

Simultaneous Equations: Add or Subtract

1

Solve the simultaneous equations.

(1) $3x + y = 14$

(2) $x + y = 6$

(1) - (2)

$2x = 8$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

Check $\underline{\hspace{2cm}}$

2

Solve the simultaneous equations.

(1) $3x + y = 14$

(2) $x - y = 6$

(1) + (2)

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

Check $\underline{\hspace{2cm}}$

3

Solve the simultaneous equations.

(1) $5x + 2y = 19$

(2) $3x + 2y = 13$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

Check $\underline{\hspace{2cm}}$

4

Solve the simultaneous equations.

(1) $3x + 2y = 17$

(2) $5x - 2y = 7$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

Check $\underline{\hspace{2cm}}$

5

Solve the simultaneous equations.

(1) $3x - y = 14$

(2) $x - y = 6$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

Check $\underline{\hspace{2cm}}$

6

Solve the simultaneous equations.

(1) $x + 3y = 14$

(2) $x + y = 6$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

Check $\underline{\hspace{2cm}}$

7

Solve the simultaneous equations.

(1) $3x + y = 5$

(2) $x + y = 7$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

Check $\underline{\hspace{2cm}}$

8

Solve the simultaneous equations.

(1) $2x + 3y = 9$

(2) $2x - y = 1$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

Check $\underline{\hspace{2cm}}$

Simultaneous Equations: Add or Subtract *further practice*

9

Solve the simultaneous equations.

(1) $-x + 2y = 3$

(2) $x + 4y = 21$

Answer $\underline{\hspace{2cm}}$

10

Solve the simultaneous equations.

$3y + 2x = 21$

$2x - y = 1$

Answer $\underline{\hspace{2cm}}$

11

Solve the simultaneous equations.

(1) $2x + 5y = 1$

(2) $-2x + y = 11$

Answer $\underline{\hspace{2cm}}$

12

A large tin holds L litres of paint and a small tin holds S litres. 2 large and 3 small tins hold 41 litres. 2 large tins and 1 small tin hold 27 litres. How much does each tin hold?

Answer $\underline{\hspace{2cm}}$

13

A plank 210 cm long is cut into a long piece, L cm, and a short piece, S cm. The long piece is 46 cm longer than the short piece. Write two equations. Find both lengths.

Answer $\underline{\hspace{2cm}}$

14

Sam solves these simultaneous equations.

(1) $4x - 2y = 10$

(2) $x - 2y = 1$

Sam writes (1) - (2): $3x - 4y = 9$. What has Sam done wrong? Solve the equations.

Answer $\underline{\hspace{2cm}}$

15

Write a pair of simultaneous equations that you would add to solve. Their solution must be $x = 2, y = -1$.

Answer $\underline{\hspace{2cm}}$

16

Explain why adding $4x + 2y = 21$ and $4x - 2y = 19$ removes y .

Answer $\underline{\hspace{2cm}}$