Government of **Western Australia**
School Curriculum and Standards Authority
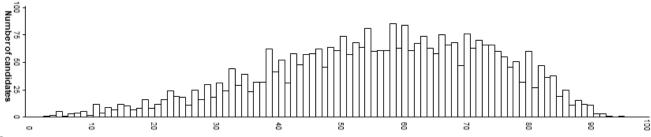
WACE
Western Australian Certificate of Education

Summary report for candidates on the 2014 WACE examination in
Mathematics 3A/3B

Year	Number who sat	Number of absentees
2014	3430	54
2013	4693	54
2012	4630	52

Examination score distribution

Summary

The examination had a mean of 56.74%.Candidate scores ranged from a minimum of 3.33% to a maximum of 96%. The standard deviation was 18.12%. The section means were: Section One: Calculator-free 62.13% and Section Two: Calculator-assumed 54.05%. The reliability of each section with the total examination was very good with 0.91 for Section One and 0.98 for Section Two.

The length of the examination seemed appropriate with at least 91% of candidates attempting each question in Section One and at least 92% attempting each question in Section Two. The two exceptions were Questions 12 and 18 with only 72% and 84% attempts respectively.

Candidates performed well on the standard routine questions with Question 2 (probability using two-way tables) appearing to be the easiest on the paper with a mean of 76.86%. Question 12 (unit circle) appeared to be the most difficult with a mean of 22.81%.

General comments

The examination had a good balance of questions from both Units 3A and 3B with a structure similar to the 2013 paper. The paper also contained some discriminating questions that required candidates to use some higher order thinking. Many candidates did not take the time to read the question instructions carefully. Question 1(b) was a good example where the question specifically stated: 'Do not simplify your answer', but the majority of the candidates did, wasting valuable time.

There were many candidates who lacked basic algebraic skills, or the skills needed to write coherent sentences when an explanation or comment was required.

The use of the Computer Algebra System (CAS) calculator has improved slightly, but the majority of candidates are still not using all the features available to them.

Advice for candidates
- Read each question carefully.
- Make sure you know the difference between decimal places and significant figures.
- Make sure you know the capabilities of your CAS calculator.