2026 RELEASED PAPER · 4052/02 · 23 OCTOBER 2026

Paper 2: what was tested

A question-by-question review, topic heatmaps and an honest comparison with our pre-exam priorities and specimen papers.

90
marks across 9 questions

14
marks in Q3: algebra & equations

8
vector marks after 1 in P1

7
sequence marks; none in P1

The main lesson: P2 brought back several P1 gaps, but it also repeated algebra, graphs, statistics, probability and trigonometry. An untested P1 topic was a revision signal, not a promise that it would appear in P2.

Largest primary categories

Equations & inequalities **11**; the integrated real-world problem **10**; vectors **8**; graphs, sequences and trigonometry **7 each**.

Unexpected emphasis

Construction returned for **2 marks**. Sequences took **7**, and congruence/angle proof occupied Q5(b). The revised specimen underrepresented these.

Predicted skills that did appear

Matrix multiplication and interpretation; fractional-to-quadratic solving; sine area and non-right-angle rules; vector ratios and collinearity; a final modelling decision.

Predicted skills that did not

No cumulative-frequency curve or numerical SD; no extended coordinate geometry; no 3D trigonometry; no curve tangent or curve–line solving; no circle/radian segment task.

Question map

Question	Marks	Content tested	Primary-topic split	Source
Q1	7	Two function graphs	Functions & graphs 7	Printed pp. 4–5
Q2	11	Numbers, estimation and sequences	Numbers & indices 4; Sequences & patterns 7	Printed pp. 6–7
Q3	14	Algebra, indices and equations	Equations & inequalities 7; Numbers & indices 2; Algebra & formulae 5	Printed pp. 8–9
Q4	11	A prism, filling rate and circular scaling	Mensuration 5; Ratio, proportion & scales 3; Congruence & similarity 3	Printed pp. 10–11
Q5	7	Construction and geometric proof	Construction 2; Congruence & similarity 3; Angles & polygons 2	Printed pp. 12–13

Question	Marks	Content tested	Primary-topic split	Source
Q6	11	Festival statistics, matrices and probability	Statistics 6; Matrices 3; Probability 2	Printed pp. 14–15
Q7	11	A quadratic inside a trigonometry problem	Pythagoras, trig & bearings 7; Equations & inequalities 4	Printed pp. 16–17
Q8	8	Column vectors and vector proof	Vectors 8	Printed pp. 18–19
Q9	10	Population planning and compound interest	Integrated real-world problem 10	Printed pp. 20–21

P2 topic heatmap

2026 P2: primary-topic marks by question

Topic	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Total
Equations & inequalities	0	0	7	0	0	0	4	0	0	11
Integrated real-world problem	0	0	0	0	0	0	0	0	10	10
Vectors	0	0	0	0	0	0	0	8	0	8
Functions & graphs	7	0	0	0	0	0	0	0	0	7
Sequences & patterns	0	7	0	0	0	0	0	0	0	7
Pythagoras, trig & bearings	0	0	0	0	0	0	7	0	0	7
Numbers & indices	0	4	2	0	0	0	0	0	0	6
Congruence & similarity	0	0	0	3	3	0	0	0	0	6
Statistics	0	0	0	0	0	6	0	0	0	6
Algebra & formulae	0	0	5	0	0	0	0	0	0	5
Mensuration	0	0	0	5	0	0	0	0	0	5
Matrices	0	0	0	0	0	3	0	0	0	3
Ratio, proportion & scales	0	0	0	3	0	0	0	0	0	3
Construction	0	0	0	0	2	0	0	0	0	2
Angles & polygons	0	0	0	0	2	0	0	0	0	2
Probability	0	0	0	0	0	2	0	0	0	2
Circle properties	0	0	0	0	0	0	0	0	0	0
Coordinate geometry	0	0	0	0	0	0	0	0	0	0
Financial arithmetic	0	0	0	0	0	0	0	0	0	0
Percentages	0	0	0	0	0	0	0	0	0	0
Sets	0	0	0	0	0	0	0	0	0	0
Rates, speed & travel graphs	0	0	0	0	0	0	0	0	0	0
All topics	7	11	14	11	7	11	11	8	10	90

Each number is an allocated mark, not a probability. One primary topic per subpart; darker cells mean more marks. The total row always covers the full paper even when topic rows are filtered.

> **Counting rule:** Q9 stays together as a 10-mark integrated real-world problem. Compound interest, percentages and graph extrapolation are embedded within it. Q4(b)(i) is under similarity/scaling, with percentage changes embedded; Q8(a)(ii) is under vectors, with Pythagoras/distance embedded. Zero primary marks does **not** mean a skill was unused.

