EduSahara™ Learning Center Assignment

Grade : Class X, CBSE
Chapter : Pair of Linear Equations in Two Variables
Name : Solution for Complex Pair of Linear Equations

Solve the following pair of equations :

1. $\frac{2}{x} + \frac{3}{y} = (-24)$

$\frac{12}{x} - \frac{10}{y} = 24$

(i) $(\frac{-1}{3}, \frac{1}{6})$ (ii) $(-1, \frac{-1}{6})$ (iii) $(\frac{-1}{3}, \frac{-1}{8})$

(iv) $(\frac{-1}{3}, \frac{-1}{6})$

Solve the following pair of equations :

2. $x + \frac{5}{y} = (-13)$

$6x + \frac{8}{y} = (-12)$

(i) $(2, \frac{-1}{5})$ (ii) $(2, \frac{-1}{3})$ (iii) $(3, \frac{-1}{3})$

(iv) $(4, \frac{-1}{3})$ (v) $(2, \frac{1}{3})$

Solve the following pair of equations :

3. $\frac{12}{x} + 15y = (-21)$

$\frac{13}{x} + 13y = 0$

(i) $(\frac{1}{7}, -8)$ (ii) $(\frac{3}{7}, -7)$ (iii) $(\frac{1}{7}, -7)$

(iv) $(\frac{1}{9}, -7)$ (v) $(\frac{1}{7}, -9)$

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4. Solve the following pair of equations :

$- \frac{1}{} + \frac{1}{} = 5$

$$\frac{}{(x+y)} \quad \frac{}{(x-y)}$$

$$-\frac{11}{(x+y)} - \frac{2}{(x-y)} = 3$$

(i) $\left(\left(\frac{-3}{10}\right), \left(\frac{-5}{8}\right)\right)$ (ii) $\left(\left(\frac{-1}{8}\right), \left(\frac{-5}{8}\right)\right)$ (iii) $\left(\left(\frac{-3}{8}\right), \left(\frac{-5}{8}\right)\right)$

(iv) $\left(\left(\frac{-3}{8}\right), \left(\frac{-7}{8}\right)\right)$ (v) $\left(\left(\frac{-3}{8}\right), \left(\frac{-5}{6}\right)\right)$

Solve the following pair of equations :

5.

$$\frac{6}{(4x+y)} - \frac{11}{(4x-y)} = (-4)$$

$$\frac{2}{(4x+y)} - \frac{5}{(4x-y)} = 4$$

(i) $\left(\left(\frac{-3}{64}\right), \frac{1}{14}\right)$ (ii) $\left(\left(\frac{-3}{64}\right), \frac{1}{16}\right)$ (iii) $\left(\left(\frac{-3}{64}\right), \left(\frac{-1}{16}\right)\right)$

(iv) $\left(\left(\frac{-1}{64}\right), \frac{1}{16}\right)$ (v) $\left(\left(\frac{-1}{22}\right), \frac{1}{16}\right)$

Solve the following pair of equations :

6.

$$\frac{1}{(x+1)} + \frac{11}{(y+8)} = 97$$

$$-\frac{17}{(x+1)} + \frac{12}{(y+8)} = (-57)$$

(i) $\left(\left(\frac{-8}{9}\right), -3\right)$ (ii) $\left(\left(\frac{-8}{9}\right), -1\right)$ (iii) $\left(1, \left(\frac{-63}{8}\right)\right)$

(iv) $\left(\left(\frac{-8}{9}\right), \left(\frac{-63}{8}\right)\right)$ (v) $\left(3, \left(\frac{-63}{8}\right)\right)$

Solve the following pair of equations :

7. $(x + 3y) = (-19xy)$

$(2x + 12y) = (-62xy)$

(i) $\left(\left(\frac{-1}{4}\right), \left(\frac{-1}{7}\right)\right)$ (ii) $\left(\left(\frac{-3}{4}\right), \left(\frac{-1}{7}\right)\right)$ (iii) $\left(\left(\frac{-1}{4}\right), \left(\frac{-1}{9}\right)\right)$

(iv) $\left(\left(\frac{-1}{2}\right), \left(\frac{-1}{7}\right)\right)$ (v) $\left(\left(\frac{-1}{4}\right), \frac{1}{7}\right)$

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8. Solve the following pair of equations :

$\frac{(-2x+5y)}{xy} = -20$

$\frac{(-3x+6y)}{xy} = -21$

(i) $(\frac{-1}{6}, \frac{-1}{5})$ (ii) $(\frac{-1}{2}, \frac{-1}{5})$ (iii) $(\frac{-1}{6}, \frac{1}{5})$

(iv) $(\frac{-1}{4}, \frac{-1}{5})$ (v) $(\frac{-1}{6}, \frac{-1}{7})$

Solve the following pair of equations :

