
FUNCTIONAL SKILLS **MATHEMATICS LEVEL 1**

8361/1/2 -Paper 1(Non-Calculator) and 2 (Calculator)
Report on the Examination

8361
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8361/1- Non-Calculator**Section A**

Question 1 was answered correctly by just under two thirds of all students. The most common incorrect choice was option 3.

Almost 70% of the students answered **question 2** correctly, with the most common incorrect response being 24

Question 3 illustrated the usual common error of carrying out the subtraction before the multiplication step of the calculation. Just over half the students gained full marks, with quite a large number doing the multiplication first to get 35 but then subtracting 36 from 35 to get the answer -1.

Question 4 was answered well, with around two thirds of the students gaining 2 or 3 marks.

Common errors included thinking 0.7 was 7% and that $\frac{1}{5}$ was 0.5. The majority could give the fraction equivalent to 0.75, but a small number wrote $\frac{7.5}{10}$.

Question 5 proved more challenging than the usual questions on this topic, with less than 30% giving the correct value. Common answers were 800, 80, 0.8 and 0.08, but 50.16 was also seen.

Section B**Question 6 Party planning**

Part a differentiated well, with the full range of marks seen. Almost all of the students gained at least one mark for drawing a correct-sized shape. Labels were often missed, and the most common error was not leaving space around the tables as required.

In **part b** quite a large number of students did not realise that the area of the dance floor would be $5 \times 5 = 25$ square metres. Those who did usually went on to score high marks for the question, but other students could still access some marks for the hall hire and totalling their values.

Part c was on the topic of simple interest, which has not been asked very often on this specification. Students were not well prepared to answer this question, with the majority being unable to work out 5% of 960. The common misconception was that you work out 5% by dividing by 5. Those who knew the method made some arithmetical errors in dividing 96 by 2, with 43 or 38 the most common incorrect values. Quite a large number of students did not make a conclusion about whether Hanifa would have enough money.

8361/2- Calculator

Section A

Question 1 was answered correctly by three quarters of all students. The most common incorrect choice was 3289.

A similar proportion of students answered **question 2** correctly, with various incorrect positions seen including probabilities of 0 and 1.

Question 3 proved to be very accessible, with the vast majority of students writing the numbers in the correct order. A small number wrote them in reverse order.

It was clear in **question 4** that a number of students did not have a protractor and tried to guess the size. The majority could measure accurately, although a small number were out of tolerance. The main error was to give the answer 20 from looking at the protractor from the wrong end.

Just over half of the students could draw the 4 correct lines of symmetry in **question 5**. A significant number drew just the vertical and horizontal lines. The less able students drew lines from each end of the curves as well.

Percentages always prove to be a challenge to level 1 students, and **question 6** was no exception. However just over 40% of students could work out the two correct values and make the correct conclusion. A small number did not make a conclusion and the weakest students could not work out 15%. Answers of 9 and 12 were quite common but gained no credit.

Students are becoming more proficient at working out the range in **question 7**, but there were still about half the students who thought it was the mean, or who subtracted the first and last values without ordering them.

Section B

Question 8 Charity shop

The majority of students could complete the frequency column correctly in **part a**. The more able students could then compare 15 with a quarter of 56. The weaker students stated that she was wrong as more jumpers were sold than shirts. There were many incorrect conclusions, even when working out 14 and 15 successfully. A small number thought that 25% meant 25 students, so compared 15 with 25

Part b was a challenging question, including percentages and conversion between grams and kilograms. The question differentiated well, with some excellent fully-correct solutions seen. Some students struggled with the extra 0.5 kg in 143.5 kg so ignored it, and a significant number did not know where to add the 10%. A variety of methods were seen, with the most successful getting to a cost of £344.40 without the 10%. In this method a small number of students then worked out that 10% of £1.20 is 12p so added 12p to 344.40

Part c had a relatively simple method, but a large number of students thought that there were 100ml in a litre. These students still gained credit for scaling up to their 12 litres. The least able students either multiplied or divided 400 by 12

Question 9 Bakery

Part a differentiated well, with about half of all students gaining full marks. A small number worked out that 1800 grams were needed in total, but then either did not subtract the 200 grams Brandon already had or added the difference between 360 and 200 grams. The least able students either just subtracted 200 from 360 or multiplied 360 by 8. The most common approach was to work out that Brandon needed 5 lots of mixture.

Part b involved the area of a T-shape, which caused problems as usual. Some students worked out the perimeter, so could gain little credit except for working out the long length of the T-shape. A common error when splitting the shape was to work out two lots of 8 by 7 and one lot of 6 by 6, omitting the middle part of the long rectangle. A significant number of students thought that the top length was 24 from 3×8 . A small number of students gave no conclusion or the incorrect conclusion.

In **part c** more than 60% of the students failed to score more than 1 mark, which indicated that they did not know how to work out a volume. The one mark was usually awarded for substituting 16 into the given formula. Those who added the dimensions could make a follow-through conclusion, but this was often the wrong conclusion.

Question 10 Working from home

Part a differentiated very well, with the full range of marks seen. Less than 20% of the students could follow the method through to an accurate answer and correct conclusion. Often the lack of full marks was due to using an incorrect number of hours that Spencer worked each day, with the most common being $5\frac{1}{2}$ hours. A small number of students omitted to use the 3 days, or thought he worked for 7 days. Working out the rate per hour or working out the total pay at a rate of £11 per hour were the two most common and successful methods.

Almost half of all the students failed to gain any credit in **part b**. These students usually multiplied 138 by £2.76 or 97 by £2.76. The most successful correct method was to work out the cost per page. Those who divided 138 by £2.76 usually got the answer of 50 but thought that this was a cost of 50p per page, not 50 pages per pound.

In **part c** the correct mean was calculated by over 30% of the students, but a small number gave an incorrect conclusion. A small number of students added the values to 69 but then did not know what else to do. A significant number of students just counted the times that were under 5 minutes and based their conclusion on this.

Question 11 School leavers

Part a involved interpreting a pie chart. Students at Level 1 always find this topic difficult, and only the most able students could make any progress. The most successful method was to realise that there are 2 degrees per student and work out that 80 students went to college and 10 started an apprenticeship. A small number of these students did not subtract the values to work out how many **more** students went to college. The least able students thought that 20 students started an apprenticeship and often just subtracted this from 90 to work out the number of students who went to college.

Students could usually add the three given times to 90 minutes in **part b** but then some had difficulty working backwards from 1.50 pm. The most common error when subtracting the times separately was to think that 1.50 – 35 minutes is 1.20. A very small number of students thought that registration and assembly would be around 9 am and therefore they could have lunch almost anytime.

A full range of marks was seen in **part c**, with the more able students giving very good fully-correct responses. Students generally found it easier to work out the cost of the two jackets in shop B. For shop A some students gave the price as $\frac{1}{3}$ of £24 and some forgot that there were two jackets to

buy. The least able students subtracted 0.3 or 0.33 from 24. Students should understand that $\frac{1}{3}$ is not equivalent to 0.3. A minimum of 2 decimal places is required, but students should be encouraged to use the full value until the final answer.

Mark Ranges and Award of Grades

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