EduSahara™ Assignment

Name : Simultaneous Equations

Chapter : Linear Equations and Simultaneous Linear Equations

Grade : ICSE Grade IX

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1. Solve $\begin{matrix}(13x-14y+9)=0\\(7x-12y-13)=0\end{matrix}$

(i) (-5,-4) (ii) (-5,-6) (iii) (-5,-5) (iv) (-4,-4) (v) (-2,-4)

2. Solve $\begin{matrix}(-4x+3y-2)=0\\(x+3y+1) = 0\end{matrix}$

(i) $(\frac{-3}{7},\frac{-2}{13})$ (ii) $(\frac{-1}{5},\frac{-4}{15})$ (iii) $(\frac{-3}{7},\frac{-2}{15})$ (iv) $(\frac{-3}{5},\frac{-2}{15})$ (v) $(\frac{-1}{5},\frac{-2}{13})$

3. Solve $\begin{matrix}(5x-2y) = 4\\(-4x+2y+2)=(-1)\end{matrix}$

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

4. Solve $\begin{matrix}(-3x-4y+3)=(-5x-3y-2)\\(-2x+y-5) =(x+3y+5)\end{matrix}$

(i) $(\frac{-8}{3},-1)$ (ii) $(\frac{-20}{7},\frac{-5}{7})$ (iii) $(\frac{-8}{3},\frac{-5}{7})$ (iv) $(\frac{-18}{7},-1)$

Solve the following pair of equations :

5. $\begin{matrix}\frac{4}{x}+\frac{14}{y}=94\\-\frac{9}{x}+\frac{13}{y}=11\end{matrix}$

(i) $(\frac{1}{8},\frac{1}{5})$ (ii) $(\frac{1}{6},\frac{1}{3})$ (iii) $(\frac{1}{6},\frac{-1}{5})$ (iv) $(\frac{1}{2},\frac{1}{5})$ (v) $(\frac{1}{6},\frac{1}{5})$

Solve the following pair of equations :

6. $\begin{matrix}-x-\frac{4}{y}=(-31)\\-4x+\frac{9}{y}=51\end{matrix}$

(i) $(3,\frac{1}{7})$ (ii) $(4,\frac{1}{7})$ (iii) $(3,\frac{1}{5})$ (iv) $(3,\frac{-1}{7})$ (v) $(6,\frac{1}{7})$

Solve the following pair of equations :

7.

$$-\frac{1}{x} - 10y = (-1)$$

$$-\frac{6}{x} - 5y = 49$$

(i) $(\frac{-1}{9}, 1)$ (ii) $(\frac{-1}{3}, 1)$ (iii) $(\frac{-1}{9}, -2)$ (iv) $(\frac{-1}{7}, 1)$ (v) $(\frac{-1}{9}, 0)$

Solve the following pair of equations :

8.

$$-\frac{4}{(x+y)} - \frac{2}{(x-y)} = (-36)$$

$$-\frac{13}{(x+y)} + \frac{6}{(x-y)} = (-42)$$

(i) $(\frac{1}{8}, 0)$ (ii) $(\frac{1}{6}, 0)$ (iii) $(\frac{1}{6}, -3)$ (iv) $(\frac{1}{6}, -1)$ (v) $(\frac{1}{2}, 0)$

Solve the following pair of equations :

9.

$$-\frac{13}{(3x+y)} + \frac{1}{(3x-y)} = (-9)$$

$$-\frac{9}{(3x+y)} - \frac{6}{(3x-y)} = (-33)$$

(i) $(\frac{5}{24}, \frac{1}{8})$ (ii) $(\frac{7}{24}, \frac{3}{8})$ (iii) $(\frac{5}{26}, \frac{3}{8})$ (iv) $(\frac{5}{24}, \frac{3}{8})$ (v) $(\frac{5}{24}, \frac{1}{2})$

Solve the following pair of equations :

10.

$$\frac{11}{(x-3)} - \frac{5}{(y+2)} = (-21)$$

$$\frac{15}{(x-3)} - \frac{7}{(y+2)} = (-27)$$

(i) $(\frac{17}{6}, -2)$ (ii) $(1, (\frac{-19}{9}))$ (iii) $(\frac{17}{6}, (\frac{-19}{9}))$ (iv) $(3, (\frac{-19}{9}))$ (v) $(\frac{17}{6}, -1)$

11. Solve the following pair of equations :

$(-10x-8y)=74xy$

$(-6x-2y)=22xy$

(i) $(\frac{-1}{8},\frac{1}{-1})$ (ii) $(\frac{-1}{8},-2)$ (iii) $(\frac{-1}{6},\frac{1}{-1})$ (iv) $(\frac{-3}{8},\frac{1}{-1})$ (v) $(\frac{-1}{8},-4)$

12. Solve the following pair of equations :

$\frac{(-6x-8y)}{xy}=-2$

$\frac{(-x+5y)}{xy}=6$

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

13. Solve the following pair of equations :

$\frac{2}{\sqrt{x}}-\frac{3}{\sqrt{y}}=7$

$\frac{6}{\sqrt{x}}-\frac{1}{\sqrt{y}}=29$

(i) $(\frac{1}{27},1)$ (ii) $(\frac{3}{25},1)$ (iii) $(\frac{1}{25},-1)$ (iv) $(\frac{1}{25},1)$ (v) $(\frac{1}{25},0)$

Assignment Key

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