



## SAMPLE ASSESSMENT OUTLINE

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MATHEMATICS METHODS  
ATAR YEAR 12

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## Sample assessment outline

## Mathematics Methods – ATAR Year 12

## Unit 3 and Unit 4

Assessment type	Assessment type weighting	Assessment task weighting	When	Assessment	Syllabus content
Response	40%	6%	Semester 1 Week 5	<b>Task 2:</b> In-class test	<b>Further differentiation and applications:</b> exponential and trigonometric functions, differentiation rules, the second derivative and applications of differentiation
		8%	Semester 1 Week 10	<b>Task 3:</b> In-class test	<b>Integrals:</b> anti-differentiation, definite integrals and the Fundamental theorem, applications of integration
		7%	Semester 1 Week 13	<b>Task 4:</b> In-class test	<b>Discrete random variables:</b> general discrete random variables, Bernoulli and binomial distributions
		6%	Semester 2 Week 5	<b>Task 7:</b> In-class test	<b>The logarithmic function:</b> logarithmic functions, calculus of the natural logarithmic functions
		7%	Semester 2 Week 9	<b>Task 8:</b> In-class test	<b>Continuous random variables and the normal distribution:</b> general continuous random variables, normal distributions
		6%	Semester 2 Week 14	<b>Task 10:</b> Assignment with in-class validation	<b>Interval estimates for proportions:</b> random sampling, sample proportions, confidence intervals for proportions
Investigation	20%	6%	Semester 1 Week 3	<b>Task 1:</b> Select, adapt and apply models to investigate and solve practical problems	<b>Further differentiation and applications:</b> exponential and trigonometric functions
		6%	Semester 2 Week 3	<b>Task 6:</b> Select, adapt and apply models to investigate and solve practical problems	<b>The logarithmic function:</b> logarithmic functions
		8%	Semester 2 Week 13	<b>Task 9:</b> Plan, research, conduct and communicate the findings of an investigation	<b>Interval estimates for proportions:</b> random sampling and sample proportions
Examination	40%	15%	Semester 1 Week 15	<b>Task 5: Semester 1 examination</b> Two sections, Calculator-free (50 mins) and Calculator-assumed (100 mins)	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 3 content
		25%	Semester 2 Week 15	<b>Task 11: Semester 2 examination</b> Two sections, Calculator-free (50 mins) and Calculator-assumed (100 mins)	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 3 and Unit 4 content
<b>Total</b>	<b>100%</b>	<b>100%</b>			