Functional Skills Certificate
MATHEMATICS

4367 Level 1
Report on the Examination

4367
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Level 1

General

The majority of the paper appeared to be accessible to its target group, although question 2d was not done well by many. There were some arithmetical errors seen, which suggests that either not all were equipped with a calculator or that some students chose not to use their calculator. There was quite a large number of non-attempts on the final two question parts of the paper, possibly due to lack of time for some students.

Quite a number of miscopies were seen; for example, 6's written in such a way as to be read as 0's later in the work. For a small number of students, the space provided was not sufficient. These students should use aa additional sheet of paper rather than writing outside the scanned space, where their response may not be seen.

Topics that were well done included:

- completing a rota
- multiplying up for a recipe
- finding a train time from a timetable
- following the steps for a formula.

Topics which candidates found difficult included:

- working out number of sweets that would fit in a box
- working out percentage profit
- calculating with multi-step costs.

Task 1 Athletics

(a)   Part (a) was answered well by the majority of students. Occasionally, one girl was put into three teams or Amy was put in teams 1 and 2 instead of teams 2 and 3. A very small number of students only completed the first person in each team and an even smaller number gave Joe as part of the teams.

(b)   Many students coped well with part (b). The most common error was 5.19 + 0.2 = 5.21, leading to a points value of 617 from the table. A small number of students added the new values to 4912, or just added the two new values together. A minority completed the check by checking the total of 4912, or by checking that Kelly's best times were the 'top' values in the table in the data sheet.

(c)   In part (c), communication was a problem for many, usually with costs given but no explanation as to how many of each type of bus were to be used. The majority found a combination which would allow between 100 and 120 passengers, but not usually the cheapest combination. A small number stopped after finding the cost of just one combination. A very small number of students failed to recognise the difference between the cost and the number of passengers, and added pounds to people or multiplied people and offered it as a cost.

Task 2 Sweets

(a)   Very few students failed to circle the correct value in part (a).

(b)   Part (b) was also answered well, although a small number of students multiplied 240 by £3.25, ignoring the 48 altogether. The check was much more successful than usual, with many students completing a correct reverse calculation.

(c)   In part (c), many students did not attempt the question or made a false start and crossed out all of their work. A large number of students attempted to use perimeter or half the perimeter. As usual, a significant minority used a division of areas, which did not work here. Some drew diagrams, often including the 'extra' as space for sweets rather than space which could not be used. The best attempts used division and rounded down, though quite a few of these then added to gain an answer of 7.

(d)   In part (d) the vast majority knew that the two costs given in the table were to be added. A minority of these then went on to find the profit. The majority though did not work out 50% extra on top of the costs. Many used selling price instead of cost price in their calculations. These students found 50% of £4.25 and compared it with £2.76

Task 3 Steam Trains

(a)   The majority of students successfully read the last train time. Some changed this to 5.40, which was accepted.

(b)   Almost all of the students could access some marks in part (b) for planning the day out. The more successful students listed all start and finish times for trains, walk and picnic, including where they got on and off the train. Students should be aware that at least one mark in this type of question is given for clear communication; in this case, a clearly laid out plan with all necessary details given. A small number of students used the wrong walk length for their chosen station. A very small number of students misread the timetable running from Pickering on the first timetable to some station on the second timetable.

(c)   Part (c) was answered well, although some students were penalised for incorrect money notation or the lack of a £ sign. The check was again done well by many students.

(d)   The more successful students coped well with part (d), although a few did not give a conclusion. Less successful students worked out the cost of two adults and three children and said "Yes, the family ticket is cheaper".

Task 4

(a)   Some excellent responses were seen for part (a). However, quite a large number of students worked out the cost of two sides and did not double to gain the cost of the whole perimeter. A minority thought that area multiplied by £2.80 would give the cost. A small number of students divided by the cost per metre rather than multiplying.

(b)   Again, some excellent responses were seen to part (b), with the majority being able to follow the steps on the data sheet.

(c)   In part (c) a wide variety of approaches was seen, the most common of which led to either 1200 sheep or 8.2 hours. Having gained a correct value or pair of values which could be used, quite a large number of students stated he was wrong as it takes more than 8 hours.

(d)   Part (d) was not well answered by quite a large number of students. It is important for students to appreciate that when a question asks them to show something they must show full working out. In this question the majority of students did not do this. A small number of students confused the mean with the median.

(e)   The final part of task 4 was not well answered by the majority of students, and there were many non-attempts. Some students incorrectly worked with 1200 or other values from previous parts of the question. As in a previous question, some divided by £1.90 to find a total cost. Others added a number of sheep to an amount of money. The best attempts were from students who considered the income from selling the wool separately from the cost of paying the shearers.

Mark Ranges and Award of Grades

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

Converting Marks into UMS marks

Convert raw marks into Uniform Mark Scale (UMS) marks by using the link below.

UMS conversion calculator