

Teacher guide: Cumulative checkpoint 4 and feedback

Objective: Apply number accuracy, graphs and equations in cumulative tasks.

Calculator condition: Non-calculator core; calculator optional only for checking where labelled.

Learning Cycle plan

Stage	Time	Teacher move	Evidence to collect
Connect & Check	5 min	State the objective and timeline. Retrieve cubic reciprocal and other graphs or a prerequisite. Diagnose a common error before modelling.	Independent written response, correction or verbal explanation.
Share	7 min	Pairs compare methods or predict a result for cumulative checkpoint 4 and feedback. Ask for a reason, not only an answer.	Independent written response, correction or verbal explanation.
Present	10 min	Diagnose whether errors arise in modelling, manipulation or checking	Independent written response, correction or verbal explanation.
Apply	25 min	Repair the weakest prerequisite and retry a fresh problem Use guided support, then remove it for independent working.	Independent written response, correction or verbal explanation.
Recall & Review	8 min	Revisit the objective. Learners solve a fresh item without prompts, explain a check, correct one error and record the next practice.	Independent written response, correction or verbal explanation.

Differentiation

- All learners reach the same objective; route choice changes the journey, not the standard.
- Use visual, method and explanation routes to support access.
- Remove prompts before exit evidence.
- Use stretch and deep challenge only after the core method is secure.

Assessment response

- Compare corrected responses with the original diagnostic and a fresh unprompted question. Record the misconception repaired and a delayed check. NC/C selected to purpose; label each question.

Recall & Review: feedback and extension integration

Lesson L064: Cumulative checkpoint 4 and feedback

Objective: Apply number accuracy, graphs and equations in cumulative tasks.

Timing for a 60-minute lesson

0-7 Connect & Check; 7-14 Share; 14-25 Present/model; 25-44 Apply route choice/practice; 44-52 independent exam-style check; 52-60 Recall & Review, WWW/EBI and next step.

Recall & Review evidence

At the end of the lesson, solve a fresh question without prompts, explain one check, correct one error and record the next practice step.

What Went Well (WWW)

I used my working and assessment evidence to identify the exact mathematical step that was secure and the specific misconception that needs attention.

Even Better If (EBI)

I will correct one precise step, explain why the correction works and complete a fresh delayed question without the original scaffold.

Integrated stretch and deep challenge

Stretch: Solve $x^2+2x-15=0$ and $2a^3 \times 3a^2$.

Deep challenge: A student obtains $x=2, y=3$ from $x+y=5$ and $x-y=1$. Test and repair.

Teacher use

Use the What Went Well (WWW) and Even Better If (EBI) prompts to write mathematics-specific feedback linked to the objective. Do not accept generic praise: identify the method, representation, reasoning or checking step that improved, then set a fresh next-step question.

Assessment evidence to inspect: Compare corrected responses with the original diagnostic and a fresh unprompted question. Record the misconception repaired and a delayed check. NC/C selected to purpose; label each question.