

Examiners' Report/  
Principal Examiner Feedback

Summer 2016

Pearson Edexcel PLSC in Mathematics  
Year 6  
(JMA01/01)

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**Principal Examiner's Report  
JMA01 / 01  
1606**

**Introduction**

This summer has seen another successful sitting of the Primary and Lower Secondary Curriculum examination JMA01. This junior paper saw another increase in cohort and a wide range of scores across the board. It was pleasing this year to see that more centres are encouraging candidates to show their working in the space provided on the examination paper.

Section A, as always, was a 20 question multiple choice section, each question worth 1 mark. The candidates on the whole do well on this section, with numerous scoring over half marks and many scoring close to full marks. Candidates present their answers clearly; putting a cross in the necessary box and a horizontal line to change their decision. It was also pleasing to see that a minimal amount of candidates were circling the answer, identifying it in the question or crossing more than one box. This helped with the marking of the questions and will lead to less error once computer marked.

Section B requires candidates to work out their answers using the space provided, with questions being worth one, 2 or 3 marks. Again, it was pleasing to see candidates this year using the space provided and showing working. This has allowed the examiners to award method marks which previously have not been awarded. Some candidates continue to use the inside and back cover for working out, which should be discouraged.

Centres must persist in encouraging candidates to show their working out on the examination paper, this will prove to be good practice as they move towards the LMA01 and iGCSE examinations, which require full working to be shown to be awarded marks for some questions. Candidates who do not show working sometimes miss out on method marks following calculation errors, as they could not be seen and worked through. As with the iGCSE it will become more common to see marks only awarded on some questions if working is seen.

**Question 21**

Many candidates answered correctly. A common error was to translate the shape rather than reflect it.

**Question 22**

This question was well answered; a few candidates joined only two pairs of fractions together therefore not scoring.

**Question 23**

A generally answered well question; one error was to occasionally reverse -3 and -5, but did show candidates could place negative numbers on a number line

**Question 24**

This question was answered well with candidates being able to work with data to find the most common result and the range.

**Question 25**

Very little working out was seen in this question, however candidates were able to show they could work with ratios.

#### Question 26

Candidates struggled on this question. Many read the wrong angle from their protractor i.e. 110 as the answer for (a). Some simply guessed their answers. Many students gave the type of angle rather than its size. The use of the reflex angle in part iii caused some candidates problems, many chose to measure the opposite angle but did not know to subtract it from  $360^\circ$ .

#### Question 27

Part (i) was generally answered well. For (ii) the most common error was to round three values to nearest 10 which led to  $40 + 20 + 30 = 90$  which was out of range. Students did not always write the numbers they were reading down so they could not be given the method mark.

#### Question 28

This question was answered well with students having a better understanding of multiples. A common error was to miss out 48.

#### Question 29

Many candidates gained at least one mark on this question, being able to get one correct answer in each column. When errors were made it was usually with the decimals and percentages for 11/25.

#### Question 30

There were mixed responses to this question. Triangular prism was a common wrong answer as was triangle, some students simply drew a triangle. Many did gain one mark for naming it as a pyramid.

#### Question 31

This question was answered well with little working shown.

#### Question 32

A lot of candidates did not seem to understand the concept of rounding and did very accurate long multiplication. However those that did round went on to get the answer required.

#### Question 33

This question was answered well from those who had knowledge of converting between top heavy fractions and mixed numbers but there were centres where candidates had no idea what was required of them.

#### Question 34

A great deal of candidates incorrectly gave 40 as their answer, many tried to count squares but could not manage to deal with parts of squares so rarely achieved the correct total. There were some who had clearly been taught the correct formula and applied it gaining the mark.

#### Question 35

This question was generally answered well. For (b) a common wrong answer was 20.

#### Question 36

This question produced a variety of answers and marks awarded. Most candidates achieved the correct frequencies, which scored them 1 mark, but failed to use the correct column headings. Candidates often only frequency column, seemingly unaware of the idea of having a tally column too.

#### Question 37

This question was poorly answered, a correct method was rarely seen, often students worked out  $160/5$  and  $160/3$  and tried to subtract their answers from these wrong calculations. There were some centres where many students did achieve the 2 marks suggesting this topic had been well taught.

#### Question 38

This question was not answered well. Many candidates could not identify which angles were the same because of the orientation of the triangle. Many gave an answer of 70 or 55 from incorrect working  $(180-70) \div 2$ . 110 was also seen.

#### Question 39

This question was either answered correctly or completely wrong. It was clear that many candidates did not understand the concept of the lines  $x=2$  and  $y=5$ . Of those that gained the mark many stopped their lines at (2,5). There were a number of students who simply plotted the point (2, 5) or drew a line joining (0,5) and (2,0).

#### Question 40

This question was answered very poorly. Few students had any understanding of how to fill in the table in part (i), potentially showing no previous experience of experimental probability. In part (ii) many candidates wrote words rather than a probability answer. They rarely made a connection with what they had written in part (i) with their answer in (ii). Their answer in (iii) was often correct but maybe through luck as it often came from no previous working; often the worded answer seen in (ii) was what they marked in (iii).

#### Question 41

When attempted this question was usually well answered. A common incorrect answer being  $6x-4$ . There were still candidates who had little knowledge of algebra and wrote number answers having chosen their own value for  $x$ .

#### Question 42

Part (a) was answered very well. In part (b) many candidates had little idea of what they were being asked to do, others giving an answer of  $n + 6$  or  $+6$ .

