

VCE Mathematical Methods 2023–2027

Written examinations 1 and 2 – End of year

Examination specifications

Overall conditions

There will be two end-of-year examinations for VCE Mathematical Methods – examination 1 and examination 2.

The examination will be sat at a time and date to be set annually by the Victorian Curriculum and Assessment Authority (VCAA). [VCAA examination rules](#) will apply.

Examination 1 will have 15 minutes of reading time and 1 hour of writing time. Students are not permitted to bring into the examination room any technology (calculators or software) or notes of any kind.

Examination 2 will have 15 minutes of reading time and 2 hours of writing time. Students are permitted to bring into the examination room an approved technology with numerical, graphical, symbolic and statistical functionality, as specified in the *VCAA Bulletin* and the VCE Exams Navigator. One bound reference (which may be annotated) may also be brought into the examination room. This may be a textbook, a securely bound lecture pad, an exercise book or a permanently bound student-constructed set of notes without foldouts. Specifications for the bound reference are published annually in the VCE Exams Navigator.

A formula sheet will be provided with both examinations.

The examination will be assessed by a panel appointed by the VCAA.

Examination 1 will contribute 20 per cent to the study score. Examination 2 will contribute 40 per cent to the study score.

Content

The *VCE Mathematics Study Design 2023–2027* ('Units 3 and 4: Mathematical Methods') is the document for the development of the examination. All outcomes in 'Units 3 and 4: Mathematical Methods' will be examined.

All of the content from the areas of study and the key knowledge and key skills that underpin the outcomes in Units 3 and 4 are examinable.

Examination 1 will cover all areas of study in relation to Outcome 1. The examination is designed to assess students' knowledge of mathematical concepts, their skill in carrying out mathematical algorithms without the use of technology, and their ability to apply concepts and skills.

Examination 2 will cover all areas of study in relation to all three outcomes, with an emphasis on Outcome 2. The examination is designed to assess students' ability to understand and communicate mathematical ideas, and to interpret, analyse and solve both routine and non-routine problems.

Format

Examination 1

The examination will be in the form of a question and answer book.

The examination will consist of short-answer and extended-answer questions.

All questions will be compulsory. The total marks for the examination will be 40.

A formula sheet will be provided with the examination. The formula sheet will be the same for examinations 1 and 2.

Answers are to be recorded in the spaces provided in the question and answer book.

Examination 2

The examination will be in the form of a question and answer book.

The examination will consist of two sections.

Section A will consist of 20 multiple-choice questions worth 1 mark each and will be worth a total of 20 marks.

Section B will consist of short-answer and extended-answer questions, including multi-stage questions of increasing complexity, and will be worth a total of 60 marks.

All questions will be compulsory. The total marks for the examination will be 80.

A formula sheet will be provided with the examination. The formula sheet will be the same for examinations 1 and 2.

Answers to Section A are to be recorded on the answer sheet provided for multiple-choice questions.

Answers to Section B are to be recorded in the spaces provided in the question and answer book.

Approved materials and equipment

Examination 1

- Basic stationery requirements (pens, pencils, highlighters, erasers, sharpeners and rulers)

Examination 2

- Basic stationery requirements (pens, pencils, highlighters, erasers, sharpeners and rulers)
- Protractors, set squares and aids for curve sketching
- An approved technology with numerical, graphical, symbolic and statistical functionality
- One scientific calculator
- One bound reference

Relevant references

The following resources should be referred to in relation to the VCE Mathematical Methods examinations:

- *VCE Mathematics Study Design 2023–2027* ('Units 3 and 4: Mathematical Methods')
- Mathematical Methods – Support materials
- VCE Exams Navigator (published annually)
- *VCAA Bulletin*

Advice

During the 2023–2027 accreditation period for VCE Mathematical Methods, examinations will be prepared according to the examination specifications above. Each examination will conform to these specifications and will test a representative sample of the key knowledge and key skills from all outcomes in Units 3 and 4.

Students should use [command/task words](#), other instructional information within questions and corresponding mark allocations to guide their responses.

Separate documents containing sample questions have been published on the VCE Mathematical Methods ['Examination specifications, past examinations and examination reports'](#) page on the VCAA website.

The sample questions provide an indication of the types of questions teachers and students can expect until the current accreditation period is over.

Answers to multiple-choice questions are provided on page 12 of the sample questions document for examination 2.

Answers to other questions are not provided.