AQA

FUNCTIONAL SKILLS
MATHEMATICS LEVEL 1
8361/1/2
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 direction, but all options were chosen.

The answer of 8 from 48 ÷ 6 was more common than the correct answer in **question 2**. Arithmetical errors prevented a few who knew the order in which to evaluate from gaining the accuracy mark. Errors such as 5 + 18 = 13 and 30 ÷ 6 = 4 were common.

It was apparent in **question 3** that many students did not have a protractor and were just guessing the size of the angle. The main error when using a protractor was to give the answer 60 from reading from the wrong end. Other common answers were 90, 180 and 270

Less than half of all students could work out the range in **question 4**, with the mean or median frequently being seen. A small number knew to choose the smallest and largest values, but not how to use them, so gained partial credit.

Just over half of the students knew the method to work out 40% in **question 5**, but arithmetical errors prevented a small number of these from gaining both marks. Common errors were answers of 12 and 1200. Students could often work out 10% or 50% but then did not know how to combine values to get 40%

Section B

Question 6   A day at the seaside

Part a was a challenging question at this level but with opportunities for the majority of students to gain some credit. Students often mixed up costs and savings, so added or subtracted the wrong values. The most common of these were the students who worked out that the savings for the adults was £32 but then added £3 for the children rather than the savings of 3 x £10.25 Another common error was to use £32 as the discounted cost for the adults instead of £64, possibly interpreting the voucher cost as 1/3 **of** the usual price.

Students often did not understand the hour or part of an hour charge in **part b** and so tried to work out, usually unsuccessfully, the costs for 4 hours 45 minutes, with 4 hours 45 minutes becoming 4.45 hours in many cases. There were also some errors in subtraction from £20 when using a rounded down time of 4 hours, with 20.00 – 5.60 = 15.60 being common.

Students who understood that they had to round the prices to the nearest pound in **part c** usually found the calculation very easy from there. However, the majority of students just worked out the total cost using the actual prices, with a small number then rounding their **answer**, which was not what the question required.

8361/2- Paper 2

Section A

Question 1 was answered very well.

In **question 2** the most common choice was view D, with just over 10% choosing the correct option.

Students found the rounding in **question 3** a challenge, with the most common incorrect answer being 1783.4 and many other variations being seen. Only about a quarter of the students rounded correctly.

Question 4 was answered correctly by about 70% of the students, with the most common incorrect choice being $\frac{7}{5}$

Question 5 was also answered well, with good use of calculators. A small number of students multiplied each value by 2 instead of squaring.

There was a mixed response to **question 6**, with about half of the students understanding how to work out 35%, either with a calculator or by using a build-up method. Of these students almost half did not increase 78 by 35%, just giving the answer 27.3. The less able students could not work out 35%, with 78 – 35 and 78 ÷ 35 both being seen frequently.

Almost half of the students could work out the volume of the cuboid in **question 7**, but units were frequently incorrect or missing. The least able students added the 3 dimensions.

Section B

Question 8   School trips

In **part a** the majority of students understood that they had to divide 34 by 8 in some way. Diagrams were often used successfully to do this. However, after getting to an answer of 4.25 or 4 with 2 students left, the majority of students rounded down to 4 teachers needed. A small number of these stated that they would just give two of the teachers an extra student each. Some did not subtract the 2 teachers who were already going.

Part b differentiated well, with only the weakest students failing to gain some credit. Minutes and hours conversions caused some issues, but the majority of students could add the three times successfully. More errors appeared when trying to subtract their total time from 1pm. The more successful method was to subtract the values one at a time, giving the interim times. With this method, the majority subtracted 1 hour 30 minutes and 20 minutes successfully but often made an error in subtracting the 45 minutes. Those students who attempted a trial and error approach, by picking a random time to leave, invariably had the students ready before 1pm

Part c differentiated well, with only the most able students gaining full marks. A small number found the correct value but did not round it to the nearest pound. A significant number of students worked out 20% correctly but then divided this by 34 rather than the amount left. The less able students could not work out 20%, often dividing by 20, but could often access the mark for division by 34

Question 9   Garden birds

There was a better response to **part a**, the pie chart diagram, than in previous series. This was perhaps a result of having one sector drawn already and some straightforward numbers for the other sections. It was clear that some students did not have a protractor, but some of these could draw a quarter of the chart for sparrows and then guessed the other split or made them equal. Only about a third of students failed to gain any credit.

The probability in **part b** caused issues for students who did not realise they had to use the 9 sparrows given in part a. Those who worked out the probability of $\frac{1}{4}$ sometimes thought this was larger than $\frac{1}{3}$ so gave the wrong decision.

Part c was answered quite well, with over 40% of the students gaining full marks. A small number found only the total number of birds rather than the mean. The least able students just stated that Sunday (56) is higher than 39 so the numbers are increasing.

There were many really good attempts at **part d**. Students sometimes did not show enough working or values to gain full credit, for example failing to state that there are 21 days in 3 weeks or getting to 2625 but not comparing with 288. The majority of students knew that there are 1000 grams in a kilogram.

Question 10   Photographer

Students made the usual error in **part a** by adding 40 and 18 before multiplying. A small number did not work out the change so gave the answer 107.50 and the value of 107.5 sometimes became 170.05 when subtracting. Students should remember that answers that ask for a cost should be given in correct money notation so the answer should be written as 12.50 not 12.5
Over 50% of the students gained at least 3 marks.

Part b differentiated well, with less than 20% of students failing to gain any credit. It was quite common for students to find the frequencies and then conclude or stop with the frequencies only. A significant number of students found the frequencies and then considered the differences instead of multiplying pack C by 4 or similar.

Part c saw a good spread of marks, with the majority who attempted the question gaining some credit. About 15% of students did not attempt the diagram at all. The majority of students drew the 6 by 6 square correctly and often drew at least one 3 by 4 rectangle. The 2.5 by 1.5 rectangle was the one that caused the most problems of the photos but there were many correct attempts seen. It was quite common to draw just one of each of the rectangles. The vast majority of students left sufficient space between the rectangles and generally the diagrams were the correct orientation.

Question 11   Patchwork

Part a was answered very well.

Part b proved to be a challenging question, with many students only working out the area of one 14 by 14 square. The border caused a problem for most students, with only the more able realising that they had to add 2 cm onto the length of 56. The least able students just worked out 14 × 16

About a quarter of the students did not attempt the question, with only about 5% giving a correct solution.

In **part c** a significant number of students either calculated the area or just added the two sides. Many students did not convert to consistent units or attempted to add on the 3.6 metres. For those who gave an answer, the correct units were usually seen.

Mark Ranges and Award of Grades

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