EduSahara™ Assignment

Name : Solution for Complex Pair of Linear Equations

Chapter : Pair of Linear Equations in Two Variables

Grade : CBSE Grade X

1. Solve the following pair of equations :

$$-\frac{11}{x}+\frac{11}{y}=77$$

$$-\frac{7}{x}+\frac{10}{y}=76$$

(i) $(\frac{1}{4},\frac{1}{9})$ (ii) $(\frac{1}{2},\frac{1}{9})$ (iii) $(\frac{3}{2},\frac{1}{9})$ (iv) $(\frac{1}{2},\frac{1}{7})$ (v) $(\frac{1}{2},(\frac{-1}{9}))$

2. Solve the following pair of equations :

$$6x+\frac{6}{y}=18$$

$$4x+\frac{8}{y}=4$$

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

3. Solve the following pair of equations :

$$\frac{1}{x}+4y=(-37)$$

$$\frac{6}{x}-4y=2$$

(i) $((\frac{-1}{5}),-11)$ (ii) $((\frac{-1}{5}),-8)$ (iii) $((\frac{-3}{5}),-8)$ (iv) $((\frac{-1}{5}),-9)$ (v) $((\frac{-1}{3}),-8)$

4. Solve the following pair of equations :

$$\frac{1}{(x+y)} + \frac{3}{(x-y)} = (-20)$$

$$\frac{11}{(x+y)} + \frac{15}{(x-y)} = (-58)$$

(i) $(\frac{1}{63}, \frac{2}{21})$ (ii) $(\frac{1}{21}, \frac{8}{63})$ (iii) $(\frac{1}{65}, \frac{8}{63})$ (iv) $(\frac{1}{63}, \frac{8}{61})$ (v) $(\frac{1}{63}, \frac{8}{63})$

5. Solve the following pair of equations :

$$-\frac{1}{(3x+y)} - \frac{7}{(3x-y)} = (-7)$$

$$\frac{7}{(3x+y)} - \frac{11}{(3x-y)} = (-71)$$

(i) $(\frac{5}{84}, (\frac{-9}{28}))$ (ii) $(\frac{5}{84}, (\frac{-11}{28}))$ (iii) $(\frac{5}{86}, (\frac{-9}{28}))$ (iv) $(\frac{1}{12}, (\frac{-9}{28}))$ (v) $(\frac{5}{84}, (\frac{-9}{26}))$

6. Solve the following pair of equations :

$$-\frac{6}{(x-1)} + \frac{5}{(y-7)} = (-14)$$

$$\frac{7}{(x-1)} + \frac{11}{(y-7)} = 50$$

(i) $(\frac{5}{4}, \frac{15}{2})$ (ii) $(\frac{5}{4}, -3)$ (iii) $(3, \frac{15}{2})$ (iv) $(1, \frac{15}{2})$ (v) $(\frac{5}{4}, -1)$

7. Solve the following pair of equations :

$$(-x+5y) = (-34xy)$$

$$(-14x-3y) = 35xy$$

(i) $((\frac{-1}{7}), -2)$ (ii) $((\frac{-1}{7}), -4)$ (iii) $((\frac{-1}{7}), \frac{1}{-1})$ (iv) $((\frac{-1}{5}), \frac{1}{-1})$ (v) $((\frac{-3}{7}), \frac{1}{-1})$

8. Solve the following pair of equations :

$$\frac{(6x+15y)}{xy} = 48$$

$$\frac{(13x+2y)}{xy} = -79$$

(i) $(\frac{1}{8}, (\frac{-1}{7}))$ (ii) $(\frac{1}{6}, \frac{1}{7})$ (iii) $(\frac{1}{6}, (\frac{-1}{7}))$ (iv) $(\frac{1}{6}, (\frac{-1}{9}))$ (v) $(\frac{1}{2}, (\frac{-1}{7}))$

Solve the following pair of equations :

