AQA

General Certificate of Education

Mathematics 6360

MD01   Decision 1

Report on the Examination

2010 Examination – January series

General

In the context of the paper, most candidates were again adequately prepared for the exam and there were very few weak candidates. Scripts were very well presented on the whole, with very few scripts unacceptably untidily written and presented. The comparative paucity of solutions offered to question 8 was because of the nature of the question and not because of any problems with the time allocated for the paper.

Question 1

Apart from the rare slip, part (a) was almost always correct.

The vast majority of candidates scored full marks in part (b). It is a very small minority who now try to use diagrams only. It was also noticeable that the diagram solutions that remain are becoming steadily less adequate. There is still a problem with unorthodox notation of paths from some candidates, and several still appear to believe that a diagram of the final matching is equivalent to a 'list'.

Question 2

In part (a), most candidates scored at least 4 marks. The most common errors were to not have the last pass, or to have 7 or more passes. It was sometimes difficult to distinguish between a sixth pass and a statement of the final ordering.

Part (b) was also usually correct, except from those candidates who missed the implication of the word 'each' in the question.

Question 3

This style of question, as before, differentiated between types of candidates, as some sub-GCSE level graph drawing appeared. Generally, though, candidates were more careful with their drawing, and there were far fewer instances where inaccuracies could justifiably be penalised.

Part (b) was poorly answered, right across the ability range. Many simply offered no solution at all. For those who did offer answers, it appears that the phrase 'use your diagram' caused candidates to concentrate too much on sliding rulers across their graph and on reading the coordinates of their points that they completely failed to notice that the points that they were homing in on did in fact have integral co-ordinates. There was also a widespread failure to give both coordinates and maximum values or to indicate which went with which.

Question 4

Most candidates scored full marks or, at worst, dropped 1 mark: $BD + CE$ in part (b).

Question 5

This was another high scoring question with only the weakest failing to score full marks.

Question 6

Apart from occasional poor arithmetic and how exactly to present the result of the 'print' statement, this caused very few problems.

Question 7

Part (a) differentiated quite well. Almost all candidates could earn at least two marks: the first and the last. Thereafter, the number of numerical alternatives started to sift the weaker candidates and finally the algebraic expressions revealed the better candidates. It is clear, though, that a significant minority of candidates do not regard it as mandatory to 'box' the final number at a vertex, regarding the absence of 'crossing-out' to be sufficient.

Part (b) also differentiated well. The weakest candidates offered nothing; then again many earned M1 only, for incorrect equations.

Question 8

Full marks on this question were incredibly rare, mainly because almost all of those earning the B marks and some of the M marks had no idea of what 'simplify' means in context.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the **Results statistics** page of the AQA Website.