



RECOGNISING ACHIEVEMENT

## NOTICE TO CENTRES

FAO: Heads of Mathematics; Mathematics departments; Examinations Officers

Date: March 2008

Subject: GCE Mathematics and Further Mathematics (7890/7892, 7895/7896)

### GCE MATHEMATICS AND FURTHER MATHEMATICS CERTIFICATION

From the January 2008 Examination session, there are important changes to the certification rules for GCE Mathematics and Further Mathematics.

- 1 In previous sessions, GCE Mathematics and Further Mathematics have been aggregated using 'least-best' i.e. the candidate was awarded the highest possible grade in their GCE Mathematics using the lowest possible number of uniform marks. The intention of this was to allow the greatest number of uniform marks to be available to grade Further Mathematics.

From January 2008 QCA have decided that this will no longer be the case. Candidates certificating for AS and/or GCE Mathematics will be awarded the highest grade with the highest uniform mark. For candidates entering for Further Mathematics, both Mathematics and Further Mathematics will be initially graded using 'least-best' to obtain the best pair of grades available. Allowable combinations of units will then be considered, in order to give the candidate the highest uniform mark possible for the GCE Mathematics that allows this pre-determined pair of grades. See page 2 for an example.

As before, the maximisation process will award a grade combination of AU above, say, BE. Where a candidate's grade combination includes a U grade a request from centres to change to an aggregation will be granted. No other requests to change grading combinations will be accepted. e.g. A candidate who has been awarded a grade combination of AD cannot request a grading change that would result in BC.

- 2 In common with other subjects, candidates are no longer permitted to decline AS and GCE grades. Once a grade has been issued for a certification title, the units used in that certification are locked into that qualification. Candidates wishing to improve their grades by retaking units, or who have aggregated GCE Mathematics or AS Further Mathematics in a previous session should re-enter the certification codes in order to ensure that all units are unlocked and so available for use. For example, a candidate who has certificated AS Mathematics and AS Further Mathematics at the end of Year 12, and who is certificating for GCE Mathematics at the end of Year 13, should put in certification entries for AS Mathematics and AS Further Mathematics in addition to the GCE Mathematics.

## Grading Example

A candidate is entered for Mathematics and Further Mathematics with the following units and uniform marks.

Unit	Uniform marks	Unit	Uniform marks
C1	90	M1	80
C2	90	M2	100
C3	90	M3	90
C4	80	S1	70
FP1	100	S2	70
FP2	80	D1	60

Grading this candidate using least-best gives the following unit combinations:

Mathematics		Further Mathematics	
Unit	Uniform marks	Unit	Uniform marks
C1	90	FP1	100
C2	90	FP2	80
C3	90	M1	80
C4	80	M2	100
S1	70	M3	90
D1	60	S2	70
Total	480 (Grade A)	Total	520 (Grade A)

Under the new system, having fixed the best pair of grades as two As, the mark for the Mathematics would be increased by combining the units in a more advantageous manner. The table below shows the allowable combination of units.

Option	Applied units used for Maths	Total uniform marks for Maths	Applied units used for Further Maths	Total uniform marks for Further Maths
1	M1, S1	500	M2, M3, S2, D1	500
2	M1, D1	490	M2, M3, S1, S2	510
3	S1, D1	480	M1, M2, M3, S2	520
4	M1, M2	530	M3, S1, S2, D1	470
5	S1, S2	490	M1, M2, M3, D1	510

Option 4 gives the highest uniform mark for Mathematics. However, this would only give a grade B in the Further Mathematics, and so is discarded. Option 1 is the next highest uniform mark for Mathematics and gives an A in Further Mathematics, and so this is the combination of units that would be used.

Any enquiry about this notice should be referred to the OCR Customer Contact Centre, (01223 553998), OCR, 1 Hills Road, Cambridge, CB1 2EU.