

Examiners' Report

Principal Examiner Feedback

Summer 2017

Pearson Edexcel In Primary Mathematics Year 6 (JMA01/01)



Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at <u>www.edexcel.com</u> or <u>www.btec.co.uk</u>. Alternatively, you can get in touch with us using the details on our contact us page at <u>www.edexcel.com/contactus</u>.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: <u>www.pearson.com/uk</u>

Summer 2017 Publications Code JMA01_01_1706_ER All the material in this publication is copyright © Pearson Education Ltd 2017 The summer of 2017 has seen another successful sitting of the Primary and Lower Secondary Curriculum examination JMA01, with again an increasing cohort. This year it was far more apparent that centres are encouraging candidates to show their working in the space provided on the examination paper; there are still some who are completing working in pencil and erasing it before the scripts are collected in. This was the first year to see a question on this paper dependent on seeing working to score marks.

Section A, as always, was a 20 question multiple choice section, each question worth 1 mark. Candidates 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. Very few candidates this year circled answers, embedded their answer within the question or chose more than one answer. This helped with the marking of the questions and will lead to less error if computer marked.

Section B requires candidates to work out their answers using the space provided, with questions being worth one or 2 or 3 marks. 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 awardable marks following arithmetic errors, as these 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; as previously stated this year saw the first question on this type on this paper.

Question 21: Many candidates answered this question correctly.

Question 22: Angle measuring seemed better prepared for this year, showing more candidates had the required equipment; however some responses showed that there were still candidates without access to a protractor. A common error was seeing 125° where candidates had read the incorrect scale.

Question 23: A generally well answered question. Incorrect responses did not seem to follow a particular trend.

Question 24: On the whole candidates were able to recognise equivalent fractions.

Question 25: The tendency here was to get this question all correct or not at all. Part a) was poorly answered; many candidates did not understand what they were being asked for with a common error giving 6 for the longest bar. If they did get part a) correct they often went on to get part b) correct too. Part c) saw more incorrect answers than correct ones.

Question 26: Candidates often ignored the units in this question being penalised in parts a) and b); there was leniency in part c) with a follow through being considered from their previous answers. In part a) 8.9 or 890 was often seen, while Part b) was usually correct. Part c) gained a mark most often as candidates could gain a mark from their previous answers; often coming up with 25 and 2.5 as their final answer.

Question 27: This was not a well answered question, candidates did not think about the missing 'tenths' and 5.3 or 0.53 were usually offered a final answer.

Question 28: Another well answered question with part a) gaining marks more often than part b). This helped to discriminate between two levels. The setting out of the question meant there was less reliance on reading the words, potentially helping some candidates.

Question 29: This question was successful dependant on centres. It was clearly something that either had or had not been covered.

Question 30: This was a surprisingly poorly answered question with many candidates unable to set up a correct scale to their bar chart. The most common error here was to not include 0 on their vertical axis. Those who chose a scale going up in 2's were most successful. Candidates were able to score 1 mark if they correctly followed through their own scale with 4 correct bar heights, however this also proved problematic.

Question 31: Again, rounding seems to have caused problems. Candidates were asked to round to the nearest 10 and work out an approximate answer. Many candidates tried to solve the division for an exact answer. If no rounding was seen, no marks were awarded; unless only the correct answer was given as it was assumed the candidate rounded to $80 \div 20$, which could be manipulated in their head.

Question 32: This question was well answered with the majority of candidates being able to plot co-ordinates, which was good to see. Occasionally candidates plotted their x and y co-ordinates in reverse, which again helped to discriminate between two levels.

Question 33: A surprising number of candidates could not count the number of squares to find the area of this shape on a cm² grid. The question did not use the term 'centimetre square grid' as a mark was being awarded for recognising cm² as the correct unit for area here; many candidates did not achieve this mark as they gave only cm as their units.

Question 34: Candidates are still offering a probability as an answer for chance.

In part i) the correct answer of 'likely' or 'very likely' was often substituted by the probability $\frac{7}{10}$; this was allowed. However, candidates who correctly chose the chance in part i) then tended to also offer the chance of 'unlikely' in part ii); a chance was not accepted as a replacement for probability which must be seen

as a fraction, decimal or percentage. Part iii) was very poorly answered with the majority of candidates drawing their arrow at 0.25 rather than 0.3

Question 35: This question was generally answered well with candidates using common multiplication and division facts to solve the problems.

Question 36: Ordering decimals seemed to cause problems this year, with candidates appearing to think that a longer string of numbers made a larger number with 0.57 mistakenly given as a smaller number than 0.507. Candidates who wrote each number to 3 decimal places were usually successful.

Question 37: Converting between Kg and g was often an issue with this question; with 1.2 kg converted to 1002g and 1005g converted to 1.5kg being the most common errors. Converting their answer after subtraction was also a place where mistakes occurred, often seeing 2.95Kg. Many candidates struggled to realise that they needed to add the mass of the two given tubs and subtract it from the total mass in order to find the mass of the third tub. On the whole, not a very well answered question.

Question 38: Pleasingly this was a very successful question. It was well answered, well set out and working was shown. This year was the first time that candidates were to be penalised for not showing their working and the comment 'You must show your working' was added to the script. Almost all candidates used the traditional method, however all written methods would have been awarded marks. Candidates who made arithmetic errors were able to be awarded a method mark for correct understanding of the multiplication process including place value. Most scored at least 1 mark this year.

Question 39: A well answered question.

Question 40: Most candidates made a good start to this question realising the need to isolate. An unfortunate first error was to subtract 7 from 20 rather than add 7 to both sides. Candidates who managed to reach 4x = 27 could gain the mark by showing $x = \frac{27}{4}$. The more able candidate tended scored this mark.

Question 41: This question was not answered particularly well, with many candidates not understanding how to find the mean of a set of numbers. Quite often 6 was given as their final answer, which was the median.

Question 42: Most candidates who attempted this final question were able to achieve at least 1 mark, which was pleasing. Most were able to expand at least one bracket correctly and where both were expanded correctly the correct answer was usually found.

Sue Garner

Principal Examiner

Pearson Education Limited. Registered company number 872828 with its registered office at 80 Strand, London, WC2R ORL, United Kingdom