iv) 10 (v) (-8)

17. Solve the equation $(x - 9) = 0$

(i) 7 (ii) 10 (iii) 9 (iv) 8 (v) 11

18. Solve the equation $x = (-4)$

(i) -4 (ii) -1 (iii) -5 (iv) -3 (v) -6

19. Solve the equation $(9x + 7) = 0$

(i) $(-\frac{5}{9})$ (ii) $(-\frac{7}{11})$ (iii) $(-\frac{7}{9})$ (iv) -1

20. Solve the equation $(\frac{7}{3}x - \frac{6}{5}) = 0$

(i) $\frac{4}{7}$ (ii) $\frac{6}{11}$ (iii) $\frac{18}{35}$ (iv) $\frac{18}{37}$ (v) $\frac{16}{35}$

21. Solve the equation $(-6x - 6) = 5$

(i) $(-\frac{9}{4})$ (ii) $(-\frac{13}{6})$ (iii) $(-\frac{11}{6})$ (iv) $(-\frac{13}{8})$ (v) $(-\frac{3}{2})$

22. Solve the equation $(\frac{7}{4}x + \frac{9}{5}) = \frac{9}{7}$

(i) $(-\frac{2}{7})$ (ii) $(-\frac{8}{27})$ (iii) $(-\frac{72}{245})$ (iv) $(-\frac{74}{245})$ (v) $(-\frac{72}{247})$

23. Solve the equation $(3x + 3) = (9x - 2)$

(i) $\frac{5}{4}$ (ii) $\frac{5}{8}$ (iii) $\frac{5}{6}$ (iv) $\frac{7}{6}$ (v) $\frac{1}{2}$

24. Solve the equation $(-\frac{5}{3}x - \frac{2}{5}) = (-7x + \frac{5}{4})$

(i) $\frac{99}{320}$ (ii) $\frac{97}{320}$ (iii) $\frac{33}{106}$ (iv) $\frac{99}{322}$ (v) $\frac{101}{320}$

25. The linear equation $(-5x - 4y - 8) = (8x - 8y + 8)$ is equivalent to

(i) $(-12x + 4y - 16) = 0$

(ii) $(-13x + 4y - 16) = 0$

(iii) $(-5x - 4y - 8) = (8x - 5y + 8)$

(iv) $(-14x + 4y - 16) = 0$

$$(v) \quad (-5x - 4y - 8) = (8x - 10y + 8)$$

Assignment Key

- 1) (i)
- 2) (v)
- 3) (iv)
- 4) (v)
- 5) (iv)
- 6) (iv)
- 7) (ii)
- 8) (iv)
- 9) (v)
- 10) (iii)
- 11) (iv)
- 12) (i)
- 13) (v)
- 14) (iii)
- 15) (v)
- 16) (iii)
- 17) (iii)
- 18) (i)
- 19) (iii)
- 20) (iii)
- 21) (iii)
- 22) (iii)
- 23) (iii)
- 24) (i)
- 25) (ii)