



This worksheet helps you learn to solve systems of equations with two variables by applying effective methods.

## Easy Questions

1. Solve the system  $2x + y = 10$  and  $x - y = 2$ .
2. Find the values of  $x$  and  $y$  in  $3x + 2y = 12$  and  $x - 2y = 4$ .
3. Determine  $x$  and  $y$  if  $x + y = 7$  and  $x - y = 3$ .
4. Solve for  $x$  and  $y$  from  $4x + y = 9$  and  $-4x + 3y = 5$ .
5. Solve the following system:  $x - y = 1$  and  $2x + y = 7$ .

## Intermediate Questions

6. Solve  $2x + 3y = 13$  and  $4x - y = 7$ .
7. Determine  $x$  and  $y$  from  $\frac{x}{2} + \frac{y}{3} = 5$  and  $\frac{x}{4} - \frac{y}{6} = 1$ .
8. Find  $x$  and  $y$  if  $5x - 2y = 8$  and  $3x + 4y = 6$ .
9. Solve  $-x + 3y = 8$  and  $2x + y = 4$ .
10. Find the solution to  $0.5x + 0.3y = 2.1$  and  $1.5x - 0.2y = 4.8$ .
11. Solve for  $x$  and  $y$  from  $6x + 2y = 22$  and  $3x - y = 4$ .
12. Determine  $x$  and  $y$  if  $x + 2y = 9$  and  $3x - y = 5$ .
13. Solve  $4x + 3y = 24$  and  $2x - y = 1$ .
14. Find the values of  $x$  and  $y$  in  $7x - 4y = 5$  and  $3x + 2y = 16$ .
15. Solve  $2x - 5y = -1$  and  $3x + y = 10$ .
16. Determine  $x$  and  $y$  from  $-3x + 2y = 7$  and  $5x - 4y = -1$ .
17. Solve the system  $4x - 6y = 8$  and  $2x + 3y = 5$ .
18. Find  $x$  and  $y$  given  $x - 4y = -3$  and  $2x + 5y = 20$ .
19. Solve  $3x + 2y = 16$  and  $5x - y = 9$ .
20. Determine the solution of  $2x + y = 11$  and  $x - 2y = -4$ .

## Hard Questions

21. Solve for  $x$  and  $y$  in  $7x + 5y = 23$  and  $2x - 3y = -1$ .
22. Find  $x$  and  $y$  if  $3x - 2y = 5$  and  $5x + 4y = 3$ .
23. Solve  $6x - y = 17$  and  $4x + 3y = 1$ .
24. Determine  $x$  and  $y$  from  $5x + 2y = 12$  and  $3x - 4y = -10$ .
25. Solve the system  $8x - 3y = 7$  and  $6x + y = 19$ .
26. Find the solution of  $9x + y = 28$  and  $4x - 2y = 6$ .
27. Determine  $x$  and  $y$  if  $2x - 3y = 6$  and  $-x + 4y = 1$ .
28. Solve  $7x - 2y = 15$  and  $3x + 5y = 29$ .
29. Find  $x$  and  $y$  such that  $11x + 7y = 40$  and  $2x - 3y = 4$ .
30. Solve for  $x$  and  $y$  in  $5x - 3y = 7$  and  $4x + 2y = 18$ .