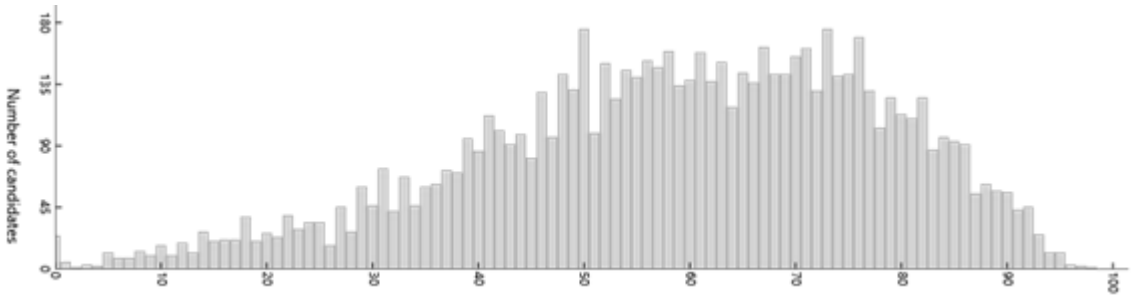
Summary report of the 2024 ATAR course examination report:
Mathematics Applications

Year	Number who sat	Number of absentees
2024	7696	130
2023	7286	147
2022	7124	209
2021	7581	190

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



Summary

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

Attempted by 7674 candidates	Mean 58.55%	Max 98.04%	Min 0.00%
Section means were:			
Section One: Calculator-free	Mean 60.68%		
Attempted by 7668 candidates	Mean 21.24(/35)	Max 34.35	Min 0.00
Section Two: Calculator-assumed	Mean 57.40%		
Attempted by 7659 candidates	Mean 37.31(/65)	Max 63.69	Min 0.00

General comments

The examination was well attempted by most candidates. The length of the paper seemed appropriate, as indicated by good participation rates in the last question parts (a), (b) and (c), but with a decline in responses to parts (d), (e) and (f). There was a good balance of straight-forward and discriminating questions. Question 2 (Two-way tables) appeared to be the easiest on the examination with a mean of 69.31%, while Question 6(d) (interest on loans) and Question13 (d)(i) and (e) (annuities and perpetuities) appeared to be the most difficult with means of 27.12%, 33.84% and 34.74% respectively. Questions that required an explanation or interpretation posed a challenge for many candidates.

Advice for candidates

- During reading time, carefully review the questions to determine the order in which you will answer them.
- For questions that have two or more categories (e.g. Year 8 students and Year 12 students), clearly distinguish between the two categories in your answers.
- Ensure your handwriting is legible.

- Ensure your calculations are presented clearly to allow markers to follow your working.
- Ensure you use a ruler when drawing a least-squares line.
- Read the mark allocation of each question to establish how much time you should spend on your answer.

Advice for teachers

- Encourage students to practise and check their arithmetic.
- Emphasise to students the difference between a recursive rule and a rule for the n^{th} term.
- Ensure students are familiar with syllabus terminology, especially relating to networks.
- Provide students with opportunities to practise accurately reading scales on graphs.
- Encourage students to use their calculator in the Calculator-assumed section, even for calculations that seem simple.

Comments on specific sections and questions

Section One: Calculator-free (54 Marks)

Most candidates performed well in this section, as shown by a mean of 60.68%. However, simple arithmetic calculations, understanding the difference between a recursive rule and a rule for the n^{th} term, identifying an association in a percentage table and correctly verifying Euler's rule were notable areas of weakness for some candidates.

Section Two: Calculator-assumed (99 Marks)

Candidates generally performed well in this section, particularly on Questions 10 and 11. The main areas of weakness were applying a steady-state solution, interpreting 'in context' questions, interpreting data and annuities and perpetuities.