

# Simultaneous

Syllabus tracker [Open it online](#)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Tick one circle for each statement — on screen (click) or with a pen. Then try the quick checks: write your answer in the box, check it against the answers at the end, and tick “right” when you got it.

## Elimination

Adding or subtracting the equations to remove one unknown.

|                                                             | Don't know            | Shaky                 | Got it                |
|-------------------------------------------------------------|-----------------------|-----------------------|-----------------------|
| I can solve simultaneous linear equations by elimination.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I can multiply an equation first so the coefficients match. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Substitution and problems

Substituting one equation into the other; forming equations from words.

|                                                                  | Don't know            | Shaky                 | Got it                |
|------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|
| I can solve simultaneous equations by substitution.              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I can form and solve simultaneous equations from a word problem. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I can solve one linear and one quadratic equation together.      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Quick checks

One quick question per statement. Answer in the box, then check the answers at the end.

1. Solve  $3x + 2y = 16$  and  $x - 2y = 0$ .

Answer: \_\_\_\_\_ ☐ I got it right

2. Solve  $2x + 3y = 12$  and  $5x - 2y = 11$ .

Answer: \_\_\_\_\_ ☐ I got it right

3. Solve  $y = 2x - 1$  and  $3x + y = 14$ .

Answer: \_\_\_\_\_ ☐ I got it right

4. 3 pens and 2 rulers cost \$13. 1 pen and 2 rulers cost \$7. How much is one pen, in dollars?

Answer: \_\_\_\_\_ ☐ I got it right

5. Solve  $y = x + 1$  and  $y = x^2 - 1$ . Which gives both solutions?

**A** (2, 3) and (−1, 0)   **B** (2, 3) and (1, 2)   **C** (−2, −1) and (1, 2)   **D** (1, 2) and (−1, 0)

Answer: \_\_\_\_\_ ☐ I got it right

## Answers

Try every question first, then check.

1.  $(4, 2)$
2.  $(3, 2)$
3.  $(3, 5)$

4. 3
5. A:  $(2, 3)$  and  $(-1, 0)$