

Response to the QCA consultation questionnaire:
Level 3 Mathematics Qualifications Overarching Issues

1a) *In what capacity are you responding to this questionnaire?*

Response

Other—Learned Society for mathematics

1b) *Are you responding to this consultation as an individual or on behalf of a named group?*

Response

Named group: London Mathematical Society

2a) *A level mathematics*

Q5a) *Do you agree that this proposed suite of qualifications contains qualifications that will meet the needs of all learners who wish to select mathematics for the extended core of their A*

level. Certainly, any change should only be contemplated if it delivers improved numbers of competent and well-trained students.

Q8) *Given that the revised A levels in mathematics and further mathematics will have more ‘stretch and challenge’ questions in the A2 assessments, there will no longer be a need for an AEA-style examination in mathematics.*

Response

Disagree

Reasons

There was very little support for A* which was felt to lead to a mindset of just trying to polish answers than really challenging the students.

There was almost universal agreement between the London Mathematical Society (LMS), Institute of Mathematics and its Applications (IMA) and Advisory Committee on Mathematics Education (ACME) that AEA (or equally rigorous qualification) is better than the A* grade for assessing. Also it is felt that further mathematics alone is not sufficient, or appropriate, for someone who is talented but does not wish to take two mathematics A levels.

We would hope and expect that further mathematics could also stretch and challenge students, and we must ensure that the provision of this remains accessible for the greatest number of learners.

We would also hope and expect to see stretch and challenge for students arising through other mechanisms, such as the use of Internet resources (eg. *+plus magazine*), creative use of the United Kingdom Mathematics Trust (UKMT) materials, mathematics Summer Camps, and enrichment activities from schools and colleges working with HE.

One further way to ensure stretch and challenge is to have good textbooks. The community is concerned that many of the A level texts are not trying to challenge or even enthuse students; this area is one in which HE could get involved and help produce better textbooks.