

Cumulative checkpoint and feedback

Pearson Edexcel GCSE Mathematics 1MA1

L024 • Foundation and Higher

60 minute lesson | learner resources

The goal and the evidence

Connect & Check → Share → Present → Apply → Recall & Review

Use independent evidence across number, proportion and algebra to identify a specific error and demonstrate a repaired method.

Explain, apply and check independently.

Starting-point diagnostic

R1–R3 • Attempt without notes

Without notes: calculate $\frac{1}{2} + \frac{1}{3}$ and 15% of 80.

Without notes: share 40 in ratio 3:5 and solve $3x + 2 = 17$.

Without notes: expand $2(x - 3)$ and find the fifth term of $3n + 1$.

Worked example and your turn

D1 • Explain each step

Model repair: $\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$. Now calculate $\frac{3}{4} + \frac{1}{6}$ with common units.

Try the paired problem; check independently.

Worked example and your turn

D2 • Explain each step

Model repair: 20% off gives £64, so
original = $64 \div 0.8 = £80$. Now 25% off gives £54. Find
original.

Try the paired problem; check independently.

Worked example and your turn

D3 • Explain each step

Model repair: $2(x+3)=14$ gives $x=4$. Now solve $3(x-2)=15$ and check.

Try the paired problem; check independently.

Worked example and your turn

D4 • Explain each step

Model repair: 5, 8, 11, ... is $3n+2$, not $5n$. Now find the linear n th term of 6, 10, 14, ...

Try the paired problem; check independently.

A method you can explain

Name what changes at each step.

Check against the original question.

Diagnostic pause

Choose and explain before moving on.

A learner has $2x+3=11$ then $2x=11$. What failed? A equality was not preserved, B multiplication is impossible, C x must be negative.

Use your explanation to decide the next step.

Careful variation

A1 • Show your reasoning

Calculate $\frac{2}{3} + \frac{1}{4}$, then $(\frac{2}{3}) \div (\frac{1}{4})$. Explain why the methods differ.

Explain your decisions and check the result.

Independent application

A2 • Show your reasoning

Solve $4x - 3 = 2x + 9$; expand $-2(x - 4)$; rearrange $y = 3x + 2$ for x .

Explain your decisions and check the result.

Use the method in context

A3 • Show your reasoning

A £5 fee plus £3 per visit must cost at most £24.
Find the maximum whole visits and check the bill.

Explain your decisions and check the result.

Intentional practice feedback

Read after attempting A3

6 visits; £23. Seven visits would cost £26.

Correct one step and explain the change.

A claim to test

C1 • Show your reasoning

A learner gets 6/6 immediately after reading retrieval answers. What further evidence would show retained understanding?

Explain your decisions and check the result.

Deepen the reasoning

C2 • Show your reasoning

A price rises 25% then falls 20%. Does it return to the start? Compare a 25% fall after the rise.

Explain your decisions and check the result.

Retrieval without notes

Q1–Q6 • Numeric answers; units as requested

Q1–Q3

$$\frac{1}{2} + \frac{1}{3}$$

15% of 80

First share: 40 in ratio
3:5

Q4–Q6

$$\text{Solve } 3x + 2 = 17$$

Fifth term of $3n + 1$

$$-8 - (-3)$$

Independent exit evidence

P1 • Without notes • Teacher review

Solve $2(x+4)=3x+1$ and check in the original equation. [2]

Show working and check your answer.

Independent exit evidence

P2 • Without notes • Teacher review

Share 63 in ratio 2:5. Explain the number of equal parts. [2]

Show working and check your answer.

Feedback and next steps

P3 • Completion is not mastery

Explain one error you have corrected.

Set a fresh question and a delayed check.

Before the next lesson

L025: Angle facts and parallel lines

Complete F1 tomorrow without notes.

Attempt F2 and bring one question.

Optional stretch

Solve $2x+5=17$, then give the third term of $3n+2$.

Show a method. Explain a check or counterexample.

Optional deep challenge

A learner extends 2,5,8,11 with 15. Diagnose and find the 20th term.

Show a method. Explain a check or counterexample.

L024 Recall & Review

Cumulative checkpoint and feedback



Fresh evidence: prove the objective

Solve a new question without prompts. Explain one check, then correct one error in your working.

Objective: Use independent evidence across number, proportion and algebra to identify a specific error and demonstrate a repaired method.

Write the next practice step before you leave. It must test the method again, not simply copy today's example.

Feedback language

Use the full phrases before the abbreviations.

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.

Identify the mathematical method, representation, reasoning or check that improved.

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.

Set one precise next-step action and test it on a fresh question.

Extension route

Choose this route only after the core evidence is secure.

Stretch

Solve $2x+5=17$, then give the third term of $3n+2$.

Deep challenge

A learner extends 2,5,8,11 with 15. Diagnose and find the 20th term.

Explain your reasoning clearly enough that another learner could check it.