

## Lifeskills Mathematics, Mathematics, Mathematics of Mechanics and Statistics

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This update contains information on any recent updates to documents for Lifeskills Mathematics, Mathematics, Mathematics of Mechanics and Statistics along with further information and guidance.

I hope you find this information helpful. If you have any questions please do not hesitate to contact me.

**Martin Brown**  
Qualifications Manager



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## The Qualifications Team

**Martin Brown**  
Qualifications Manager

**Hilary Cuthbertson**  
Qualifications Officer

**Lynn McKinlay**  
Qualifications Officer

**Michael Atkinson**  
Subject Implementation Manager

## Changes to documents in August and September

The notification of changes spreadsheet has been updated to reflect the latest changes to the Lifeskills Mathematics, Mathematics, Mathematics of Mechanics and Statistics unit assessment support packs. You can view this spreadsheet at [www.sqa.org.uk/nqsubjectchanges](http://www.sqa.org.uk/nqsubjectchanges). The unit assessment support packs were changed for one or more of the following reasons:

- as a result of actions arising from the Mathematics Review Report
- to standardise the wording in judging evidence tables across the levels
- to clarify questions and marking guidance
- to replace references to points with marks
- to remove duplication of sub-skills

### National 5 Mathematics

For candidates who incorrectly use Rad or Grad with or without working, full marks cannot be achieved. The unit assessment support packs have been updated to reflect this.

When determining the nature of roots for a quadratic, the expected candidate responses are:

- For  $b^2 - 4ac > 0$ : 'two real and distinct roots'.
- For  $b^2 - 4ac = 0$ : 'one repeated real root' or 'two equal real roots'.
- For  $b^2 - 4ac < 0$ : 'no real roots'.

### Higher Mathematics

Straight line — candidates will be expected to remove brackets and collect any constant terms as part of their final answer, eg:

$$y - 4 = 3(x - 5) \text{ should be simplified to}$$
$$y = 3x - 11 \text{ or equivalent.}$$

The unit assessment support packs have been updated to reflect this.

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## SCQF level 6 Statistics Award

A second unit-by-unit assessment support pack for the SCQF level 6 Statistics Award has now been published on our secure website.

### Advanced Higher Statistics

The use of  $p$ -value approaches for *Hypothesis Testing* using, for example, a graphical calculator has been exemplified in the unit assessment support packs and the course assessment marking instructions.

The Advanced Higher Statistics Question Paper Brief has been updated to remove a reference to short case studies. The updated Question Paper Brief can be found on the [Advanced Higher Statistics subject page](#) under the 'Specimen and Exemplar Question Papers and Marking Instructions' section.

## Further information and guidance

### Changes to National Courses

In September 2016, the Deputy First Minister announced that unit assessments will be removed from National 5, Higher and Advanced Higher courses. These changes will be implemented over a three-year period and we have started to review how each course is assessed.

[Find out more about the changes to National Courses.](#)

### What's next for Subject Review Reports?

Following the Scottish Government decision to make changes to unit assessment in National Courses, we are reviewing current activities with regard to the Subject Review Reports and associated guidance notes.

Completed review report actions for 2016–17 will remain. Actions for 2017–18 onwards may be cancelled or rescheduled in light of the work associated with the revisions to National Courses, especially those relating to unit assessments.

Further information and subject-specific updates will continue to be communicated via Centre News and the subject web pages.

### Guidance notes

- [Lifeskills Mathematics: understanding the next steps for session 2016–17](#)
- [Mathematics: understanding the next steps for session 2016–17](#)
- [Mathematics of Mechanics: understanding the next steps for session 2016–17](#)
- [Statistics: understanding the next steps for session 2016–17](#)

These documents outline the specific actions to take or points to be aware of when carrying out assessments with your candidates in session 2016–17.

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## Removal of exemplar question papers

Exemplar question papers were created as a revision resource for learners during the implementation of the new Higher and Advanced Higher National Qualifications. As we now have two years' worth of past papers for new Higher as well as a specimen question paper for each subject with an exam, the exemplar question papers will be removed from our website in the week commencing 24 October 2016. Associated guidance documents and guidance on the use of past paper questions documents will also be removed at this time.

The Advanced Higher exemplar question papers and associated guidance will remain for session 2016–17 and will be removed from the website in July 2017.

