

EduSahara™ Learning Center Assignment

Grade : Class IX, ICSE

Chapter : Linear Equations and Simultaneous Linear Equations

Name : Linear Equations Complex Problems

1. Solve : $\frac{(-x+4)}{2} + \frac{x}{7} = \frac{(x-3)}{14}$

(i) $\frac{21}{4}$ (ii) $\frac{29}{6}$ (iii) $\frac{31}{6}$ (iv) $\frac{11}{2}$ (v) $\frac{41}{8}$

2. Solve : $\frac{(x+5)}{2} + \frac{(x-2)}{14} = (-x)$

(i) $(-\frac{5}{4})$ (ii) $(-\frac{1}{2})$ (iii) $(-\frac{5}{2})$ (iv) $(-\frac{3}{2})$ (v) -2

3. Solve : $\frac{(x-1)}{5} + \frac{(x+3)}{(x+5)} = \frac{(x+3)}{10}$

(i) $(\frac{-47}{11})$ (ii) $(\frac{-53}{13})$ (iii) $(\frac{-43}{11})$ (iv) $(\frac{-45}{11})$ (v) $(\frac{-37}{9})$

4. Solve : $(-x+1) + \frac{(x-3)}{5} = \frac{(x+2)}{10}$

(i) $\frac{2}{11}$ (ii) $\frac{2}{7}$ (iii) $\frac{4}{9}$ (iv) 0 (v) $\frac{2}{9}$

5. Solve : $(-x+3) + \frac{(x-2)}{7} = (-x)$

(i) -21 (ii) -17 (iii) -20 (iv) -18 (v) -19

6. Solve : $(-x) + \frac{(x+2)}{(x-4)} = \frac{(x+2)}{2}$

(i) -10 (ii) -7 (iii) -9 (iv) -11 (v) -12

7. Solve : $\frac{(-x+3)}{9} + \frac{x}{3} = \frac{(-x-4)}{4}$

(i) $(\frac{-48}{17})$ (ii) $(\frac{-50}{17})$ (iii) $(\frac{-46}{17})$ (iv) $(\frac{-52}{19})$ (v) $(\frac{-44}{15})$

8. Solve : $\frac{(5x-1)}{2} + \frac{(3x-1)}{10} = \frac{(-3x+1)}{5}$

(i) $\frac{6}{17}$ (ii) $\frac{4}{17}$ (iii) $\frac{4}{15}$ (iv) $\frac{2}{17}$ (v) $\frac{4}{19}$

9. Solve : $\frac{(x+2)}{8} + \frac{(-3x+4)}{2} = (3x+2)$

(i) 0 (ii) $\frac{2}{35}$ (iii) $\frac{2}{37}$ (iv) $\frac{4}{35}$ (v) $\frac{2}{33}$

10. Solve : $\frac{(-2x+4)}{2} + 4x = \frac{(-x+5)}{8}$

(i) $(\frac{-11}{23})$ (ii) $(\frac{-11}{27})$ (iii) $(\frac{-11}{25})$ (iv) $(\frac{-9}{25})$ (v) $(\frac{-13}{25})$

11. Solve : $(3x+4) + \frac{(-4x-4)}{4} = \frac{(-3x+5)}{2}$

(i) $\frac{1}{7}$ (ii) $(\frac{-1}{5})$ (iii) $(\frac{-3}{7})$ (iv) $(\frac{-1}{9})$ (v) $(\frac{-1}{7})$

12. Solve : $(4x+3) + \frac{(-3x+2)}{4} = (4x+2)$

(i) 2 (ii) 5 (iii) -1 (iv) 1 (v) 3

13. Solve : $(-3x+1) + (x+2) = \frac{(5x+1)}{2}$

(i) $\frac{5}{9}$ (ii) $\frac{1}{3}$ (iii) $\frac{5}{11}$ (iv) $\frac{7}{9}$ (v) $\frac{5}{7}$

14. Solve : $(4x+5) + \frac{(3x-1)}{5} = \frac{(-x+3)}{8}$

(i) $(\frac{-59}{63})$ (ii) $(\frac{-59}{65})$ (iii) $(\frac{-19}{21})$ (iv) $(\frac{-61}{63})$ (v) $(\frac{-59}{61})$

15. Solve : $\frac{(x+7)}{(-8x-6)} = \frac{(x-5)}{(-8x+9)}$

- (i) $\frac{11}{29}$ (ii) $\frac{13}{27}$ (iii) $\frac{11}{27}$ (iv) $\frac{1}{3}$ (v) $\frac{11}{25}$

16. Solve : $\frac{1}{(2x-2)} = \frac{(-4)}{(2x+4)}$

- (i) $\frac{2}{7}$ (ii) 0 (iii) $\frac{4}{5}$ (iv) $\frac{2}{3}$ (v) $\frac{2}{5}$

17. Solve : $\frac{(-x+9)}{(2x+2)} = \frac{7}{5}$

- (i) $\frac{33}{19}$ (ii) $\frac{29}{19}$ (iii) $\frac{31}{19}$ (iv) $\frac{11}{7}$ (v) $\frac{29}{17}$

18. Solve : $-\frac{3}{(x+2)} - \frac{2}{(x-2)} = -\frac{5}{x}$

- (i) 12 (ii) 10 (iii) 8 (iv) 9 (v) 11

19. Solve : $-\frac{7}{(3x+3)} - \frac{5}{(3x-3)} = -\frac{12}{3x}$

- (i) 5 (ii) 6 (iii) 4 (iv) 7 (v) 8

20. Solve : $-\frac{1}{(x+6)} - \frac{1}{(x+1)} = \frac{6}{(x+1)} - \frac{8}{(x-4)}$

- (i) $(\frac{-36}{7})$ (ii) $(\frac{-52}{11})$ (iii) $(\frac{-46}{9})$ (iv) $(\frac{-14}{3})$ (v) $(\frac{-44}{9})$

21. Solve : $-\frac{5}{(x-4)} + \frac{1}{(x-1)} = \frac{5}{(x-1)} - \frac{9}{(x+4)}$

- (i) 4 (ii) 1 (iii) 3 (iv) 2 (v) -1

Assignment Key

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