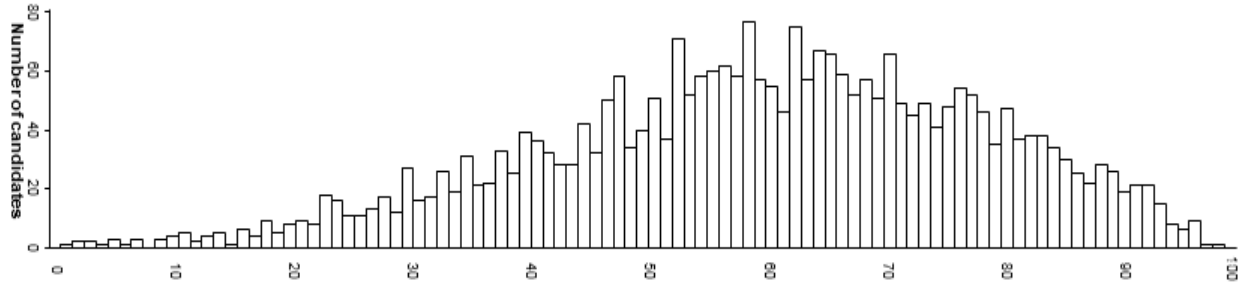
Government of **Western Australia**
School Curriculum and Standards Authority

WACE
Western Australian Certificate of Education

Summary report for candidates on the 2014 WACE examination in Mathematics 3C/3D

Year	Number who sat	Number of absentees
2014	2919	27
2013	3897	28
2012	3748	45

Examination score distribution



Summary

The examination had a mean of 60.08%. Candidate scores for the examination ranged from a minimum of 1.33% to a maximum of 99%. The standard deviation was 18.62%. The section means were: Section One: Calculator-free 60.40% with a standard deviation of 21.58%; and Section Two: Calculator-assumed 59.94% and a standard deviation of 18.28%. The higher standard deviation for the calculator-free section was possibly due to some candidates' lack of basic maths skills wherein they may have relied too heavily on the use of Computer Algebra System (CAS) calculators. This may also explain the higher correlation for the calculator-assumed section with the examination total.

General comments

In general most candidates were able to attempt most questions and perform as expected. Sufficient discrimination within the paper accounted for the range of candidates' abilities and understanding of the course.

Topics that were answered well and understood by most candidates were in determining tangents and solving inequalities. Problems associated with growth and decay, linear programming together with sensitivity and the use of Binomial and uniform probability distributions were answered well. Most candidates were able to work with related rates successfully.

Questions that were presented in familiar contexts were answered well, but when an unexpected context was given, a number of candidates failed to make connections. This was best seen in Question 3. The question was a straight forward probability problem with two dice but candidates needed to present an argument to investigate independence. This confused some candidates who were unable to calculate simple probabilities.