Recent P2 comparison

Paper 2: marks in the 4052 series

Topic	2023	2024	2025	2026
Equations & inequalities	8	12	10	11
Numbers & indices	1	4	3	6
Algebra & formulae	4	4	5	5
Statistics	4	5	5	6
Mensuration	13	7	6	5
Pythagoras, trig & bearings	0	9	11	7
Congruence & similarity	0	3	2	6
Functions & graphs	11	11	7	7
Integrated real-world problem	10	11	9	10
Ratio, proportion & scales	3	2	6	3
Vectors	4	0	0	8
Sequences & patterns	10	0	0	7
Probability	5	4	6	2
Coordinate geometry	7	9	6	0
Circle properties	4	0	0	0
Rates, speed & travel graphs	2	2	0	0
Financial arithmetic	0	0	0	0
Matrices	0	5	3	3
Sets	0	0	4	0
Construction	0	0	0	2
Angles & polygons	0	0	6	2
Percentages	4	2	1	0
Total	90	90	90	90

Comparable 4052 papers only: each is out of 90. The older 4048 paper also labelled 2023 is excluded. Historical classifications are the previously audited ledger; 2026 is classified from the supplied scan.

Recurring areas

Equations: **8** → **12** → **10** → **11** marks. Vectors: **4** → **0** → **0** → **8**. Matrices: **0** → **5** → **3** → **3**. The final real-world task remains prominent at **10, 11, 9, 10**.

A trend can break

Coordinates had **7, 9, 6** primary marks in 2023–2025, then **0** in 2026. Sequences moved **10** → **0** → **0** → **7**; construction moved **0** → **0** → **0** → **2**.

How the earlier predictions held up

> **All five “First” priority areas appeared at broad topic level.** Their exact methods and settings did not all match. In particular, “graphs appeared” does not mean the predicted tangent or graphical equation question appeared. No single “accuracy percentage” is claimed.

Earlier tier	Priority	Actual reference	Assessment	What matched / differed
First	Graphs	Q1: 7 marks	Partial method match	Table and curve plotting appeared, plus quadratic sketching. No tangent gradient or curve–line equation-solving task.
First	Quadratics / fractional equations	Q3(c); Q7(a)–(c)	Strong method match	A fractional equation genuinely led to a quadratic; the triangle question required forming an equation, factorising and rejecting a root. The revised specimen used a photo-border context and the formula, so its exact setting did not match.
First	Matrices	Q6(b): 3 marks	Strong method match	Quantities × unit values and interpretation appeared. Actual task used profit via P(D − C), rather than ticket revenue.
First	Non-right-angled trigonometry	Q7(a),(d): 7 primary marks	Strong method match	½ab sin C, cosine rule and sine rule/obtuse angle appeared. No 3D angle or elevation problem.
First	Real-world problem	Q9: 10 marks	Broad structure match	Final multi-step modelling, graph use and justified decision appeared. The population, infrastructure and compound-interest context was not predicted by the revised coach problem.
Next	Coordinate geometry	No dedicated coordinate-geometry question	Miss	No line equation, intersection or coordinate area. Q8(a) used position vectors and a magnitude: this overlaps distance skills but is classified as vectors, not a successful extended-coordinate prediction.
Next	Vectors	Q8: 8 marks	Strong method match	Vector routes, ratios and a scalar-multiple collinearity proof appeared. No vector area-ratio question.
Next	Cumulative frequency / numerical SD	Q6(a) used different statistics	Miss at concept level	Statistics appeared, but as a pie chart and weighted mean. No CF graph, quartile reading or numerical SD calculation.
Next	Composite solids / scaling	Q4: 11 mixed-topic marks	Partial method match	Composite cross-section volume, filling rate and radius/area scaling appeared. No hemisphere composite surface or cubed similar-solid scale factor; the actual cylinders had equal heights and were not similar.
Short drill	Sequences	Q2(d): 7 marks	Underweighted	Arithmetic and geometric sequences plus a divisibility explanation appeared. The original P2 had a sequence question; the revised P2 omitted it.

Earlier tier	Priority	Actual reference	Assessment	What matched / differed
Short drill	Construction / angles	Q5(a),(b)(ii): 4 primary marks	Underweighted	An accurate protractor construction and an angle proof appeared. The low historical P2 construction frequency did not rule this out.
Maintain	Probability / proof / algebra	Q3; Q5(b); Q6(c)	Mixed	Congruence, algebra and repeated independent-event probability mattered. No circle theorem, tree diagram, radians or segment-area question.

