

# Examiners' Report Principal Examiner Feedback

January 2021

Pearson Edexcel Awards In Number and Measure Level 1 (ANM10\_1A)

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## **General Comments**

- This exam paper was accessible to many and gave a good range of marks for the award of a pass.
- There was evidence to suggest that students did not always choose to use a calculator on section A.
- Students continue to mix up methods, especially for area and perimeter of a rectangle and volume of a cuboid where they sometimes found surface area or length of edges.
- Students must read questions carefully so that they give the answer that is required, for example on section, question 17 some students found the sum of the two amounts of money rather than the difference.
- Students must make sure they bring mathematical equipment to the examination and use it correctly as there was evidence that some were unable to draw the line on section B, question 5b.
- A lack of working for questions that were almost correct caused a lot of students to lose method marks especially on question 16, the area of a shape made from rectangles.

## Section A

- Most students were able to gain the 3 marks available for correctly using the table to answer the questions. Sometimes for part (c) students failed to read the question fully and gave the most expensive toaster, the Smug, rather than the most expensive toaster with 6 settings which was the Grillo.
- 2. We saw a reasonable number of students giving the correct answer for this question asking for the interest on £650 at 2% for one year, but there was a disappointing lack of responses and certainly many responses showing no working, so a fair number gained no marks at all.
- 3. Nearly all students were able to achieve these 3 marks by correctly using their calculator to find the answers to these calculations.

In part (a) the mistake we sometimes saw was a student adding all three numbers rather than subtracting 8.46 In part (b) we saw mostly correct answers. In part (c) we also saw mostly correct answers with the occasional decimal point inserted incorrectly.

4. For part (a) of this question about two-thirds oof students were able to correctly write 8.73 to the nearest whole number. Those who did not often gave the answer as 8 or 8.7.

Part (b) of this question was the most well done part with the majority of students able to correctly write 736 to the nearest hundred. Incorrect answers included 730, 740 and 800.

Part (c) asking students to write down the value of 4 in 7.43 was poorly done with only about one-quarter of students giving the correct answer. Many left the answer line blank and there were incorrect answers such as tens or hundreds given.

5. Students tend to be particularly good at recognising numbers on number scales and this question was no exception with about 90% gaining full marks on part (a) where the notches on the scale where each worth 1 unit. Part (b) was done slightly less well, but correct by about 80% of pupils, where some found the scale of one notch equal to 2 units a bit more difficult.

6. For part (a) most students were able to give a multiple of 8 with 16 and 64 being the most common. Incorrect responses generally gave 2 or 4, factors rather than multiples of 8

For part (b) we saw many correct responses for a common factor of 12 and 20 with 2 or 4 being the most common. Incorrect responses were generally those who got mixed up with factors and multiples. The responses to part (c) were pleasing showing that students, in general, knew what a prime number was. 17 was by far the most popular answer with 21 being the most popular incorrect answer.

- 7. Most students were able to differentiate between the hour and minute hands to give 9:20 but some students struggled to recognise that the time was in the evening and hence lost 1 mark. There were plenty of instances of student being able to write the time correctly in 24 hour clock as well and of course they gained the mark without the need to state pm.
- 8. About 70% of students were able to correctly add 3 minutes 48 seconds and 2 minutes 20 seconds and give their answer in seconds. Those who did not get the correct answer or gain method marks often forgot that time is not decimalised, so 5.68 or 568 were commonly seen. It was not uncommon for students to gain a mark for reaching 6 minutes 8 seconds but then give the answer as 6 minutes 8 seconds or 5 minutes 68 seconds or just 68 seconds so fail to gain any more marks.
- 9. For part (a) only about half of the students were able to write 1/5 correctly as a decimal with many using the figures from the decimal itself and giving numbers such as 1.5 or 0.5

Considerably more students were able to correctly write 39% as a fraction than were able to gain the mark for part (a). Many students were able to work out 5/19 × 3 with a mistake sometimes made by multiplying the denominator by 3 as well as the numerator. Part (d), finding 2/9 of 450 was done reasonably well with over a half of students giving the correct answer of 100. Few that did not gain full marks showed working worthy of the method mark and students should be encouraged in this case to find 1/9 of 450 and then double this. The 1/9 of 450 would have gained a method mark.

