



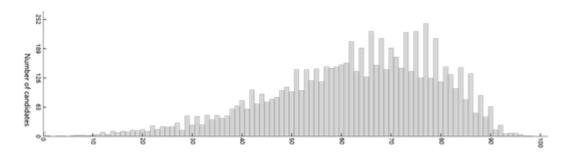
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# Summary report of the 2021 ATAR course examination report: Mathematics Applications

Year	Number who sat	Number of absentees
2021	7581	190
2020	7611	192
2019	8047	163
2018	8451	178

The number of candidates sitting and the number attempting each section of the examination can differ as a result of non-attempts across sections of the examination.

#### Examination score distribution-Written



## Summary

The examination consisted of two sections: a Calculator-free section and a Calculator-assumed section.

Attempted by 7575 candidates	Mean 62.66%	Max 97.96%	Min 0.00%
Section means were:			
Section One: Calculator-free	Mean 71.44%		
Attempted by 7574 candidates	Mean 25.00(/35)	Max 35.00	Min 0.00
Section Two: Calculator-assumed	Mean 57.94%		
Attempted by 7555 candidates	Mean 37.66(/65)	Max 64.31	Min 0.00

#### General comments

There were sufficient complex questions to ensure a good spread of scores and sufficient simple questions to ensure candidates could demonstrate their understanding of concepts. The length of the paper seemed appropriate with 97% of the candidates attempting Question 15 and 97% of the candidates attempting Question 16. Responses indicated that basic arithmetic skills are still very poor with many candidates.

#### Advice for candidates

- Focus on key words/phrases in questions, such as 'in context'.
- Practise doing calculations without a calculator, particularly multiplying fractions/decimals and converting fractions to percentages.
- Show working, even for two-mark questions.
- Practise plotting points on a Cartesian plane.

#### Advice for teachers

- Stress the importance of setting out responses in a logical and methodical way.
- Stress the importance of using brackets.
- Continue to emphasise the importance of using correct terminology. Refer students to the Glossary of terms at the end of the Year 12 syllabus.
- · Remind students to read questions carefully.

# Comments on specific sections and questions

### **Section One: Calculator-free (52 Marks)**

Candidates performed very well in this section, as shown by a mean of 71.44%. However, basic arithmetic skills were lacking among many candidates. These included converting fractions into percentages and reducing a fraction to its lowest terms.

## Section Two: Calculator-assumed (94 Marks)

This section appeared to be more difficult than Section One for candidates, with a mean of 57.94%. Questions 12 and 14 proved to be the discriminating questions. Candidates performed well on the routine questions but experienced difficulty with questions that required interpretation of solutions.