Revised P2 specimen: question-by-question audit

The ten-question specimen written after P1 is assessed as it stood before this P2 was supplied. A transferable method is distinguished from a matching question structure.

Specimen Q	Prepared content	Actual P2	Match level	Evidence / limitation
1	Matrices and percentages	Q6(b)	Close core method	Matrix product and meaning of entries; actual adds subtraction for profit. The ticket-price percentage extension did not recur.
2	CF and numerical SD	Q6(a)	Broad topic only	Actual statistics is pie chart + weighted mean. CF, SD calculation and misleading bar chart were absent.
3	Coordinate trapezium	None	No dedicated match	No extended line, intersection, ratio or area task. Position-vector magnitude is too narrow to count this question as a hit.
4	Field / mast trigonometry	Q7(a),(d)	Partial method match	Sine area and cosine rule transferable; actual mixes algebra, a quadratic and an obtuse-angle sine-rule choice. No 3D mast.
5	Curve and straight lines	Q1(a)	Partial method match	Table and curve plotting transfer, but actual function has two branches separated by x = 0. No tangent or suitable straight line.
6	Vectors and areas	Q8(b)	Close core method	Vector routes, section ratios and scalar multiples transfer. Actual asks collinearity and a ratio; no area ratio.
7	Photo-border quadratic	Q3(c); Q7(a)–(c)	Partial method match	Quadratic solving and rejecting a root transfer. The actual formation is trigonometric, and factorisation is explicitly required in Q7(b).
8	Circle proof and probability	Q5(b); Q6(c)	Broad methods only	Congruence and probability transfer, but no circle, radians, tree or conditional-sample-space task.
9	Composite vessel / similar solids	Q4	Partial method match	Volume and scaling principles transfer. Actual uses a prism, a filling rate and equal-height cylinders rather than similar solids.
10	Coach decision	Q9	Structure only	Final multi-step decision transfers. Population extrapolation and compound interest were omitted from the revised specimen.

The original specimen also matters. Its Q8 included sequence work and an algebraic proof, so it offered preparation the revised specimen removed. Original Q1(b) covered changing the subject, relevant to actual Q3(d). Its sequence was quadratic rather than the actual arithmetic/geometric combination. Original Q2's grouped statistics also missed the actual pie-chart and weighted-mean structure. Neither specimen predicted Q9's population/compound-interest setting.

What to learn from the misses

- Keep a short drill for every syllabus strand. Low historical frequency did not eliminate construction.
- Practise statistics as a family: pie charts, weighted means, CF, spread and interpretation are different skills.
- For quadratics, retain factorisation, the formula and contextual checks. Actual Q7(b) explicitly demanded factorisation.
- For scaling, check what is fixed. Equal-height cylinders require direct formula ratios, not similar-solid rules.
- For real-world tasks, practise percentages, capacity, rounding and compound interest together with graph reading.

2026 COMPLETE EXAMINATION · 4052/01 + 4052/02

Both papers: the complete picture

180 marks, with P1 breadth and P2 linked reasoning shown side by side.

180
total marks: 90 + 90

37
questions: 28 + 9

20
equations & inequalities marks

35
algebra + equations marks

Combined topic heatmap

Primary-topic allocation; all totals reconcile

Topic	P1 /90	P2 /90	Both /180	Share	P1 references	P2 references
Equations & inequalities	9	11	20	11.1%	Q13, Q15, Q22	Q3, Q7
Numbers & indices	11	6	17	9.4%	Q2, Q9, Q23	Q2, Q3
Algebra & formulae	10	5	15	8.3%	Q1, Q4, Q16, Q21	Q3
Statistics	8	6	14	7.8%	Q5, Q10, Q12, Q26	Q6
Mensuration	8	5	13	7.2%	Q18, Q25	Q4
Pythagoras, trig & bearings	6	7	13	7.2%	Q7, Q20	Q7
Congruence & similarity	5	6	11	6.1%	Q24	Q4, Q5
Functions & graphs	3	7	10	5.6%	Q28	Q1
Integrated real-world problem	0	10	10	5.6%	—	Q9
Ratio, proportion & scales	6	3	9	5.0%	Q11, Q27	Q4
Vectors	1	8	9	5.0%	Q14	Q8
Sequences & patterns	0	7	7	3.9%	—	Q2
Probability	4	2	6	3.3%	Q8, Q19	Q6
Coordinate geometry	5	0	5	2.8%	Q14	—
Circle properties	4	0	4	2.2%	Q3	—
Rates, speed & travel graphs	4	0	4	2.2%	Q6	—
Financial arithmetic	3	0	3	1.7%	Q17	—
Matrices	0	3	3	1.7%	—	Q6
Sets	3	0	3	1.7%	Q8	—
Construction	0	2	2	1.1%	—	Q5
Angles & polygons	0	2	2	1.1%	—	Q5
Percentages	0	0	0	0.0%	—	—
Total	90	90	180	100%	28 questions	9 questions

