Course report 2026

Higher Mathematics, SCQF level 6

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: 19,767

Number of resulted entries in 2026: 19,792

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

Course award	Number of candidates	Percentage	Cumulative percentage	Minimum mark required
A	7,433	37.6	37.6	83
B	4,025	20.3	57.9	70
C	3,097	15.6	73.5	58
D	2,271	11.5	85.0	45
No award	2,966	15.0	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

The question papers performed largely as intended and were accessible to most candidates.

Candidates had good opportunities to demonstrate their knowledge and understanding of the course.

Question paper 1 (non-calculator)

Questions 5(b), 12(b)(i), and 12(b)(ii) were slightly more demanding than intended at upper A. We took this into account when setting the grade boundaries.

Question paper 2

Questions 5(b), 5(c), 9, and 13(b) were slightly more demanding than intended. We took this into account when setting the grade boundaries.

How candidates performed

Most candidates attempted most questions. Many candidates set out their working well and gave solutions in a clear and concise manner.

Many candidates did not perform as well in questions that required deeper reasoning or precise mathematical communication.

A few candidates did not structure their solutions well. Markers sometimes found their handwriting difficult to read, and the layout of their working was often inconsistent or contained transcription errors.

Question paper 1 (non-calculator)

Most candidates made a good attempt at all questions. Many candidates missed out on marks due to numerical inaccuracies in their responses.

Question 1: completing the square

Most candidates attempted this question well. Many candidates processed the numeric term correctly.

Question 2: indefinite integral

Most candidates attempted this question well. A few candidates did not include a constant of integration at an appropriate point in their solution.

Question 3: tangent to a circle

Most candidates attempted this question well.

Question 4: compound angles

Most candidates attempted parts (a) and (b) of this question well.

A few candidates missed out on marks due to a lack of rigour in their supporting working, by making statements such as $169-25=\sqrt{144}=12$.

Most candidates did not apply the trigonometric identity $\tan a = \dfrac{\sin a}{\cos a}$ from National 5.

A few candidates did not process $\dfrac{56}{65} \div -\dfrac{33}{65}$ to find $\tan a$.

Question 5: composite functions

Most candidates gained full marks for part (a).

Most candidates did not apply knowledge of the range of a function in part (b).

Question 6: vector pathway

Many candidates attempted this question well and stated a vector pathway as a sum of directed line segments. Many candidates gained full marks.

Question 7: gradient of a tangent

Most candidates attempted this question well.

A few candidates did additional unnecessary working and found the equation of the tangent line.

Question 8: solving a logarithmic equation

Most candidates attempted this question well.

Some candidates did not convert from logarithmic form to exponential form correctly, and some candidates incorrectly attempted to ‘cancel out’ logs.

Question 9: collinearity and internal division points

Most candidates gained the first 2 marks for part (a). Only a few candidates communicated the condition for collinearity in a coherent way.

Some incorrect responses implied that the points were parallel, the lines were collinear, or did not identify that the line segments were parallel.

A few candidates made statements such as $\overrightarrow{DE} = \begin{pmatrix} 2 \\ -4 \\ 6 \end{pmatrix} \div 2 = \begin{pmatrix} 1 \\ -2 \\ 3 \end{pmatrix}$, which did not gain full marks.

A few candidates attempted to find a 'gradient of a vector'.

We intended part (b) to be one of the more demanding questions in the paper. A few candidates left their answer as a position vector or did not use point F as the internal division point in their calculation.

Question 10: definite integral

Many candidates attempted this question well.

A few candidates attempted to expand the integrand in an invalid way or started to work in degrees before completing the integration.

Evidence from responses suggests that a few candidates did not use the formulae list effectively when answering this question.

Some candidates did not calculate $\cos 0$ and $\cos\frac{\pi}{2}$ correctly without a calculator.

Question 11: solving a polynomial

Most candidates gained full marks for part (a)(i).

We intended part (a)(ii) to provide a greater level of challenge than many of the other questions in the paper. Only a few candidates identified that the discriminant should be used to determine that a quadratic factor is impossible (rather than difficult) to factorise.

Some candidates began looking for linear factors again in part (b) instead of building on their work from part (a).

Question 12: inverse function graphs

We included this question to provide appropriate challenge and effective differentiation. Only a few candidates gained full marks in all parts of the question.

Question paper 2

Most candidates made a good attempt at all questions.

Question 1: using the discriminant

Most candidates attempted this question well and applied the discriminant condition correctly to find the values of k.

Some candidates did not expand the bracket accurately, leading to an equation with no solutions.

Question 2: angle between vectors

Most candidates attempted this question well.

Many candidates successfully calculated the scalar product and the angle between vectors.

In part (a), a few candidates stated $\begin{pmatrix}3\\2\\6\end{pmatrix}\cdot\begin{pmatrix}-5\\-2\\4\end{pmatrix}=\begin{pmatrix}-15\\-4\\24\end{pmatrix}=5$, which did not gain a mark.

Question 3: inverse functions

Most candidates attempted this question well.

A few candidates stated multiple expressions for '$y=\ldots$' or '$g^{-1}(x)=\ldots$', which did not gain full marks.

Question 4: equation of a circle

Many candidates attempted this question well.

A few candidates attempted to find the equation of the tangent to the circle instead of the equation of the circle.

Question 5: recurrence relations

Many candidates did not clearly communicate why a limit did not exist in part (b) and only some candidates stated the final value of n in part (c).

Question 6: transformation of graphs

Many candidates attempted this question well and produced accurate sketches.

A few candidates did not use the axes provided, which affected the accuracy of their sketches.

Question 7: area under a curve

Most candidates attempted this question well.

Some candidates did not include 'dx' in their statement of the definite integral.

