

EduSahara™ Learning Center Assignment

Grade : Class VIII, ICSE
Chapter : Simultaneous Linear Equations
Name : Solving Simultaneous Equations
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1. Solve

$$\begin{aligned} (-5x + y - 35) &= 0 \\ (-13x - 8y - 38) &= 0 \end{aligned}$$

(i) $(-6, 2)$ (ii) $(-3, 5)$ (iii) $(-6, 5)$ (iv) $(-6, 4)$ (v) $(-5, 5)$

2. Solve

$$\begin{aligned} (-5x + 5y - 5) &= 0 \\ (-3x + y + 1) &= 0 \end{aligned}$$

(i) $(2, 2)$ (ii) $(1, 2)$ (iii) $(2, 1)$
 (iv) $(3, 1)$ (v) $(3, -1)$

3. Solve

$$\begin{aligned} (-4x - 5y + 2) &= (-5) \\ (-2x + 5y + 4) &= (-1) \end{aligned}$$

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

4. Solve

$$\begin{aligned} (-4x + 3y + 2) &= (3x + 2y + 1) \\ (-x + y + 3) &= (-5x - 3y - 2) \end{aligned}$$

(i) $(\frac{1}{32}, (\frac{-41}{32}))$ (ii) $(\frac{-1}{34}, (\frac{-37}{30}))$ (iii) $(\frac{-1}{34}, (\frac{-39}{32}))$
 (iv) $(\frac{1}{32}, (\frac{-37}{30}))$ (v) $(\frac{-1}{32}, (\frac{-39}{32}))$

Solve the following pair of equations :

5. $\frac{15}{x} - \frac{15}{y} = (-30)$

$$\frac{10}{x} - \frac{17}{y} = 22$$

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

(iv) $(\frac{-3}{8}, \frac{-1}{6})$ (v) $(\frac{-1}{6}, \frac{-1}{6})$

Solve the following pair of equations :

6.
$$-10x - \frac{12}{y} = 14$$

$$-12x - \frac{6}{y} = 42$$

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

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

Solve the following pair of equations :

7.
$$-\frac{4}{x} + 11y = 36$$

$$-\frac{7}{x} - 5y = (-34)$$

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

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

Solve the following pair of equations :

8.
$$-\frac{3}{(x+y)} + \frac{4}{(x-y)} = 13$$

$$\frac{8}{x} - \frac{10}{y} = (-34)$$

$$(x+y) \quad (x-y)$$

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

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

Solve the following pair of equations :

$$9. \quad -\frac{10}{(x+y)} - \frac{17}{(x-y)} = 12$$

$$-\frac{7}{(x+y)} - \frac{5}{(x-y)} = 36$$

$$(i) \left(\frac{1}{16}, \left(\frac{-3}{14} \right) \right) \quad (ii) \left(\frac{1}{16}, \left(\frac{-3}{16} \right) \right) \quad (iii) \left(\frac{1}{18}, \left(\frac{-3}{16} \right) \right)$$

$$(iv) \left(\frac{3}{16}, \left(\frac{-3}{16} \right) \right) \quad (v) \left(\frac{1}{16}, \left(\frac{-5}{16} \right) \right)$$

Solve the following pair of equations :

$$10. \quad \frac{6}{(x+6)} - \frac{11}{(y-8)} = (-69)$$

$$-\frac{9}{(x+6)} - \frac{12}{(y-8)} = 18$$

$$(i) \left(\left(\frac{-37}{6} \right), \frac{25}{3} \right) \quad (ii) \left(3, \frac{25}{3} \right) \quad (iii) \left(\left(\frac{-37}{6} \right), -1 \right)$$

$$(iv) \left(1, \frac{25}{3} \right) \quad (v) \left(\left(\frac{-37}{6} \right), -2 \right)$$

Solve the following pair of equations :

$$11. \quad (4x + 2y) = (-28xy)$$

$$(-4x + 3y) = 48xy$$

$$(i) \left(\frac{1}{6}, \left(\frac{-1}{9} \right) \right) \quad (ii) \left(\frac{1}{4}, \left(\frac{-1}{9} \right) \right) \quad (iii) \left(\frac{3}{4}, \left(\frac{-1}{9} \right) \right)$$

$$(iv) \left(\frac{1}{4}, \left(\frac{-1}{11} \right) \right) \quad (v) \left(\frac{1}{4}, \frac{1}{9} \right)$$

Solve the following pair of equations :

$$12. \quad \frac{(-3x + 7y)}{xy} = -69$$

$$\frac{(-13x - 4y)}{xy} = 10$$

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

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

Assignment Key

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