AQA

Functional Skills Certificate
MATHEMATICS
4367 Level 1
Report on the Examination

4367
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General

The majority of the paper appeared to be accessible to its target group, but parts of context 4 seemed to be very challenging to many students. Working was usually seen, but not always in a well-structured way. Some students did not give conclusions where they were needed.

Topics that were well done included:

- reading a bar chart
- straightforward division of grams
- making a rota

Topics which students found difficult included:

- following rules from the data sheet to calculate units of electricity
- calculating $\frac{1}{5}$ of a quantity
- checking their work

Task 1   Tenpin bowling

1 (a)   The majority of students worked out that the family ticket was £2.17 cheaper. A small proportion of these made the wrong conclusion by failing to compare this with £3 cheaper. Some students just worked out the cost of the 4 separate tickets and then either stated that the family ticket was cheaper or stated 'No', with no evidence to support this conclusion.

1 (b)   This question was answered well by the majority of students. The most common error was to give 9 as the total after frame 2.

1 (c)   Many students found calculating the score after a strike quite demanding, despite the information and examples on the pre-release material. Teachers should ensure that students fully understand any pre-release information before the examination. The most common incorrect answer was to give 85 as the score at frame 9 and 93 as the final score. A small number of students failed to include the 5 pins for the last ball altogether.

1 (d)   This question was answered well by most of the students. Those who did not score the mark generally only stated that Jamil won 3 games and made no comparison to the number of games won by Tom.

1 (e)   Most students compared the total scores of both players, and these were usually correct. Some found the mean scores, and again usually did so accurately. A small number of students only found the totals for the games each boy won and some said that as Tom had a couple of games with higher scores than Jamil his average would be higher.

Task 2   Sandwiches

2 (a)   Students found this very straightforward.

2 (b)   In this question there were a significant number of misreads of the heights of the bars. The majority did, however, give the two correct totals and make the correct decision. A small number of students confused the totals for 'with salad' and 'without salad' and went on to make an incorrect conclusion. A small number used the differences between the heights of each bar to compare, usually successfully.

2 (c)   The majority of students gave the correct answer, although a small number divided the wrong way round, leading to an answer of 0.083

Those students who showed how they obtained 12 often went on to show the reverse multiplication as their check. Students should understand that lack of working in a question with a check means that no alternative or reverse method can be credited.

2 (d) The most successful method in this question was to multiply their 12 g from **2 (c)** by 500 and then convert their answer to kilograms. Those students who did this usually went on to give the correct final answer, but a small number failed to divide by 2 for the 2 kg per tub and gave the answer as 6 tubs. Some students just converted 2 kg to 2000 g and divided by 500

2 (e) In this question those students who drew boxes of the correct size on the diagram generally managed to fit the 6 crates in successfully. A small number of students then tried to fit in another crate by cutting a crate in half. Students who used calculation were successful if they divided the width of the floor space by the width of a crate, and similarly for the lengths. A common incorrect method was to divide the total area of the floor space by the total area of a crate. Students were asked to show their working, as an answer of 6 could be gained from drawing incorrectly sized crates. Answers of 6 with incorrect drawing or no working were not awarded full marks. It was often unclear whether the students were using the diagram or their working to give their answer

2 (f) Students found this question demanding. Common errors were omitting going back to the shop at the end, using a route where the shop or an office was visited more than once and starting by visiting office B or office C first. Poor arithmetic was seen quite frequently, and students often failed to communicate their route clearly.

Task 3 Hairdressing salon

3 (a) The scale drawing differentiated well between students. It was rare to see a fully correct diagram as very few students drew circles of radius 2 squares for the chairs. The majority either drew small circles or, more often, drew squares for the chairs. The furniture was usually placed in the correct area of the salon and the sinks were often the correct scaled size. A small number of students did not use the scale and some did not label their items - a necessary communication skill.

3 (b) Students usually coped well with this question, and many fully correct answers were seen. The most common error was miscounting the number of shifts each person did so that they were not equal. Those who miscounted often did not give each person at least one day off. The majority did give Craig the day off on Saturday. Some students either did not complete the grid or had the same person as worker 1 and 2 on a particular shift.

3 (c) This was a multi-step money question. The majority of students coped well with the large amount of given information and gave a fully correct solution, although a small number who correctly calculated the profit of £705 failed to make a conclusion. Some students only calculated the income of £1710 and stated that this was more than £700. A very small number of students stated that £990 was taken for cut and blow dry so this is already more than £700

Task 4 Electricity

4 (a) Those students who followed the steps on the data sheet were usually successful in this question. However, many just multiplied 6 by 15p and gave 90p as their answer. Others tried to combine 6, 15 and 2.50 in various ways with no correct outcome.

4 (b) This question was not well done. The most common approach was to divide 200 by 4 and state that he used 50 units per year. Students should realise that a 'show that' question requires **all** steps to be shown. Those who started with $100 \div 1000 = 0.1$ generally went

on to give a complete and correct method. However, a large number of students either failed to make any useful start, or found 0.1, 50000 or 2000 and made no further progress.

4 (c) In this question the students had to divide 200 by 5, but a large number used 100 or 500. Very few students gave an acceptable check of their calculation, with the majority just repeating the same calculation or showing the method that led to the answer they had just stated. A significant number did not attempt this question.

4 (d) This question was very demanding and was rarely answered correctly; a large number of students made no attempt at all. Of those who did attempt a correct method, some did not include £38 as the total cost of buying ordinary bulbs and the electricity needed to run them. A small number of students did work out that it would cost £6 for the electricity for the low energy bulb, but then made no further progress. Some students simply subtracted £13.88 from £38

Mark Ranges and Award of Grades

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

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