Many candidates who calculated $\int_{-1}^{2}\left(x^2 - x - 2\right)dx$ did not effectively communicate that the area would be positive. Some candidates made an error, which left them without a negative result. These responses did not gain the final mark.

A few candidates stated that $\int_{-1}^{2}\left(x^2 - x - 2\right)dx = \left(\frac{x^3}{3} + \frac{x^2}{2} + 2x\right)^2 - \left(\frac{x^3}{3} + \frac{x^2}{2} + 2x\right)^{-1}$ instead of, for example, $\left[\frac{x^3}{3} + \frac{x^2}{2} + 2x\right]_{-1}^{2}$.

Most candidates included additional lines of working instead of using their calculator efficiently.

Question 8: perpendicular bisectors and $m = \tan\theta$

Most candidates attempted part (a) well and found the midpoint and gradient.

We designed part (b) to be more demanding than part (a). Only some candidates used $m = \tan\theta$ to calculate the angles between the two lines and the positive direction of the x-axis appropriately.

Question 9: increasing functions

Many candidates attempted this question well.

Some candidates did not state the necessary condition ($f'(x) < 0$ or $12x^2 - 24x < 0$) for the function to be strictly decreasing.

Question 10: trigonometric equations

Many candidates attempted this question well.

Some candidates did not factorise the quadratic in $\cos x°$. Incorrect responses included attempting to solve a quadratic that was not in standard form or incorrectly identifying a ‘common factor’ of $\cos x°$.

A few candidates did not communicate that $\cos x° = -2$ had no solutions.

Question 11: logarithmic graphs

We intended this question to be one of the more demanding questions in the paper.

A few candidates incorrectly used the relationship $y = ax^b$ instead of the relationship stated in the question, $y = ab^x$. These candidates did not gain any marks.

Question 12: stationary points

Most candidates attempted part (a) of this question well. We designed part (b) to be more demanding than part (a).

A few candidates did not write consistent lines of working, for example:

$$\begin{aligned} & 3x^2 + 4x - 4 \\ &= x^2 + 4x - 12 \\ &= (x-2)(x+6) \\ &= (3x-2)(x+2) \end{aligned} \qquad\qquad \begin{aligned} & 3x^2 + 4x - 4 \\ &= 3x^2 - 2x + 6x - 4 \\ &= x(3x-2)2(3x-2) \\ &= (3x-2)(x+2) \end{aligned}$$

Inconsistencies prevented the responses that reached the correct factorised form from gaining full marks.

In part (b), some candidates obtained incorrect values when evaluating the function for the required values of x.

Few candidates checked the endpoints of the closed interval and only focused on the nature of stationary points.

Question 13: wave function

Most candidates attempted this question well.

Many candidates made processing errors during at least one stage of their working.

We designed part (b) to be more demanding than part (a). Only a few candidates applied the period of the graph accurately to gain the final mark.

Question 14: exponential equations

Many candidates attempted this question well.

A few candidates gave 800 as the answer to part (a) or evaluated $800e^{-0.1240}+25$ instead of $800e^{-0.124\times0}+25$.

Many candidates wrote inconsistent lines of working in part (b) and made errors when converting the equation from exponential form to logarithmic form.

Question 15: trigonometric identities

We designed this question to be demanding.

Many candidates did not expand the brackets accurately.

Some candidates incorrectly simplified $3\sin\theta\times3\cos\theta$ to $3\sin\theta\cos\theta$, $6\sin\theta\cos\theta$, $9\sin\theta9\cos\theta$, or $9\sin\ \cos\theta$.

A few candidates incorrectly simplified $3\sin\theta\times\sin\theta$ to $3\sin\theta^2$.

Only a few candidates applied the double angle formula from the formulae list and the National 5 trigonometric identity correctly.

Preparing candidates for assessment

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

- Maintain and practise basic numerical skills regularly, particularly fractions and negative numbers.
- Give candidates opportunities to attempt unfamiliar and challenging questions under exam conditions.
- Give candidates opportunities to consolidate lower-level skills such as factorising, expanding brackets, and trigonometric identities.
- Emphasise the importance of the intervening steps when teaching algorithms that arrive at the correct final answer. Candidates should understand that, when factorising a quadratic expression, statements that are inconsistent from line to line do not gain full marks.
- Encourage candidates to carefully check their answers against the requirements of the question.
- Encourage candidates to simplify final answers, where possible.
- Encourage candidates to write as clearly as possible, so that markers can read their responses correctly and understand their mathematical reasoning.
- Encourage candidates to lay out their working in a structured and logical manner. Each line of working should follow logically from the line above. This is particularly important when differentiating or integrating, and when working with logarithms and exponentials.
- Encourage candidates to use notation and symbols accurately throughout the course, for example integral and vector notation.
- Encourage candidates to use brackets appropriately throughout the course, particularly when calculating definite integrals, working with logarithms or trigonometric functions, and when substituting negative numbers into formulae.
- Encourage candidates to use a calculator, and efficiently record their working, when preparing for question paper 2.
- Encourage candidates to score out working that does not form part of their final response, including working in the ‘additional space for answers’ section at the back of the answer booklet.

- Consider how best to practise using radian measure and the exact values of trigonometric ratios.
- Consider how best to practise determining vector pathways in three dimensions.
- Consider how best to practise sketching graphs of functions on provided axes.

You can find the detailed marking instructions for the 2026 course assessment on our website. These illustrate the requirements for questions on, for example, use of the discriminant, increasing and decreasing functions, sketching graphs, finding the inverse, working with collinearity, using an integral to calculate an area, using the wave function, and confirming maximum or minimum values on closed intervals. Our website also contains the marking instructions from previous years.

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