9. $-\frac{8}{\sqrt{x}} + \frac{7}{\sqrt{y}} = 8$

$-\frac{15}{\sqrt{x}} + \frac{6}{\sqrt{y}} = -42$

(i) $(\frac{1}{36}, \frac{-1}{64})$ (ii) $(\frac{1}{12}, \frac{1}{64})$ (iii) $(\frac{1}{36}, \frac{1}{64})$

(iv) $(\frac{1}{36}, \frac{1}{62})$ (v) $(\frac{1}{38}, \frac{1}{64})$

Solve the following pair of equations :

10. $-\frac{6}{x} + \frac{6}{y} = 12$

$\frac{2}{x} - \frac{7}{y} = 1$

(i) $(\frac{-1}{3}, -2)$ (ii) $(\frac{-1}{3}, -4)$ (iii) $(-1, \frac{1}{-1})$

(iv) $(\frac{-1}{3}, \frac{1}{-1})$

Solve the following pair of equations :

11. $3x - \frac{6}{y} = 39$

$-2x - \frac{2}{y} = 4$

(i) $(3, \frac{-1}{5})$ (ii) $(4, \frac{-1}{5})$ (iii) $(6, \frac{-1}{5})$

(iv) $(3, \frac{1}{5})$ (v) $(3, \frac{-1}{7})$

Solve the following pair of equations :

12. $\frac{6}{x} + 5y = (-13)$

$-\frac{5}{x} - 7y = 8$

(i) $(\frac{-1}{3}, 1)$ (ii) $(\frac{-1}{3}, -1)$ (iii) $(-1, 1)$

(iv) $(\frac{-1}{3}, 0)$

Solve the following pair of equations :

13. $-\frac{4}{(x+y)} - \frac{5}{(x-y)} = (-36)$

$-\frac{6}{(x+y)} + \frac{2}{(x-y)} = (-16)$

(i) $(\frac{1}{6}, 0)$ (ii) $(\frac{3}{4}, 0)$ (iii) $(\frac{1}{4}, -1)$

(iv) $(\frac{1}{4}, 0)$ (v) $(\frac{1}{4}, -2)$

Solve the following pair of equations :

14. $\frac{6}{(4x+y)} + \frac{1}{(4x-y)} = 13$

$-\frac{3}{(4x+y)} + \frac{12}{(4x-y)} = (-69)$

(i) $(\frac{1}{60}, \frac{2}{15})$ (ii) $(\frac{1}{60}, \frac{4}{15})$ (iii) $(\frac{1}{20}, \frac{4}{15})$

(iv) $(\frac{1}{62}, \frac{4}{15})$ (v) $(\frac{1}{60}, \frac{4}{13})$

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15. Solve the following pair of equations :

$-\frac{4}{(x-3)} - \frac{8}{(y+4)} = 20$

$\frac{5}{} + \frac{1}{} = 2$

$(x-3)$ $(y+4)$

(i) $(1, (\frac{-13}{3}))$ (ii) $(4, -2)$ (iii) $(4, (\frac{-13}{3}))$

(iv) $(2, (\frac{-13}{3}))$ (v) $(4, -1)$

Solve the following pair of equations :

16. $(-5x + 13y) = 71xy$

$(x + 15y) = 21xy$

(i) $(\frac{1}{2}, (\frac{-1}{9}))$ (ii) $(\frac{1}{4}, (\frac{-1}{9}))$ (iii) $(\frac{1}{2}, \frac{1}{9})$

(iv) $(\frac{1}{2}, (\frac{-1}{11}))$ (v) $(\frac{3}{2}, (\frac{-1}{9}))$

Solve the following pair of equations :

17. $\frac{(-3x - 2y)}{xy} = 2$

$\frac{(x - y)}{xy} = -4$

(i) $(\frac{1}{2}, (\frac{-1}{2}))$ (ii) $(\frac{3}{2}, (\frac{-1}{2}))$ (iii) $(\frac{1}{2}, (\frac{-1}{4}))$

(iv) $(\frac{1}{2}, \frac{1}{2})$ (v) $(\frac{1}{4}, (\frac{-1}{2}))$

Solve the following pair of equations :

18. $\frac{16}{\sqrt{x}} - \frac{13}{\sqrt{y}} = -37$

$\frac{13}{\sqrt{x}} - \frac{5}{\sqrt{y}} = -69$

(i) $(\frac{3}{64}, \frac{1}{49})$ (ii) $(\frac{1}{64}, \frac{1}{49})$ (iii) $(\frac{1}{66}, \frac{1}{49})$

(iv) $(\frac{1}{64}, (\frac{-1}{49}))$ (v) $(\frac{1}{64}, \frac{1}{47})$

Assignment Key

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