EduSahara™ Assignment

Name : Solving Simultaneous Equations

Chapter : Simultaneous Linear Equations

Grade : ICSE Grade VIII

1. Solve $\begin{matrix}(x-15y-128)=0\\(x-10y-83)=0\end{matrix}$

(i) (-6,-9) (ii) (-7,-9) (iii) (-7,-11) (iv) (-7,-10) (v) (-5,-9)

2. Solve $\begin{matrix}(-3x+4y-5)=0\\(4x-5y-2)=0\end{matrix}$

(i) (33,26) (ii) (34,25) (iii) (34,26) (iv) (36,25) (v) (36,23)

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

(i) $(\frac{-31}{27},\frac{-2}{3})$ (ii) $(\frac{-27}{25},\frac{-2}{3})$ (iii) $(\frac{-27}{25},\frac{-4}{5})$ (iv) $(\frac{-29}{25},\frac{-2}{5})$ (v) $(\frac{-31}{27},\frac{-2}{5})$

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

(i) $(\frac{17}{28},\frac{-39}{28})$ (ii) $(\frac{1}{2},\frac{-35}{26})$ (iii) $(\frac{17}{28},\frac{-35}{26})$ (iv) $(\frac{1}{2},\frac{-37}{28})$ (v) $(\frac{15}{28},\frac{-37}{28})$

5. Solve the following pair of equations :

$$\frac{4}{x}-\frac{10}{y}=52$$

$$\frac{5}{x}+\frac{1}{y}=(-43)$$

(i) $(\frac{-1}{7},\frac{-1}{8})$ (ii) $(\frac{-1}{7},\frac{1}{8})$ (iii) $(\frac{-1}{7},\frac{-1}{10})$ (iv) $(\frac{-1}{5},\frac{-1}{8})$ (v) $(\frac{-3}{7},\frac{-1}{8})$

6. Solve the following pair of equations :

$$10x-\frac{7}{y}=26$$

$$4x+\frac{6}{y}=(-60)$$

(i) $(-1,\frac{-1}{8})$ (ii) $(-3,\frac{-1}{8})$ (iii) $(-3,\frac{-1}{10})$ (iv) $(-3,\frac{1}{8})$ (v) $(-2,\frac{-1}{8})$

7. Solve the following pair of equations :

$$\frac{15}{x} + y = 114$$

$$\frac{12}{x} + 8y = 48$$

(i) $(\frac{3}{8}, -6)$ (ii) $(\frac{1}{10}, -6)$ (iii) $(\frac{1}{8}, -7)$ (iv) $(\frac{1}{8}, -8)$ (v) $(\frac{1}{8}, -6)$

8. Solve the following pair of equations :

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

$$-\frac{8}{(x+y)} + \frac{2}{(x-y)} = (-54)$$

(i) $(\frac{4}{7}, (\frac{-3}{5}))$ (ii) $(\frac{4}{7}, (\frac{-3}{7}))$ (iii) $(\frac{6}{7}, (\frac{-3}{7}))$ (iv) $(\frac{4}{9}, (\frac{-3}{7}))$ (v) $(\frac{4}{7}, (\frac{-5}{7}))$

9. Solve the following pair of equations :

$$-\frac{2}{(4x+y)} + \frac{16}{(4x-y)} = 130$$

$$-\frac{12}{(4x+y)} + \frac{15}{(4x-y)} = 51$$

(i) $(\frac{2}{63}, \frac{1}{61})$ (ii) $(\frac{2}{65}, \frac{1}{63})$ (iii) $(\frac{2}{63}, \frac{1}{63})$ (iv) $(\frac{4}{63}, \frac{1}{63})$ (v) $(\frac{2}{63}, (\frac{-1}{63}))$

10. Solve the following pair of equations :

$$-\frac{12}{(x+3)} - \frac{2}{(y-8)} = 72$$

$$-\frac{15}{(x+3)} - \frac{6}{(y-8)} = 69$$

(i) $((\frac{-22}{7}), \frac{49}{6})$ (ii) $((\frac{-22}{7}), -3)$ (iii) $(1, \frac{49}{6})$ (iv) $(2, \frac{49}{6})$ (v) $((\frac{-22}{7}), -1)$

11. Solve the following pair of equations :

$(-3x-6y)=(-30xy)$

$(15x+3y)=(-12xy)$

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

12. Solve the following pair of equations :

$\frac{(14x+6y)}{xy}=14$

$\frac{(5x+3y)}{xy}=11$

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

Assignment Key

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