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. ★ = IGCSE Extended tier only.

Elimination

Adding or subtracting the equations to remove one unknown.

	Don't know	Shaky	Got it
I can solve simultaneous linear equations by elimination.	○	○	○
I can multiply an equation first so the coefficients match.	○	○	○

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.	○	○	○
I can form and solve simultaneous equations from a word problem.	○	○	○
I can solve one linear and one quadratic equation together. ★	○	○	○

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)