## Course Reports

We strongly recommend that you read the annual Course Reports for the subject(s) and levels you are teaching. These reports are produced following the annual diet of exams and are published by the end of October. The reports provide informed and valuable commentary on the assessment for each component in the course, and include a summary of:

- candidate performance in the course assessment
- areas in which candidates performed well
- areas which candidates found demanding

The reports also contain advice on preparing future candidates, and statistical data relating to grade boundaries. Course Reports will be available from the relevant subject pages of our website at [www.sqa.org.uk/nqsubjects](http://www.sqa.org.uk/nqsubjects)

## Verification Key Messages

Key messages from rounds 1 and 2 of verification in session 2015–16 are available on the relevant subject pages of our website at [www.sqa.org.uk/nqsubjects](http://www.sqa.org.uk/nqsubjects). You can access them from the 'Verification and Course Reports' tab.

## Looking ahead to session 2016–17

### National Qualification Support Team

Ahead of the autumn meeting of the Lifeskills Mathematics and Mathematics National Qualification Support Team (NQST) we would like to add to the existing membership.

NQSTs are subject-specific stakeholder consultation groups that feed back to SQA on the internal and external assessment of National Qualifications.

These groups communicate via secure online discussion forums as well as an annual face-to-face meeting.

For more information and to express an interest in joining the team, visit [www.sqa.org.uk/nqst](http://www.sqa.org.uk/nqst)

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## Marker recruitment opportunities for 2017

We are now accepting marker applications from teaching professionals to contribute to the 2017 exam diet. If you are interested in joining us as a marker, please visit the [appointee opportunities](#) section of our website where you will find a marker advert for all subjects and levels, with details of the role.

Becoming a marker helps to increase your awareness of the demands of course assessment and provides excellent professional and personal development.

Please check [www.sqa.org.uk/appointees](http://www.sqa.org.uk/appointees) regularly for other appointee opportunities which may be of interest to you.

## Understanding Standards programme

Our Understanding Standards programme will continue in the coming session and will include nominee training events, subject-specific course events and the publication of further Understanding Standards materials.

## Understanding Standards course events 2016–17

We are running a programme of subject-specific Understanding Standards events from October 2016 until January 2017. The majority of these events will focus on the standards required for course assessment at Advanced Higher.

For more information and to book your place, visit [www.sqa.org.uk/ngevents](http://www.sqa.org.uk/ngevents). Please note that for each subject there is a maximum of one place per centre.

## Understanding Standards materials

Understanding Standards materials contain real examples of candidate evidence from course and unit assessments, along with a commentary that explains why the evidence has or has not met the assessment standards. These materials are a really useful resource for helping you to strengthen your understanding of the standards required for assessment.

We will continue to publish new Understanding Standards materials throughout the coming session and you can access them from the following locations:

<b>SQA Understanding Standards website</b> ( <a href="http://www.understandingstandards.org.uk">www.understandingstandards.org.uk</a> )	<b>SQA Secure website</b> ( <a href="https://secure.sqa.org.uk">https://secure.sqa.org.uk</a> )
Candidate evidence and commentaries for <b>externally assessed</b> components of course assessment (including question papers).	Candidate evidence and commentaries for unit assessment and <b>internally assessed</b> components of course assessment.

You can arrange access to our secure website through your SQA co-ordinator. Any materials downloaded from our secure website must be stored securely and treated as confidential.

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## Extra support to help you deliver your courses

### Continuing professional development (CPD)

We will continue to offer subject-specific CPD support at a local authority, independent school and college level, subject to request. This involves an experienced SQA appointee providing advice and guidance on any areas of concern that are not already addressed by the Understanding Standards programme.

Please note that CPD requests should be made by the appropriate representative from the local authority, independent school or college. For each request we will agree with the representative the content to be covered and the most appropriate way to deliver the support, eg in person, by webinar or by video conference/teleconference.

CPD requests can be made at [www.sqa.org.uk/cpdfom](http://www.sqa.org.uk/cpdfom)

### Subject Implementation Manager

Michael Atkinson has been working with the maths team for just over a year, supporting centres with the implementation of the new qualifications. He has eight years' experience as a principal teacher in Midlothian and is available to discuss any aspect of the qualifications and the processes behind them. As well as supporting centres, Michael works with the verification and examining teams to help maintain consistency and quality in all aspects of the qualifications.

## Stay informed

### Subscribe to Centre News

Our weekly Centre News newsletter contains the latest news and updates for centres delivering SQA qualifications. It also includes subject-specific news and a regular reminder of key dates during the session.

To subscribe, visit <http://mailer.sqa.org.uk>

### Visit your subject pages

Make sure you regularly visit your subject pages, where you can access documents and assessment support materials for your courses, Verification Key Messages and information on coursework. You will also find the latest news updates for your courses in the 'Updates and announcements' section.

Visit [www.sqa.org.uk/nqsubjects](http://www.sqa.org.uk/nqsubjects)

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## Sign up to MyAlerts

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YouTube: [SQAonline](https://www.youtube.com/SQAonline)

### Contact us

For centre enquiries, please contact our Customer Support Team:

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