

RESPONSE TO

**Developing new GCSE, A level and AS qualifications
for first teaching in 2016**

Your details

School or college type

- Comprehensive or non-selective academy
 - State selective or selective academy
 - Independent
 - Special school
 - Further education college
 - Sixth form college
 - Other (please state below)
-

Type of representative group or interest group

- Group of awarding organisations
 - Union
 - Employer or business representative group
 - Subject association or learned society
 - Equality organisation or group
 - School, college or teacher representative group
 - Other (please state below)
-

Nation*

- England
- Wales
- Northern Ireland
- Scotland
- Other EU country: _____

() Non-EU country: _____(E)-2(U co)-(u)-(n)(try)11(:)-31 252_

This response relates to Mathematics and Further Mathematics A-levels

A level and AS qualifications in Mathematics

Before answering the specific questions we will make some general points.

Most criticism of current arrangements for A-level Mathematics relate to the ineffective implementation of criteria, rather than of the criteria themselves. The critical issue is that awarding bodies carry out assessments which actually reflect the assessment objectives and give valid and reliable assessment of mathematical thinking. It is therefore essential that Ofqual effectively regulates these qualifications. To do this we believe that Ofqual must have a team of Mathematics experts, including some with experience of teaching Mathematics in universities as well as some who teach Mathematics in schools and colleges. The selection of this team should be done by well-publicised open advertisement and the composition of this team should be publically known, and any reports it issues promptly published. The current arrangement, where Ofqual simply has a list of experts including some with mathematics degrees, does not seem to be sufficient, and there is no public record of reports made by these experts. There are some good individuals on the list, but Ofqual working methods do not seem to have allowed them to effectively regulate these qualifications. The English system is peculiarly complicated with its multiple awarding bodies; while this system persists the demands on the regulator, and the costs incurred, are high.

We continue to have serious concerns about the rapid move to a linear model and the decoupling of AS level from A level; these concerns have been expressed by many, for instance by ALCAB. We believe that the effect of removing January modules should be investigated before any further changes are made; such changes take a little while to bed in, so this investigation would need to look at the first two or three cohorts affected.

Consultation Question 33: To what extent do you agree or disagree that AS qualifications in mathematics should be assessed entirely by exam?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please give reasons for your answer.

Longer examinations, of at least 2.5 hours duration, would help increase the validity of the assessment. Even without linearisation this could be achieved by combining C1 and C2 into a single module.

Consultation Question 34: To what extent do you agree or disagree that A level mathematics should be assessed entirely by exam?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please give reasons for your answer.

Longer examinations, of at least 2.5 hours duration, would help increase the validity of the assessment. Even without linearisation this could be achieved by combining C1 and C2 into a single module, and similarly C3 and C4.

Consultation Question 35: To what extent do you agree or disagree that the proposed assessment objectives are appropriate for A level and AS qualifications in mathematics?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please give reasons for your answer.

As already remarked, the critical issue is that awarding bodies carry out assessments which actually reflect these assessment objectives. To ensure that this occurs is a key duty of the regulator.

Consultation Question 36: To what extent do you agree or disagree that the proposed weightings of the assessment objectives are appropriate for AS qualifications in mathematics?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please give reasons for your answer.

The weighting of AO1 is too high and that of AO3 too low. They should be equally weighted, with lower tolerance, 30-35% for each.

Consultation Question 37: To what extent do you agree or disagree that the proposed weightings of the assessment objectives are appropriate for A level mathematics?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please give reasons for your answer.

The weighting of AO1 is too high and that of AO3 too low. They should be equally weighted, with lower tolerance, 30-35% for each.

Consultation Question 38: Do you have any further comments relating to the assessment of this subject?

It is important that appropriate assessment is made over the full range of grades. Particular arrangements, including an extra paper, should be considered for the award of the A* grade in Mathematics; there should be a pilot of such a paper as soon as possible.

A level and AS qualifications in further mathematics

Consultation Question 39: To what extent do you agree or disagree that AS qualifications in further mathematics should be assessed entirely by exam?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please give reasons for your answer.

Papers should be at least 2.5 hours long

Consultation Question 40: To what extent do you agree or disagree that A level further mathematics should be assessed entirely by exam?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please give reasons for your answer.

Papers should be at least 2.5 hours long

Consultation Question 41: To what extent do you agree or disagree that the proposed assessment objectives are appropriate for A level and AS qualifications in further mathematics?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree

Strongly disagree

Please give reasons for your answer.

As already remarked, the critical issue is that awarding bodies carry out assessments which actually reflect these assessment objectives. To ensure that this occurs is a key duty of the regulator.

Consultation Question 42: To what extent do you agree or disagree that the proposed weightings of the assessment objectives are appropriate for AS qualifications in further mathematics?

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

Please give reasons for your answer.

The weighting of AO1 is too high and that of AO3 too low, and the tolerance too high. They should be weighted as follows: AO1 25-30% AO2 30-35% AO3 35-40%.

Consultation Question 43: To what extent do you agree or disagree that the proposed weightings of the assessment objectives are appropriate for A level further mathematics?

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

Please give reasons for your answer.

The weighting of AO1 is too high and that of AO3 too low, and the tolerance too high. They should be weighted as follows: AO1 25-30% AO2 30-35% AO3 35-40%.

Consultation Question 44: Do you have any further comments relating to the assessment of this subject?

It is important that appropriate assessment is made over the full range of grades. Particular arrangements, including an extra paper, should be considered for the award of the A* grade in Mathematics; there should be a pilot of such a paper as soon as possible.