Course report 2026

Advanced Higher Mathematics, SCQF level 7

We've written this report for teachers and lecturers. We recommend you read this with the published course assessment documents and marking instructions.

The report:

- provides a summary of how each course component performed
- highlights areas of the question paper and coursework where candidates performed well and areas where they did not perform well
- has advice you might find useful when preparing candidates for assessment

We collect and prepare the statistics in course reports before we complete the appeals process.

Statistical and grade boundary information

Course entries

Number of resulted entries in 2025: 4,469

Number of resulted entries in 2026: 4,784

Distribution of course awards (including minimum mark to achieve each grade)

Course award	Number of candidates	Percentage	Cumulative percentage	Minimum mark required
A	1,977	41.3	41.3	81
B	874	18.3	59.6	68
C	637	13.3	72.9	56
D	559	11.7	84.6	43
No award	737	15.4	100	Not applicable

We've not applied rounding to these statistics.

In this report:

- 'Most' means greater than or equal to 70%.
- 'Many' means 50% to 69%.
- 'Some' means 25% to 49%.
- 'Few' or 'a few' means less than 25%.

You can find statistical reports on our website.

General commentary on grade boundaries

Our main aim when setting grade boundaries is to be fair to candidates across all subjects and levels, and to maintain comparable standards across the years, even as arrangements evolve and change.

For most National Courses, we aim to set examinations and other external assessments and create marking instructions that allow:

- a competent candidate to score a minimum of 50% of the available marks (the notional grade C boundary)
- a well-prepared, very competent candidate to score at least 70% of the available marks (the notional grade A boundary)

It's very challenging to get the standard on target every year, in every subject, at every level. Therefore, we hold a grade boundary meeting for each course to bring together all the information available (statistical and qualitative) and make final decisions on grade boundaries based on this information. Senior Qualifications Scotland staff normally chair these meetings.

Principal assessors use their subject expertise to evaluate the performance of the assessment and propose suitable grade boundaries based on the full range of evidence. We can adjust the grade boundaries as a result of the discussion at these meetings. This allows the pass rate to be unaffected in circumstances where there is evidence that the question paper or other assessment has been more, or less, difficult than usual.

- We can adjust the grade boundaries downwards if there's evidence that the question paper or other assessment has been more difficult than usual.
- We can adjust the grade boundaries upwards if there's evidence that the question paper or other assessment has been less difficult than usual.
- If levels of difficulty are comparable to previous years, we maintain similar grade boundaries.

Every year, we evaluate the performance of our assessments in a fair way, while ensuring standards are maintained so that our qualifications remain credible. To do

this, we measure evidence of candidates' knowledge and skills against the national standard.

For full details of the approach, please refer to the Awarding and Grading for National Courses Policy.

How the course assessment performed

Question paper 1 (non-calculator)

Feedback suggested that paper 1 was less demanding than intended, particularly question 6(c). We took this into account when setting the grade boundaries.

Question paper 2

Feedback suggested that paper 2 was more demanding than intended, particularly question 8. We took this into account when setting the grade boundaries.

How candidates performed

Many candidates demonstrated their knowledge and understanding of established techniques and routines to answer questions 1(a), 2, 4 and 7(a) in paper 1 and questions 1, 3(a)(i), 4, 5, 10(a) and 13(a) in paper 2.

Some candidates produced excellent answers for the more challenging questions, in particular question 5(c) in paper 1, and questions 6(c), 10(b), 15, and 16(c)(ii) in paper 2.

Some candidates did not simplify final answers, particularly in questions 1(b) and 6(b) in paper 1 and question 6(b)(iii) in paper 2. Some candidates' responses to question 5(a) in paper 1, and questions 6(c) and 7(b) in paper 2 contained errors in basic algebraic manipulation.

Question paper 1 (non-calculator)

Question 1(b)

Some candidates equated the derivative to the original expression or did not simplify the derivative.

Question 3

Some candidates made errors with notation or in the determination of exact values.

Question 5(b)

Some candidates did not correctly carry out a simple algebraic process.

Question 5(c)

Some candidates handled matrix manipulation well. We allowed minor notation errors and incorrect matrix names where the intended meaning was clear.

Question 6(a)

Many candidates handled the double substitution well.

Question 6(b)

A few candidates did not simplify the numerical fraction in their final answer.

Question 7(a)

Most candidates correctly gave the complex conjugate of the given root.

Question 7(b)

Candidates generally had greater success when they began by creating two linear factors than when they used synthetic division.