10. Over 60% of students were able to correctly calculate the perimeter and several were able to gain the method mark for showing the correct working or the correct working for the semi-perimeter. Those gaining no marks often found the area of the rectangle.

- 11. Most were able to tell us that Wednesday was the day of the 23rd September 2020, however the date three weeks after the 18th September was more difficult. Problems included not knowing how many days are in September, not knowing which month comes after September, counting on 2 weeks or 4 weeks rather than 3, and counting back 3 weeks instead of counting on. Students should note that we leave the calendar blank and expect them to use it to count on – and in this case if they had shown us 30th September with no 31st we would have awarded them a method mark.
- 12. Students needed to divide £2.47 or 247p by 8 to find the price, to the nearest penny of one ice lolly and many showed a correct method but were then unable to interpret their answer correctly. This was shown in the distribution of marks with 45% gaining one mark for correct working but only about 20% gaining full marks. However, it was pleasing to see correct working!
- 13. This question asked the students to find the volume of a cuboid. About half the students taking this paper were able to give the correct volume. Those who did not often gave the answer of 47 which was the total of the three given measurements. Other incorrect methods involved finding the full surface area or the surface area of two or more faces or finding the total length of all the edges.
- 14. For this question students were asked to work out a sum where the numbers were in kilometres and metres. The biggest mistake was to fail to give the units of the answer and for a correct figure without units 1 mark was awarded. Some students did not know how many metres in a kilometre.

Some thought that metres and kilometres could be combined as if all were the same unit, so 3 km 251 m was given as 3251 m. A few students added all the measurements and were awarded a special case B1 if they did this correctly and included the units.

15. This 'shopping bill' and change question was well answered by several students, who in many cases showed their working or gained correct results. Some gave an answer close to the correct one but with no working or a few odd figures on the page, so we could not award any marks as there was no evidence of correct working; it must be stressed to students that for any questions with more than one mark they are running a risk of gaining

no marks if they make a slight error and have not shown any working. A handful of students did not read the question thoroughly enough and made careless mistakes such as working out the cost of 1 of each item rather than the given amount of each item; if such students worked correctly, they could gain special case marks. Some students forgot to work out the change after finding the total cost and others worked in inconsistent units.

- 16. This question asked students to find the area of a shape made from two rectangles. Over half of the students sitting the paper gained no marks because they left the question blank or attempted to find the perimeter or multiplied all the given numbers together. Students confident with finding the area often showed their method clearly but overall, few benefitted from just gaining the method marks.
- 17. This question asked students to find how much more money Lily had than Imani had, one value given in pounds and one in pence. For the method mark the students needed to show the two values subtracted either in pounds or pence or to give the correct answer without units. This mark was often gained for the answer without units and students should be reminded that they need to display the appropriate symbol in money calculations if it is not on the answer line. It was pleasing that over half of the students sitting this paper did give the correct result along with the correct unit.
- 18. There have been many phone bills in the past, so this question should not have been a surprise to students. We did see a good performance from a fair number but also some students who showed little understanding of what was needed, with the modal mark being zero, closely followed by the mark of 4. There were also a good number who gained 2 marks, these forgetting to add on the monthly charge. We also saw working that showed students adding all the given numbers together whether they were numbers of minutes, numbers or texts or costs.

## Summary

Based on their performance on this paper, students are offered the following advice:

- Read questions very carefully and ensure the answer is what is asked for.
- Use the calculator when allowed to do so, i.e. on section A.
- Show all working clearly even on the calculator section.
- Learn conversions between metric units of length, weight and capacity.
- Learn the calculations needed for area, perimeter and volume, and know not to get them mixed up.
- Spend more time revising fractions and decimals and various bills, eg phone bills, gas bills, electricity bills etc

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