
FUNCTIONAL SKILLS **MATHEMATICS LEVEL 1**

8361/1 and 2
Report on the Examination

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Paper 1

Section A

In **question 1** the responses were almost equally split between the option -1.4 and the option -23, indicating that a large number of Level 1 students do not understand what an integer is.

The zeros caused problems in **question 2**, with a large number of students omitting them and giving the answer 97.4. Only about a third of the students gave the correct answer.

Question 3 was answered more successfully, but about one third of the students failed to score. The most common incorrect answer was 16 from $5 \times 2 + 3 \times 2$

Although just under half of the students could write the fraction correctly in digits in **question 4** a large number did not understand that it was a fraction, with 245 being a common incorrect answer.

Question 5 tested volume and about half of the students either worked out the volume correctly or knew the correct units. However, less than 20% of the students could give the correct volume **and** the correct units. Common errors included working out surface area or just adding the three dimensions.

Section B

Question 6 Jewellery

The majority of students struggled with the ratio in **part a**), with common errors including using the ratio 6 : 10 or dividing by 4 or multiplying 10 by 3. About two thirds of students failed to score in this basic ratio question.

In **Part b** about a quarter of students gained full marks, but just over 40% failed to score. Common errors included using $1\text{ m} = 1000\text{ cm}$ and working out a quarter of 20 rather than of the chain. Students who used the correct method to get to 7.5 usually realised they had to round this down to 7 complete bracelets.

Part c differentiated well, with marks available for a correct method to lead to 6 and 12 and then follow through marks for completing the pictogram correctly for their values. The most common error after getting to 18 left was to divide by 2 and draw 9 for each of bracelets and rings. There were some very poor diagrams, with no attempt to keep shapes the same size or align them. The least able students could not work out that there were 16 necklaces and 11 anklets.

Paper 2

Section A

Question 1 had a correct response from just under 60% of the students, with 0.53 being the most popular incorrect option.

The majority of students chose the correct angle in **question 2**, with angle b being the next most common choice.

Students often do not know how many millilitres there are in a litre, with the answer 320 being as common as the correct answer of 3200 for **question 3**. Students should avoid putting commas between thousands as they can look like decimal points.

Question 4 on simple probability was poorly answered, with only about 30% of students giving the correct probability. The most common wrong answer was $\frac{3}{6}$. Some students used incorrect formats and should be made aware that 1 in 6, 1 : 6 or similar are not acceptable.

The majority of students worked out that the length was 20 in **question 5** but either failed to state any units or gave the answer 20 cm.

Question 6 was answered quite well, with the majority of students understanding how to work out the mean of a small set of numbers. A minority of students just gave the total of the six values, and a very small number of students worked out the median or the range.

In **question 7** the majority of students could gain a mark for working out 20% of 1600, but most of these students then gave 320 as the answer or added it to 1600. The most common error was to divide 1600 by 20

Section B

Question 8 Holiday to Portugal

The majority of students struggled with the car hire formula in **part a**, with the most common error being to just add £130 and £35, completely ignoring the number of days hire. A small number of students subtracted the car hire from the cost for the flights and villa. About 20% of students failed to show any work of credit.

Many different approaches were taken with **part b**, but finding the number of euros needed in total compared with the number they had, or the number needed per day were the most successful. The least able students used the exchange rate the wrong way round and therefore failed to make significant progress. There were a significant number of misreads of 1.16 as 1.6 for the exchange rate. Students should check that the figures they are using have been correctly read and copied.

The majority of students could make progress with **part c**, but of these almost all failed to double the 98 miles for the return journey. A small number of students doubled the taxi fare and the least able students just added 98, 15 and 85.

Question 9 Country estate cycle ride

Students frequently mix up perimeter and area, and **part a)** of this question was no exception. Many area attempts were seen, with these students gaining credit for a missing length if found but otherwise making little progress. Of those who attempted perimeter, a significant number just added the four given lengths, failing to include the long top length and missing side length. Over 40% of students failed to score any marks in this part.

The 3.5 hours caused difficulties in **part b**, with many students thinking this was 3 hours 50 minutes. Students generally knew what method to use, but frequent inaccuracies in converting to hours and minutes were seen. A small number of students omitted one of the times. Those students who guessed a time to leave home were rarely successful. Adding one of the 40 minutes to the 20 minutes to make one hour helped quite a few students to go on to give a correct total time taken.

In **part c** the majority of students did attempt area calculations and some were successful, with the question differentiating well. However, there were a lot of incorrect conclusions from correct areas seen, and a small number of students just said that the land for sheep was greater.

Question 10 Clothes company - making badges

Part a saw a good spread of marks, with just under a quarter of students giving a fully correct solution and another quarter gaining partial credit. However, around half of the students just commented that the machine made more than 250 badges so the manager was wrong.

Part b was answered well, with nearly 70% of students gaining 2 or more marks. Errors were often to arithmetical, for example adding 5000, 5000 and 1400 to give 2400.

Part c was a challenging multi-step question and the vast majority of students made little progress. The use of inconsistent units gave incorrect values to work with, in particular taking $5000 \times 17p$ to be £85 000 or £85. Students were given credit for working out 40%, but this was often done incorrectly or students did not add it on to increase by 40%. Those students who did achieve the final value of 31.2p to break even then often rounded it down to 31p, not appreciating that the profit would not then be made. About 20% of the students did not attempt this question but went on to try question 11.

Question 11 Hotel work

Part a differentiated well and the more able students made good progress, with about 25% gaining full marks. The most common error was to forget about the double time on Sundays, so giving an answer of 10 hours of work needed on Sunday. A common error was to read 17.7 on a calculator as 17.07 rather than 17.70. Students had to show working as the final answer was a rounded value, but it was very rare to see an answer only.

In **part b** a significant number of students did not read the question carefully and for make-up worked out one fifth of the remaining money. The question was worded clearly to try to avoid this, with the total of £72.90 repeated. The least able students showed no method and with inaccurate values could not be given any credit.

The most popular choice of suitable chart in **part c** was a bar chart. The most common incorrect diagram was a time series or just a selection of plotted points. Students often struggled to have a correct linear scale, especially if they tried to use $1\text{ cm} = 3\text{ guests}$. Labelling was often missed off the axes or for the bars was plotted at the extremities as a linear scale rather than under the bars. Diagrams were often messy, with a lack of rulers being used.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the [Results Statistics](#) page of the AQA Website.