AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Secondary Education

Mathematics (Modular) 4302
Specification B

Module 1 Foundation Tier   43001F

Report on the Examination

2007 examination – June series

General

This paper appeared to be accessible to its target group and all questions were attempted by the majority of candidates. The full range of marks was seen and there were only a few very low scores. Some incorrect probability notation was seen, including ratio and the use of words.

Topics that were well done included:
- pictogram
- range and mode
- two-way table and simple probability
- drawing a scatter diagram.

Topics which candidates found difficult included:
- pie chart interpretation involving calculation
- mean of grouped data.

Question 1

This first question was answered well with many candidates scoring full marks.

Question 2

Many candidates had fully correct answers, although there was some confusion between mean, median and mode. The answer 354 was often seen in part (a). Other candidates failed to subtract for the range and gave $76 - 16$ as their answer.

Question 3

Part (a) was generally well done. There were many correct answers in part (b), but also answers of 2 were seen. Some candidates used incorrect probability notation, in particular '2 out of 18'.

Question 4

Some candidates coped well with this question, which involved two digits in the stem. Others appeared to be unfamiliar with stem-and-leaf diagrams. Candidates often failed to order the leaves, and weaker candidates could not deal with the novelty of the question. Those candidates who were successful in drawing the diagram often gave the correct median in part (b). A large number of candidates did not use their stem-and-leaf diagram and proceeded to order all of the original numbers to identify the median correctly.

Question 5

This question caused the most difficulty, with a mark of zero often awarded. Very few fully correct answers were seen. Those who found the midpoints often went on to add them up and divide by 5. Even those who added correct products often divided by 5 or 125.

Question 6

This question was well answered although a few candidates used non-linear scales in part (b). A common wrong answer for part (c) was 4, obtained by counting the different items.

Question 7

Parts (a)(i) and (ii) were well done but part (iii) caused confusion. Many approaches were seen in part (b), for example, using angles, fractions or percentages, with differing success. Many candidates gained at least one mark in this part, and stronger candidates found the question straightforward.

Question 8

Often, either both parts were correct or both parts were incorrect. Many integer answers were seen, as were $\frac{6}{9}$ and $\frac{11}{4}$. In part (b) some candidates did not understand the significance of 'or' and gave separate answers of $\frac{6}{15}$ and $\frac{5}{15}$. A surprising number of candidates gave $\frac{9}{15}$ where they had worked out the probability of a chew or a chocolate. Some incorrect probability notation was seen, including ratio.

Question 9

Part (a) was well done. In part (b) the word 'positive' was seen frequently without the word 'correlation'. Those who described the relationship in words were generally more successful. A number of candidates mentioned the anomaly at 900, hence losing the idea of a general relationship.

Question 10

Many candidates scored full marks. Others simply repeated the original question or offered questions with a different meaning, for example, 'How often do you eat fast food?'

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the
http://www.aqa.org.uk/over/stat.html page of the AQA Website.