



Entry Level Certificate

Mathematics

5930 ELC Mathematics
Report on the Examination

Specification 5930
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Introduction

This was the first series of the 5930 specification, which replaces 4930. The new specification allows students to take between four and eight externally-assessed components from a total of eight, with the remaining components being assessed internally. A majority of students have taken the option of completing all eight components externally.

This report on the examination is split into three sections:

- Externally Assessed Components
- Internally Assessed Components
- Administration

Externally Assessed Components

Most centres used Set 1 of the three sets of assessments, implying that most students did not have to re-sit an alternative version.

Unfortunately, some centres completed and submitted the Specimen External Assessments. When this happened, moderators informed centres, who were able to repeat the assessments with the students using the 'live' papers. Other centres sent some external assessments from the current specification (5930) with external assessments from the previous specification (4930). When this happened moderators were able to contact the centre to try to remedy the situation. Please do not use the assessments from 4930 in the future because this specification has now finished.

Some moderators noted that one or two centres sent two copies of the same assessment, which is not allowed. Students should be offered one of the other sets if they need to re-sit a component to achieve a higher score. When this was seen by a moderator the score that was used for the portfolio was the lower of the two scores.

There was a variety in the type of marking of external assessments, which sometimes led to inaccurate totalling of components. There can be 'ticks' next to the answer, but there is also an expectation that external assessments have the marks allocated to each question written in the right-hand margin next to the score available for the question. If a question is worth 2 marks and there is a 'tick' next to the student's answer then there should also be a '2' in the right-hand margin. This is where there could be inconsistencies in totalling of scores.

Component 1 - Properties of Number

Students have done well on this component, and there were very few marking errors. Please note that as long as the intention is clear, when numbers are written as words, any incorrect spelling of numbers to words is not penalised.

Component 2 - The four operations

Generally, students are able to perform calculations without a calculator, although questions involving division were often omitted by students. Students need extra practice with problem solving questions involving the two operations of addition and subtraction and questions on the understanding of multiplication being a method for repeated addition, as these questions were often answered incorrectly.

Component 3 - Ratio

Working with fractions as a complete component is new to this qualification. Students have done well with most of the questions, but those areas poorly done include:

- adding the next number to the pattern, when counting in fractions of one half, one third or one quarter

- recognising and identifying equivalent fractions
- working out any number of thirds, quarters, fifths or tenths of a number

Component 4 - Money

Students understand the questions, but they now need to make sure they complete answers with £ or p when identifying coins or notes. Many centres did not mark questions as 'wrong' when these signs were missing and there were lots of adjustments to students' marks. The mark scheme is very clear about the necessity for these units.

Students should also be taught that the correct notation for money is in the form £3.65 not £3.65p, even though the mark scheme condones this incorrect version. Please also note that 0.75p is not the same as 75p or £0.75; this was marked correct by a lot of centres on the Set 1 Assessments in question 13(a). There are also two questions on Set 1 that allow follow-through answers from an incorrect response for 13(a) or 19(a), which were often marked incorrectly.

Component 5 - The calendar and time

Students have demonstrated a good understanding of time. In general, they can successfully read the time and draw the hands on a clock. There were not many marking problems with this component. However, with lengths of hands on clocks and position of the hour hand it is not necessary to be totally correct i.e. a time of 10:30 would not need the hour hand to be half-way between 10 and 11. It would improve students' understanding of time on an analogue clock if this was taught in centres. As a minimum it would be useful to teach that the hour hand is smaller than the minute hand. Some centres had perhaps not read the comment in the mark scheme about length of hands and were severe in their marking of these questions that required students to draw the time on a clock. Students were less successful with outcome 3.3; using a calendar and writing the date correctly.

Component 6 - Measures

For this component there have been comments from a couple of centres about the first question of Set 1. The question asks students to 'look at the centimetre grid', not 'measure the lines', so the question must be answered about the centimetre grid not about the true lengths of the lines. This is an Entry Level 1 question, set to assess Outcome 1.2, to give the length of a line drawn on a centimetre grid.

Students should be taught that in order to gain marks for outcome 3.4 they must add together their measurements to give the perimeter of a simple shape; many students measured the sides but failed to add the measurements. Students found it difficult to select lengths in different units and compare the total to a requirement, to fulfil the requirements of outcome 3.1

Centres must follow the mark scheme and only give marks for the correct answer. However, in this component, some questions require precise measuring and have comments to ask centres to check the length of their printed papers and allow the 2mm tolerance either side of the true measurement, as distortions can occur when photocopying. On many occasions student answers were marked incorrect when, in fact, they had been answered correctly.

Component 7 - Geometry

This component was very well done by all students, even those with poor number skills. The majority of students could recognise and name shapes and solids, plot and identify coordinates, draw lines of symmetry, complete and recognise nets and identify whether angles are more or less than a right angle. Although some students have problems with their motor skills, there is an expectation that those students who are able to use a ruler and pencil should use this equipment

when drawing a rectangle and lines of symmetry. The 'lines of symmetry' also have to be within a 2mm tolerance and by drawing freehand can have part of the line out of tolerance.

Component 8 - Statistics

In this component students should be encouraged to use a ruler and a pencil when completing graphs. Graphs should also be drawn in the style of the rest of the bars/blocks already drawn, and if not drawn in that style then should be marked incorrect. Students were seen not to be using rulers for this assessment and graphs were very untidy. This component was also badly marked, particularly when students were completing tally charts and frequency tables. Again, the mark scheme must be followed exactly as these questions carry 6 marks altogether. Some teachers were marking student work correct if they had written frequencies instead of tallies in the table.