9. $-\frac{8}{\sqrt{x}}+\frac{8}{\sqrt{y}}=0$

$\frac{3}{\sqrt{x}}+\frac{13}{\sqrt{y}}=64$

(i) $(\frac{1}{16},\frac{1}{16})$ (ii) $(\frac{1}{18},\frac{1}{16})$ (iii) $(\frac{1}{16},\frac{1}{14})$ (iv) $(\frac{1}{16},(\frac{-1}{16}))$ (v) $(\frac{3}{16},\frac{1}{16})$

Solve the following pair of equations :

10. $-\frac{12}{x}-\frac{7}{y}=(-37)$

$\frac{2}{x}+\frac{3}{y}=19$

(i) $(\frac{1}{-1},\frac{1}{5})$ (ii) $(1,\frac{1}{7})$ (iii) $(\frac{1}{-1},(\frac{-1}{7}))$ (iv) $(0,\frac{1}{7})$ (v) $(\frac{1}{-1},\frac{1}{7})$

Solve the following pair of equations :

11. $5x+\frac{13}{y}=97$

$-11x+\frac{2}{y}=(-91)$

(i) $(12,\frac{1}{4})$ (ii) $(9,(\frac{-1}{4}))$ (iii) $(10,\frac{1}{4})$ (iv) $(9,\frac{1}{4})$ (v) $(9,\frac{1}{2})$

Solve the following pair of equations :

12. $\frac{1}{x}-y=1$

$\frac{10}{x}-9y=8$

(i) $(\frac{1}{-1},-2)$ (ii) $(\frac{1}{-1},-5)$ (iii) $(\frac{1}{-1},-3)$ (iv) $(1,-2)$ (v) $(0,-2)$

13. Solve the following pair of equations :

$$-\frac{6}{(x+y)}-\frac{9}{(x-y)}=63$$

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

(i) $(\frac{-5}{11},\frac{4}{9})$ (ii) $(\frac{-5}{9},\frac{4}{9})$ (iii) $(\frac{-5}{9},\frac{4}{7})$ (iv) $(\frac{-1}{3},\frac{4}{9})$ (v) $(\frac{-5}{9},\frac{2}{9})$

14. Solve the following pair of equations :

$$\frac{8}{(x+y)}+\frac{2}{(x-y)}=50$$

$$\frac{13}{(x+y)}+\frac{6}{(x-y)}=62$$

(i) $(\frac{-1}{112},\frac{15}{112})$ (ii) $(\frac{-1}{112},\frac{3}{22})$ (iii) $(\frac{-1}{114},\frac{15}{112})$ (iv) $(\frac{-1}{112},\frac{13}{112})$ (v) $(\frac{1}{112},\frac{15}{112})$

15. Solve the following pair of equations :

$$\frac{3}{(x+6)}-\frac{7}{(y-9)}=(-41)$$

$$-\frac{3}{(x+6)}-\frac{4}{(y-9)}=19$$

(i) $(\frac{-55}{9},-1)$ (ii) $(\frac{-55}{9},-2)$ (iii) $(2,\frac{19}{2})$ (iv) $(1,\frac{19}{2})$ (v) $(\frac{-55}{9},\frac{19}{2})$

16. Solve the following pair of equations :

$(-6x-y)=31xy$

$(-x+5y)=0$

(i) $(1,(\frac{-1}{5}))$ (ii) $(\frac{1}{-1},(\frac{-1}{5}))$ (iii) $(\frac{1}{-1},(\frac{-1}{7}))$ (iv) $(0,(\frac{-1}{5}))$ (v) $(\frac{1}{-1},\frac{1}{5})$

17. Solve the following pair of equations :

$$\frac{(-3x-4y)}{xy}=11$$

$$\frac{(-11x-5y)}{xy}=-8$$

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

Solve the following pair of equations :

18. $\frac{6}{\sqrt{x}} + \frac{15}{\sqrt{y}} = -18$

$-\frac{1}{\sqrt{x}} + \frac{2}{\sqrt{y}} = -15$

(i) $(\frac{3}{49}, \frac{1}{16})$ (ii) $(\frac{1}{51}, \frac{1}{16})$ (iii) $(\frac{1}{49}, \frac{1}{16})$ (iv) $(\frac{1}{49}, \frac{1}{14})$ (v) $(\frac{1}{49}, (\frac{-1}{16}))$

Assignment Key

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