

CCEA Key Skills Application of Number
(Summer Series) 2011

**Chief Examiner's
and Principal Moderator's Report**

application
of number

(Level 1, 2 and 3)

Foreword

This booklet contains the Chief Examiner's/Principal Moderator Report for CCEA's Level 1, 2 and 3 Certificate in Key Skills: Application of Number from the Summer Series 2011.

CCEA's examining teams produce these detailed reports outlining the performance of candidates in all aspects of the qualification in this series. These reports allow the examining team an opportunity to promote best practice and offer helpful hints whilst also presenting a forum to highlight any areas for improvement.

CCEA hopes that the Chief Examiner/Principal Moderator Reports will be viewed as a helpful and constructive medium to further support teachers and the learning process.

This report forms part of the suite of support materials for the specification. Further materials are available from the specification's microsite on our website at www.ccea.org.uk

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KEY SKILLS: APPLICATION OF NUMBER

Principal Moderator's Report

Task Setting

The tasks set were suitable to enable students to generate the evidence required at the appropriate level.

Application of the Assessment Criteria

Level 1

Generally portfolios were correctly assessed as Level 1.

Source material was generally appropriate and the portfolios contained some evidence of planning.

For N1.2(a) and (b) calculations were shown however, these were not always checked. Calculation evidence of N1.2(c) was sometimes not presented. For this criterion, candidates must carry out and check calculations to do with Handling Statistics. They should calculate (and check the calculation) the mean or range for a data set of up to 10 items.

All categories of calculations need to be supported by appropriate checks. For N1.2 only accurate calculation evidence is acceptable.

Evidence for N1.3 was generally appropriate. The results were presented using suitable methods and a simple conclusion provided.

Level 2

The standard of Level 2 portfolios was good this series and all portfolios contained evidence that met the standards at Level 2.

Annotation

Generally portfolios were annotated however, tutors need to ensure that actual calculations are carried out for Handling Statistics at Level 1. In most cases the documentation was completed appropriately.

Evidence of Internal Moderation

Evidence of Internal Moderation was weak. Centres should ensure that internal moderation is carried out prior to entering candidate work for accreditation.

Chief Examiner's Report

Level 3

The level of difficulty in this paper was overall less demanding than some previous papers, but similar to recent series. However, there was a broader range of difficulty between parts of questions, with some parts little above Level 2 (other than the type of number used) while other parts were more complex. The graph was especially 'friendly'.

This variation posed problems in choosing an appropriate pass mark as a candidate's performance was highly dependent on the questions/topics where they chose to use Application of Number skills. The examiners were probably generous, in the end.

Many candidates from the May 2011 examination cohort exhibited ability in knowledge and use of numerate skills. More specific comments follow.

Some issues specific to this paper:

- Q1** As these parts were all one mark each, examiners did not focus on the issue of sensible rounding of final answers – but candidates should be encouraged to give appropriate accuracy for the context.
- (a) Many candidates struggled with finding the percentage change.
 - (b) I was surprised how many candidates could not negotiate this straightforward bit of arithmetic.
 - (c) Those who understood the requirement for a simple ratio usually found the correct answer.
 - (d) The first example in this paper of a relative figure (i.e. value **per** claim); this concept is important, and some seem unable to cope with this.
- Q2** The weakness of a substantial number of candidates in using Simple Proportion in Application of Number Level 3 problems is apparent in this question and many others.
- (a) The answer needs to be rounded to be sensible.
 - (b)&(c) The check needs to check all steps in the calculation; perhaps the difficulty that many had in checking revealed an uncertainty about what they had done originally, even when they had a correct answer in (b).
 - (d) Many confused by multi-stages and changes of units.
- Q3**
- (a) Few correct equations.
 - (b) Some calculated the correct answer without reference to the equation (accepted). Others forgot to answer the question (despite the bold type).
 - (c) As there were few correct equations, there were few who could solve this part. Candidates need to be prepared to solve problems using an equation.
- Q4**
- (a) A large number of correct attempts at this part; it is pleasing to see that candidates appear to be better prepared for this topic.

- (b)& (c) Once again, it was clear that many centres have worked to improve candidates' skills in Pythagoras and Trigonometry.
- (d) A reasonably simple formula for Level 3, but requiring rearrangement – candidates were not as successful as in earlier parts of this question.
- (e) This seemed to me to be a question requiring careful manipulation of units, so it was good to see some candidates who worked logically through to the correct answer.
- Q5**
- (a) Many answered this correctly, but, for a few, it would seem that the old advice to “Read the question!” would be relevant.
- (b) Overall, poorly done.
- (c) Some candidates worked well with the repeated percentage change; others had many unnecessary steps (often with mistakes).
- (d) Disappointingly poor response to a straightforward question at this level.
- (e) Some clear answers, but many who were confused, apparently by the ‘big’ numbers.
- Q6**
- (a) A fairly obvious fraction for those who are looking for it!
- (b) Straightforward for many (as it should be), but still a few pockets of ignorance!
- (c) An easy mark!
- (d) Most candidates found this a straightforward graph – but some needed to take care not to drop marks by lack of attention to detail e.g. in having no title or plotting carelessly.
- (e) Most simple comments made were acceptable.
- (f) A generally poor response in applying proportion to find the relative figure (minutes slept **per** hour) for the US adults.
- (g) For most candidates this seemed to be one stage too many.
- (h) A majority of those who attempted this were correct.
- (i) Many sensible estimation checks from those who had completed (h).

Contact details

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