Internally Assessed Components

This specification allows between none and four internally-assessed components. AQA has provided free downloadable worksheets for each of the outcomes across all the 8 components. These resources are annotated correctly and fulfil all the requirements for each outcome. When submitting internally-assessed work most centres did use these resources.

One or two centres wrote their own worksheets, and it was pleasing to see a few really well thought out worksheets that enabled students to show their competency. However, it was noted that some centres chose to use a commercially produced set of worksheets. Unfortunately, this resource did not address all the outcomes adequately, because some of the outcomes had either been misunderstood by the author or there were insufficient examples to prove competency. When centres had used this resource students had scores adjusted during moderation.

Several centres misunderstood the awarding of internally assessed outcomes by rewarding students for just attempting to complete an outcome on a worksheet, rather than by demonstrating their competency in it. Internal work can be corrected by students and work can be annotated to show amended answers are now correct.

In a few instances, work was submitted that bore no resemblance to the specification and/or was not annotated with the component and outcome, which provided moderators with the difficult task of trying to secure marks for the students who, through no fault of their own, were not going to receive the award at the correct level. Please check through the outcome requirements carefully, as they are very specific. For example, Component 2 outcomes 2.4 and 3.4 require students to use and interpret $+$, $-$, \times and \div . If students only answer questions on addition and subtraction this does not fulfil the requirements.

Component 2, outcome 3.7, requires students to recall and use multiplication facts. Centres often submitted evidence that did not use the facts and therefore cannot be awarded. Work at a higher academic level cannot be used to award outcomes if the content does not fit the outcome requirement. For example, work on areas cannot support Component 6 outcome 3.4, which requires students to measure the perimeter of a simple shape.

Some centres were overly severe on their awarding of outcomes. Students do not have to get 100% on the internal work to be awarded an outcome. As long as around two thirds of the questions are answered correctly and the assessor knows the student has achieved the outcome then the moderator will support the decision. However, in some instances, the assessor may need to look specifically at the questions that the student has answered incorrectly. For example, in Component 1, if a student cannot round a number ending in 5 to the nearest 10, or a number ending in 50 to the nearest 100 then they have not been successful in this outcome - this is where work can easily be corrected by the student. In Component 2, if a student cannot exchange 10's or

100's successfully then those outcomes cannot be awarded and the student needs further teaching before they can have success, and answers can then be corrected.

Internal work is also expected to be marked. There should be no 'global' ticks. Each question should be marked right or wrong so that the moderator can see how much of an outcome has been answered correctly. There were quite a few instances of internal work being incorrectly marked by centres.

Administration

The majority of centres, particularly those centres who have been regularly entering students for the previous specification (4930), are used to the necessary requirements of administration and have sent portfolios in the correct format, with all required documentation.

However, there has been a big increase in the number of centres entering students for Entry Level Certificate and many aspects of administration have been omitted or incorrectly interpreted.

There were many centres who had apparently not read the specification in enough detail and had misinterpreted the requirements. There are Coursework Advisers for every centre, and they can be contacted to help with any questions. If a centre does not have details of their coursework advisor then AQA can be contacted to provide details – please email maths@aqa.org.uk to request the information.

Moderators have had to contact more centres this year for the following reasons, before moderation can be started or completed:

- no Centre Declaration Sheet - the most common problem
- no Candidate Record Forms, or incorrect completion or addition of scores
- no Candidate Record Sheet - used to inform the moderator which outcomes are being claimed
- marks not being input by the 15th May
- incorrect total marks being entered into the e-submissions
- portfolios not arriving by 15th May - If there is going to be a delay then an extension might be given if agreed with AQA
- centres not responding to moderator emails, requiring further emails or phone calls.

The following common errors have been made with students' portfolios:

- plastic wallets or folders/files have been used - portfolios must be secured with a treasury tag, with the Candidate Record Form on top, followed by the Candidate Record Sheet, which is only required if there are Internally Assessed Components
- work has been organised in Component order, ie all Component 1 for all students has been collated together - all the work for one student should be together, preferably in component order
- no Student Numbers or Centre Numbers on the front page of each External Assessment with a Student signature on the front of each of the External Assessments
- incorrect addition on the Candidate Record Form - when this happens some students may end up with a level different to the one they expect. For example, if a student's score should be 192 but was added to 189 then they might be awarded an Entry Level 2 rather than an Entry Level 3 if the incorrect score straddles a grade boundary. This may not be picked up at moderation if that student's work has not been selected for moderation by the e-submission system
- on Internally Assessed Components some centres failed to award 'subsumed' outcomes which are easily spotted on the Candidate Record Sheet. If an outcome has been completed and

there is another outcome in brackets, on the sheet, then this outcome can also be awarded. Evidence does not have to be seen for the subsumed outcome.

Overall, students have scored very well on the new specification for Entry Level Mathematics and moderators have seen a lot of very high marks. There are very few students at the lower end of scores, implying that students have responded well to the increase in content for this award. However, because the grade boundary marks may change from year to year, centres should try to make sure that students achieve as many outcomes as possible and re-take external assessments in order to maximise the points achieved. This should enable the majority of students to move forward onto GCSE Mathematics post-16.

Use of statistics

Statistics used in this report may be taken from incomplete processing data. However, this data still gives a true account on how students have performed for each question.

Mark Ranges and Award of Grades

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