No double counting. The same primary-topic rules are used for both papers. “Percentages: 0” and the small primary financial total are classification results: percentages appeared in P1 Q17/Q27 and P2 Q4(b)/Q9; compound interest appeared inside P2 Q9(c). These skills were tested.

How P2 complemented P1

Area	P1 marks	P2 marks	What changed
Matrices	0	3	New in P2: profit matrix and interpretation (Q6(b)).

Area	P1 marks	P2 marks	What changed
Sequences	0	7	New in P2: arithmetic and geometric sequences, threshold and proof (Q2(d)).
Construction	0	2	New in P2: accurate quadrilateral drawing (Q5(a)).
Vectors	1	8	P1 translation grew into column-vector magnitude, ratios and collinearity (Q8).
Equations	9	11	P1 had linear solving; P2 added a genuine fractional quadratic and factorisation (Q3(c), Q7(b),(c)).
Trigonometry	6	7	P1 right-angle/bearing skills were extended by sine area and non-right-angle rules (Q7).
Statistics	8	6	Both papers tested statistics, but neither tested CF or a numerical SD calculation. P2 focused on pie charts and a weighted mean.
Coordinate geometry	5	0	P1 covered line equation and distance; P2 did not add an extended coordinate problem.
Congruence / similarity	5	6	P1 similarity and crossed posts; P2 scaling in Q4(b)(i) and AAS congruence in Q5(b)(i).

Skills used across topic boundaries

Question	Primary category	Embedded content worth recognising
P1 Q17; Q27	Financial arithmetic; proportion	Percentage fee / percentage increase
P2 Q4(b)(i)	Congruence & similarity	Successive percentages → circumference/radius ratio → squared area ratio
P2 Q5(b)(ii)	Angles & polygons	Congruence result → isosceles triangle → algebraic angle expression
P2 Q7(a)	Trigonometry	Sine area formula → form and expand a quadratic
P2 Q8(a)(ii)	Vectors	Scalar multiple → coordinate distance / Pythagoras
P2 Q9	Integrated real-world problem	Extrapolation, percentages, proportional transport cost, discrete capacity, compound interest and a justified claim

Still not directly examined in these two papers

No cumulative-frequency curve or numerical standard-deviation computation; no tangent-gradient construction or suitable-line graphical equation solution; no 3D trigonometry; no explicit radian-sector/segment calculation; no speed–time graph or vector area-ratio proof. These omissions describe this examination only and do not remove them from the syllabus.

Recent whole-exam comparison

Combined P1 + P2: marks in the 4052 series

Topic	2023	2024	2025	2026
Equations & inequalities	13	19	21	20
Numbers & indices	7	9	10	17
Algebra & formulae	19	22	14	15
Statistics	11	16	13	14
Mensuration	17	16	11	13
Pythagoras, trig & bearings	13	22	14	13
Congruence & similarity	1	3	8	11
Functions & graphs	14	11	17	10
Integrated real-world problem	10	11	9	10
Ratio, proportion & scales	8	6	10	9
Vectors	9	6	3	9
Sequences & patterns	13	2	0	7
Probability	7	4	10	6
Coordinate geometry	9	9	6	5
Circle properties	6	3	3	4
Rates, speed & travel graphs	2	2	4	4
Financial arithmetic	5	7	2	3
Matrices	5	5	3	3
Sets	2	2	4	3
Construction	0	0	3	2
Angles & polygons	0	3	9	2
Percentages	9	2	6	0
Total	180	180	180	180

2023–2026 use syllabus 4052, 90 marks per paper. The percentages use 90 for a single paper and 180 for both.

Forecast audit across both papers

Keep the two audits separate. The original P1 specimen had 4 close-method, 15 partial and 7 not-seen question matches across its 26 questions. Those are question categories, not an exam-score prediction. The P2 audit compares the latest revision priorities and the revised ten-question specimen with the actual nine-question paper. Combining them into a single “prediction accuracy” would hide important differences.

Read the full P2 prediction audit · Revisit the P1 review

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