

## Simultaneous equations: add or subtract

Exit ticket **ANSWERS** Name \_\_\_\_\_

- 1 Add or subtract to eliminate  $y$ ? Decide only, do not solve.

(a) (1)  $7x - 2y = 3$  (b) (1)  $3x + 4y = 11$   
(2)  $4x - 2y = 6$  (2)  $x - 4y = -7$

(a) subtract (b) add

- 2 Solve the simultaneous equations.

(1)  $6x + 2y = 7$   
(2)  $2x + 2y = 3$

$x = 1, y = \frac{1}{2}$

- 3 Solve the simultaneous equations.

(1)  $3x + 2y = 4$   
(2)  $5x - 2y = 12$

$x = 2, y = -1$

The Maths Habit

## Simultaneous equations: add or subtract

Exit ticket **ANSWERS** Name \_\_\_\_\_

- 1 Add or subtract to eliminate  $y$ ? Decide only, do not solve.

(a) (1)  $7x - 2y = 3$  (b) (1)  $3x + 4y = 11$   
(2)  $4x - 2y = 6$  (2)  $x - 4y = -7$

(a) subtract (b) add

- 2 Solve the simultaneous equations.

(1)  $6x + 2y = 7$   
(2)  $2x + 2y = 3$

$x = 1, y = \frac{1}{2}$

- 3 Solve the simultaneous equations.

(1)  $3x + 2y = 4$   
(2)  $5x - 2y = 12$

$x = 2, y = -1$

The Maths Habit

## Simultaneous equations: add or subtract

Exit ticket **ANSWERS** Name \_\_\_\_\_

- 1 Add or subtract to eliminate  $y$ ? Decide only, do not solve.

(a) (1)  $7x - 2y = 3$  (b) (1)  $3x + 4y = 11$   
(2)  $4x - 2y = 6$  (2)  $x - 4y = -7$

(a) subtract (b) add

- 2 Solve the simultaneous equations.

(1)  $6x + 2y = 7$   
(2)  $2x + 2y = 3$

$x = 1, y = \frac{1}{2}$

- 3 Solve the simultaneous equations.

(1)  $3x + 2y = 4$   
(2)  $5x - 2y = 12$

$x = 2, y = -1$

The Maths Habit

## Simultaneous equations: add or subtract

Exit ticket **ANSWERS** Name \_\_\_\_\_

- 1 Add or subtract to eliminate  $y$ ? Decide only, do not solve.

(a) (1)  $7x - 2y = 3$  (b) (1)  $3x + 4y = 11$   
(2)  $4x - 2y = 6$  (2)  $x - 4y = -7$

(a) subtract (b) add

- 2 Solve the simultaneous equations.

(1)  $6x + 2y = 7$   
(2)  $2x + 2y = 3$

$x = 1, y = \frac{1}{2}$

- 3 Solve the simultaneous equations.

(1)  $3x + 2y = 4$   
(2)  $5x - 2y = 12$

$x = 2, y = -1$

The Maths Habit

## Simultaneous equations: add or subtract

Exit ticket **ANSWERS** Name \_\_\_\_\_

- 1 Add or subtract to eliminate  $y$ ? Decide only, do not solve.

(a) (1)  $7x - 2y = 3$  (b) (1)  $3x + 4y = 11$   
(2)  $4x - 2y = 6$  (2)  $x - 4y = -7$

(a) subtract (b) add

- 2 Solve the simultaneous equations.

(1)  $6x + 2y = 7$   
(2)  $2x + 2y = 3$

$x = 1, y = \frac{1}{2}$

- 3 Solve the simultaneous equations.

(1)  $3x + 2y = 4$   
(2)  $5x - 2y = 12$

$x = 2, y = -1$

The Maths Habit

## Simultaneous equations: add or subtract

Exit ticket **ANSWERS** Name \_\_\_\_\_

- 1 Add or subtract to eliminate  $y$ ? Decide only, do not solve.

(a) (1)  $7x - 2y = 3$  (b) (1)  $3x + 4y = 11$   
(2)  $4x - 2y = 6$  (2)  $x - 4y = -7$

(a) subtract (b) add

- 2 Solve the simultaneous equations.

(1)  $6x + 2y = 7$   
(2)  $2x + 2y = 3$

$x = 1, y = \frac{1}{2}$

- 3 Solve the simultaneous equations.

(1)  $3x + 2y = 4$   
(2)  $5x - 2y = 12$

$x = 2, y = -1$

The Maths Habit

1 Add or subtract to eliminate  $y$ ? Decide only, do not solve.

(a) (1)  $7x - 2y = 3$       (b) (1)  $3x + 4y = 11$

(2)  $4x - 2y = 6$               (2)  $x - 4y = -7$

(a) subtract (b) add

TESTS

Add or subtract: the same term, sign included, subtract; opposite terms add

LOOK FOR

(a) subtract (b) subtract always subtracts:  $-4y$  and  $+4y$  add to 0

FIX IT

Add or subtract to eliminate  $y$ ? Decide only.  $2x + 3y = 12$  and  $4x - 3y = 6$

add

2 Solve the simultaneous equations.

(1)  $6x + 2y = 7$

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

$x = 1, y = \frac{1}{2}$

TESTS

Eliminating, then dividing the right way round to get a half

LOOK FOR

$x = 1, y = 2$   $2y = 1$  turned into  $1 \div 2$  the wrong way round

FIX IT

Solve  $3x + 4y = 8$  and  $x + 4y = 4$

$x = 2, y = \frac{1}{2}$

3 Solve the simultaneous equations.

(1)  $3x + 2y = 4$

(2)  $5x - 2y = 12$

$x = 2, y = -1$

TESTS

Adding with a negative coefficient; a negative answer

LOOK FOR

$x = -1, y = 2$  swapped  $x$  and  $y$ : check in both equations

FIX IT

Solve  $4x + 3y = 6$  and  $x - 3y = 9$

$x = 3, y = -2$