



FUNCTIONAL SKILLS MATHEMATICS LEVEL 1

8361/1 and 2
Report on the Examination

8361
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8361/1 - Paper 1

Section A

In **question 1** the majority of students chose the correct value of 16. 8 was the most common incorrect choice and a small number of students failed to attempt the question.

Approximately 50% of students gave the correct value in **question 2**. For those who made errors, it was quite common for them to attempt to work out the answer using long multiplication, which often resulted in errors. 1345 was a common incorrect answer. Another common error seen was students adding in two 0's as they were multiplying by 100. This resulted in several answers of 100.345, 1.34500 and 134500 .

Answers given as a ratio or 50/50 were common errors in **question 3**. Some students thought there were 2 odd numbers and gave $\frac{2}{6}$ or $\frac{1}{3}$ as their answer.

It was very common to see 8 as the answer to **question 4**, where $9 + 15$ was calculated first. Errors in arithmetic were common, but these were usually in incorrect methods. About 50% of the students accurately calculated 14.

Students placed decimal points in a variety of places amongst the digits given in **question 5**. It was common for long multiplication attempts to be seen, leading to digits other than those given, and even where it did lead to the correct digits the decimal point was in the wrong place if inserted at all.

Students did not score well on **question 6**, with only about 40% getting 12. A common error was to get 6 and then attempt further, incorrect working.

Section B

Question 7 Charity Walk

Part a differentiated well, with the most able students being able to accurately measure the distances and use the scale. Many were able to multiply up by 4 correctly with the 3 cm to get 12 km. Several students struggled with the diagonal line and the half square. There were also some errors if they counted the squares. A common method was to count up in 4's on the diagram. However, the half square and square at point C caused issues and resulted in incorrect values.

About 50% of students failed to score on **part b** due to a variety of reasons. Arithmetical errors were quite common, particularly in the subtraction calculations (eg $1040 - 760$ was often found to be 380). Several found the quantity of numbers involved challenging and added the values two at a time. Unfortunately, this sometimes led to errors as values were miscopied. It was quite common to see two values for the missing sides with no working. This led to fewer marks being awarded when these were incorrect. Several students added the three given sides anticlockwise from the gate and then subtracted 1360. Some thought they could choose which two sides and which four sides to compare. Working out for this question was quite disorganised, which made it quite difficult to follow the steps taken.

Again, **part c** differentiated well, with the most able students able to find the reduction and then the total cost. A number of students knew what to do but lost marks due to arithmetical errors in

working. Several students were able to get as far as 252, 25.2 or 32.4, but no further. Another common problem for those not scoring many marks, if any, was using incorrect methods to work out 10%. Several students subtracted 10 instead of multiplying by 0.1.

8361/2 - Paper 2

Section A

In **question 1** the majority of students chose the shape, but all options were chosen. Just over 65% of students selected the correct answer.

The majority of students gained at least 1 mark in **question 2**. If only one mark was scored it was usually due to having one value in the wrong place. There was no regular placement of the incorrect value. A few reversed the order, but this was not common. If no marks were scored a common answer was 2.702, 2.035, 2.45 then 2.6.

Students were able to generally write the number in digits for **question 3**. However, common errors were 371 and 300071

Over 65% of students scored the mark r in **question 4**. The most common incorrect answers were North and South.

For **question 5**, approximately 30% of students correctly filled in the two boxes. If they scored one mark, they often scored it for giving 70% for the percentage. A common error was to write $\frac{65}{10}$ for the fraction. Other incorrect fractions were $\frac{5}{6}$ and $\frac{6}{5}$. If an error was made in the percentage box, 7% was often written.

About 70% of students were able to score at least one mark on **question 6**. If only one mark was scored it was often for the follow-through from their tallies. A common error was to miss one tally mark.

Students found **question 7** very challenging, with over 60% failing to score a mark. Two very common errors were working out the perimeter of the shape, or multiplying the distances together. Several students also gave 117 as their final answer.

Section B

Question 8 Charity Walk

Part a differentiated well, with about 38% of students scoring full marks. However, several students had problems finding the correct number of hours, with 63.5 from 2 hrs being common. Tidying up and setting up was an issue for some students, as 'parts' of hrs were sometimes paid for at the hourly rate. Issues with rounding then resulted in errors. Also, some students multiplied both the 32 and the pay by the number of hours. It was also common to see errors in arithmetic on this calculator paper.

Many students found **part b** difficult to complete, but when a diagram was used they were often successful in scoring full marks. Some students successfully obtained 11.25, but then incorrectly

wrote 11 as their answer. Also $30 \div 3 = 10$ was a common incorrect answer, as well as $30 \div 8 = 3.75$, so 4 pizzas.

In **part c** the majority of students could not work out if there was enough cranberry juice to make drinks for 30 people, but some were able to accurately convert the units. Only about 20% were able to score 2 or more marks. A number of students calculated the value 8400, but were unable to progress further. It was also fairly common to see 2000 divided by either 280 or 30. A number of students scored a mark for 56, but then completed no further useful work.

Question 9 Pets

About 40% of students scored at least a mark on part a. However, few scored full marks. It was common to see students incorrectly convert 0.7 to 7%, or conclude 6.21 and Yes rather than No. Some students also calculated $5.4 + 6.1$.

About 90% of students attempted **part b** and scored at least one mark. The majority drew bar charts. The most common error was to not label the vertical axis. Several students used a non-linear vertical scale, sometimes starting at 1 or with the squares labelled rather than the lines. Another common error seen was inconsistent gaps between bars.

Part c saw students continue to find calculating volume difficult, with many adding the 3 values to get 115. If they were able to calculate the volume of 54000, only a few then got 54. If they then went further, many made the error of dividing by 2, rather than multiplying.

Question 10 The Cafe

Quite a few students were confused by the 'hours' on the answer line in **part a** when their answer was not a whole number of hours. Several wrote 2 hrs and 30 minutes, and then chose 2 as their final answer. Others were able to obtain 24 or 17.5, but not all got to 67.2. Students needed to show a fully correct method to score two marks, but few showed all their working and so were not able to score.

On Part b, less than 20% of students scored a mark. A number of students did not understand the offer and often halved both sandwiches. Again, a number of arithmetical errors were seen on this calculator paper, with several students not showing working out for the subtraction and losing marks. Some students also stopped at the total cost and ignored the rest of the question. As a result of these errors, 7.16, 12.86 and 12.84 were often given as answers.

Students demonstrated a good understanding of mean on **part c**, with over 40% scoring full marks. Students scoring part marks either found the total and did not divide or failed to make a conclusion if a division was seen. Several students found the range rather than the mean value. Some incorrectly compared the number of days above and below 75.

Question 11 Cake Company

Many students were able to draw the squares correctly in **part a**, but often failed to draw five, usually drawing only 2 or 3. Also, several students drew rectangles alongside the given square incorrectly.

Part b differentiated well, with students able to show their understanding of reading tables and using formulae. The most common errors occurred when using the formula. Several added the 20p and £1.50 to get £1.70 as the handling fee. Some even multiplied this £1.70 by the total number of boxes.

Very few students made good progress with the pie chart in **part c**. The weakest students just calculated the missing angle for the large boxes of cupcakes or the income from small boxes of cupcakes. A common error was also to subtract the values given (eg $16\,200 - 10\,000$).

Students still find interest hard to calculate as required in **part d**, but this time over 50% were able to score at least one mark. The main problem students faced was not being able to find 5% of a value accurately. Many were able to score a mark for 26, as they knew to subtract the values.

Mark Ranges and Award of Grades

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