Question paper 2

Question 3(a)

In part (ii), some candidates made errors in basic differentiation.

Question 3(b)

Most candidates used an unmodified, or incorrectly modified, expression from 3(a)(ii). A few candidates attempted to produce an expression from first principles. Most of these candidates gained no marks in this part.

Question 6(b)

In part (iii), many candidates did not simplify their expression. Some candidates omitted brackets when raising the value of the common ratio to a power. Some candidates incorrectly multiplied the ratio by a constant and raised the resultant product to a power.

Question 7(b)

A few candidates multiplied out a pair of brackets in part (a) but did not produce a correct factorisation of the resultant expression.

Question 8

Many candidates did not use a negative value for the rate of change of volume with respect to time, despite the context of the question. A few candidates did not correctly differentiate the volume with respect to the depth.

Question 11

A few candidates split the integral to produce two standard integrals.

Question 12

A few candidates introduced summation notation in a proof relating to divisibility.

Question 13(b)

Many candidates made good progress with this question, correctly finding the integrating factor, processing the differential equation and applying the result from part (a).

Question 14

Some candidates did not use standard notation for normal and direction vectors or used the two interchangeably.

Question 15(a)

Many candidates did not correctly state the contrapositive of a given statement.

Question 15(b)

Some candidates gave the correct form of a rational number but only a few candidates stated that the numerator and denominator had to be integers.

Question 16(b)

In part (i), a few candidates made good progress in evaluating the integral but expressed their result as an approximation instead of an exact value. In part (ii), a few candidates obtained the correct answer by using integration by parts in reverse or by using differentiation.

Preparing candidates for assessment

The comments in the previous sections and those below can help you prepare candidates for the Advanced Higher Mathematics question papers.

- Encourage candidates to thoroughly revise established techniques and routines so they understand them well. Established routines are particularly useful when solving a differential equation using an integrating factor (for example, question 13(b) in paper 2) and dealing with logarithmic differentiation (for example, question 5 in paper 2).
- Candidates should practise proof by induction (for example, question 12 in paper 2), so that they are familiar with the vocabulary they need to use to demonstrate their understanding of the process. They should be aware that omitting certain words or phrases can invalidate the proof. They should clearly show details such as substitution and algebraic manipulation and understand that not every induction question involves summation.
- Candidates should ensure that they distinguish between different matrices, such as the inverse, transpose and adjoint. In the case of an adjoint matrix, candidates do not need to use the term ‘adjoint’, but they must use a different symbol to distinguish it from the original matrix and other related matrices. Candidates should also avoid ‘dividing’ one matrix by another.
- Make sure candidates understand the importance of using notation, terminology, brackets and symbols accurately. Candidates can miss out on marks for omitting brackets in questions, for example question 1 in paper 1 and questions 1, 2 and 6 in paper 2. Encourage candidates to use standard notation for vectors, particularly ‘n’ and ‘d’ respectively for a normal and direction vector, for example question 14 in paper 2. Remind candidates not to use the equals sign inappropriately, for example between a function and its derivative (question 1(b) in paper 1).
- Emphasise the importance of writing numbers, symbols and letters clearly and unambiguously. Encourage candidates to write the equals sign clearly and distinguish it from the inclusive inequality symbols. Markers can find candidates’ handwriting difficult to interpret, especially if a candidate has written over their original answer to make a correction. This is especially important because

markers work from a scanned image. Candidates should not write over their original answer if they make a mistake. They should score through the original answer and write their new answer legibly on a blank space in their answer booklet. Candidates should ensure their layout leaves the marker in no doubt about what they should mark and what they can ignore.

- Remind candidates that they need to be accurate at all times when writing integrals. This is especially important when the relevant variable is not obvious, for example integration by substitution (question 6(a) in paper 1) and volume of revolution (question 6(b) in paper 1).
- Encourage candidates to include a constant when determining an indefinite integral and to take care with notation if the constant is subsequently manipulated, for example question 13(b) in paper 2.
- Make sure candidates can apply prior knowledge, especially basic algebra and the laws of indices. For example, candidates should know that after multiplying out brackets to form a quadratic expression, they should simply use the original factors (and not attempt to find a different factorisation) if asked to solve the quadratic as in question 7 in paper 2.

You can find the detailed marking instructions for the 2026 course assessment on our website. Our website also contains the marking instructions from previous years.

The Understanding Standards website contains examples of candidate evidence with commentary.