Principal Assessor Report 2004

Assessment Panel:	**MATHEMATICS**

Qualification area

Subject(s) and Level(s) Included in this report	**AH MATHEMATICS**

Statistical information: update

Number of entries in 2003	2519

Number of entries in 2004 (pre-Appeal)	2416

General comments re entry numbers

It is possible that the new style of course structure and question paper may have reduced the uptake.

Statistical Information: Performance of candidates

Distribution of awards

Please see next page.

Comments on any significant changes in percentages or distribution of awards

Responses appeared to be better and this is reflected in the increased rate of success. It is likely that centres are getting used to managing AH. The mean mark was 8% higher than in 2003.

Grade boundaries at C, B and A for each subject area included in the report

Distribution of awards	%	Cum %	Number of candidates	Lowest mark
A	23.2	23.2	560	75
B	21.1	44.3	510	62
C	20.9	65.2	506	50
D	8.5	73.7	206	44
No award	26.3	100.0	634	0
			2416	

General commentary on passmarks and grade boundaries

- While SQA aims to set examinations and create mark schemes which will allow a competent candidate to score a minimum 50% of the available marks (notional passmark) and a very well-prepared, very competent candidate to score at least 70%, it is almost impossible to get the standard absolutely on target every year, in every subject and level
- Each year we therefore hold a passmark meeting for each subject at each level where we bring together all the information available (statistical and judgmental). The Principal Assessor and SQA Qualifications Manager meet with the relevant SQA Business Manager and Statistician to discuss the evidence and make decisions. The meetings are chaired by members of the senior management team at SQA
- We adjust the passmark downwards if there is evidence that we have set a slightly more demanding exam than usual, allowing the pass rate to be unaffected by this circumstance
- We adjust the passmark upwards if there is evidence that we have set a slightly less demanding exam than usual, allowing the pass rate to be unaffected by this circumstance
- Where the standard appears to be very similar to previous years, we maintain similar grade boundaries
- An exam paper at a particular level in a subject in one year tends to have a marginally different set of grade boundaries from exam papers in that subject at that level in other years. This is because the particular questions are different. This is also the case for exams set in centres. And just because SQA has altered a boundary in a particular year in say Higher Chemistry does not mean that centres should necessarily alter boundaries in their prelim exam in Higher Chemistry. The two are not that closely related as they do not contain identical questions
- Our main aim is to be fair to candidates across all subjects and all levels and maintain standards across the years, even as syllabuses evolve and change

Comments on grade boundaries for each subject area

The grade boundaries for A, B and C reflect distinct levels of attainment.
Mathematics is a subject which allows the full range of marks to be achieved.

Comments on candidate performance

General comments

As usual, there was a wide spread of marks, from 0 to 100. The increase in the mean mark could have been due to a combination of several possibilities: centres becoming more proficient at delivering the course; with the lack of any options, centres may have been able to be more focussed; having all the short questions before any long questions might have assisted candidates; or, perhaps the candidates were better.

Areas of external assessment in which candidates performed well

As is to be expected, there were better performances in the early part of the paper and also in the early parts of each of the long questions.

Areas of external assessment in which candidates had difficulty

In general, topics which were assessed for the first time, or have a considerable lapse, produced poorer results.
Specific items which were done badly included:
The proof by induction (an unfamiliar context);
Handling the limits in the integration using partial fractions (lack of modulus signs);
A significant number claimed (in the curve sketching question) that because there were no stationary values there could not be any points of inflection!

Recommendations

Feedback to centres

The new format for the course and assessment seems to have worked well. Some candidates produced good quality, well-written solutions but others were much more variable. Mathematical presentation needs to be properly emphasised.
Centres should study the solutions which are available on the web, but note that these solutions are intended to be illustrative rather than prescriptive.