

# Simultaneous equation

## Steps

- 1 Get the same number of **y terms** in both equations by multiplying.
- 2 Eliminate the **y terms** by adding or subtracting.
- 3 Solve to find x.
- 4 Substitute the value for x into one of the original equations.
- 5 Solve to find y.

## Exercise: 20

1  $3x + 2y = 12$   
 $x + 3y = 11$

x=\_\_\_\_, y=\_\_\_\_

2  $4x + 2y = 14$   
 $2x + 5y = 11$

x=\_\_\_\_, y=\_\_\_\_

3  $2x + 3y = 13$   
 $5x + 2y = 27$

x=\_\_\_\_, y=\_\_\_\_

4  $4x + 3y = 17$   
 $7x - 4y = 2$

x=\_\_\_\_, y=\_\_\_\_

5  $11x - 3y = 8$   
 $9x + 4y = 13$

x=\_\_\_\_, y=\_\_\_\_

6  $5x + 3y = 12$   
 $6x - 4y = 22$

x=\_\_\_\_, y=\_\_\_\_

7  $5x + 4y = 11$   
 $2x + 3y = 3$

x=\_\_\_\_, y=\_\_\_\_

8  $4x + 5y = 26$   
 $5x + 4y = 28$

x=\_\_\_\_, y=\_\_\_\_

9  $3x - 2y = 12$   
 $x - 3y = 11$

x=\_\_\_\_, y=\_\_\_\_

10  $4x - 2y = 14$   
 $2x - 5y = 11$

x=\_\_\_\_, y=\_\_\_\_

11. Solve the simultaneous equations  $2x + y = 10$  and  $3x - y = 5$

x=\_\_\_\_, y=\_\_\_\_

12. Solve the simultaneous equations  $3x + y = 17$  and  $y = x + 1$

x=\_\_\_\_, y=\_\_\_\_

13. Solve the simultaneous equations  $4x + y = 10$  and  $4x - y = 6$

x=\_\_\_\_, y=\_\_\_\_