



SAMPLE ASSESSMENT OUTLINE

MATHEMATICS SPECIALIST

ATAR YEAR 11

Acknowledgement of Country

Kaya. The School Curriculum and Standards Authority (the Authority) acknowledges that our offices are on Whadjuk Noongar boodjar and that we deliver our services on the country of many traditional custodians and language groups throughout Western Australia. The Authority acknowledges the traditional custodians throughout Western Australia and their continuing connection to land, waters and community. We offer our respect to Elders past and present.

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Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the course. Teachers must exercise their professional judgement as to the appropriateness of any they may wish to use.

Sample assessment outline
 Mathematics Specialist – ATAR Year 11
 Units 1 and 2

Assessment type	Assessment type weighting	Assessment task weighting	Semester/Week	Assessment description
Response	40%	12%	Semester 1 Week 4	Task 1: Test 1 – Geometry: The nature of proof, Circle properties (1.1.1–1.1.15)
		7%	Semester 1 Week 12	Task 2: Test 2 – Vectors in the plane: Representing vectors by directed line segments, Algebra of vectors (1.3.1–1.3.14)
		9%	Semester 2 Week 4	Task 5: Test 3 – Trigonometry: The basic trigonometric functions, Compound angles, The reciprocal trigonometric functions, Trigonometric identities and Applications of trigonometric functions to model periodic phenomena (2.1.1–2.1.9)
		12%	Semester 2 Week 14	Task 8: Test 4 – Matrices: Matrix arithmetic, Transformations in the plane and Systems of linear equations (2.2.1–2.2.11), Real and complex numbers: Proofs involving numbers, Rational and irrational numbers and An introduction to proof by mathematical induction (2.3.1–2.3.6)
Investigation	20%	7%	Semester 1 Weeks 8	Task 3: Investigation 1 – Students use the mathematical thinking process and course related knowledge from Combinatorics (1.2) to select, adapt and apply models to investigate and solve a practical scenario
		6%	Semester 2 Week 8	Task 6: Investigation 2 – Students use the mathematical thinking process and course related knowledge from Matrix arithmetic (2.2.1–2.2.10) to plan, research, conduct and communicate the findings of an investigation
		7%	Semester 2 Week 13	Task 7: Investigation 3 – Students use the mathematical thinking process and course related knowledge from Complex numbers and The complex plane (2.3.7–2.3.13) to plan, research, conduct and communicate the findings of an investigation

Examination	40%	15%	Semester 1 Week 15	Task 4: Semester 1 examination – Section One: calculator-free (35%), Section Two: calculator-assumed (65%) Application of mathematical understanding and skills to analyse, interpret and respond to a variety of question types that require both open and closed responses based on Unit 1 content.
		25%	Semester 2 Week 15	Task 9: Semester 2 examination – Section One: calculator-free (35%), Section Two: calculator-assumed (65%) Application of mathematical understanding and skills to analyse, interpret and respond to a variety of question types that require both open and closed responses based on Unit 1 and Unit 2 content.
Total	100%	100%		