SAMPLE ASSESSMENT OUTLINE

MATHEMATICS SPECIALIST
ATAR YEAR 11
### Sample assessment outline

**Mathematics Specialist – ATAR Year 11**

**Units 1 and 2**

<table>
<thead>
<tr>
<th>Assessment type</th>
<th>Assessment type weighting</th>
<th>Assessment task weighting</th>
<th>Week/s</th>
<th>Assessment description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response</strong></td>
<td>40%</td>
<td>5%</td>
<td>Week 4</td>
<td><strong>Task 1:</strong> Test 1 – Vectors in the plane: Representing vectors in the plane by directed line segments (1.2.1 – 1.2.4), algebra of vectors in the plane (1.2.5 – 1.2.9)</td>
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</tbody>
</table>
|                 |                            | 7%                        | Week 9 | **Task 3:** Test 2 – Vectors in the plane: Algebra of vectors in the plane (1.2.10 – 1.2.14)  
Geometry: The nature of proof and circle properties, including proof and use (1.3.1 – 1.3.15) |
|                 |                            | 7%                        | Week 13| **Task 4:** Test 3 – Geometry: Geometric vectors in the plane (1.3.16 – 1.3.18)  
Combinatorics: Permutations, the inclusion-exclusion and the pigeon-hole principle (1.1.1 – 1.1.6) |
|                 |                            | 5%                        | Week 19| **Task 7:** Test 4 – Trigonometry (2.1.1 – 2.1.8) |
|                 |                            | 9%                        | Week 24| **Task 9:** Test 5 – Matrices (2.2.1 – 2.2.11) |
|                 |                            | 7%                        | Week 29| **Task 11:** Test 6 – Real and complex numbers (2.3.1 – 2.3.16) |
| **Investigation**| 20%                        | 6%                        | Week 6 | **Task 2:** Select, adapt and apply models to investigate and solve practical problems  
Vectors in the plane: Algebra of vectors in the plane |
|                 |                            | 4%                        | Week 14| **Task 5:** Plan, research, conduct and communicate the findings of an investigation  
Combinatorics: Permutations and combinations |
|                 |                            | 4%                        | Week 20| **Task 8:** Select, adapt and apply models to investigate and solve practical problems  
Trigonometry: Model periodic motion using sine and cosine functions and understand the relevance of the period and amplitude of these functions in the model and reciprocal trigonometric functions |
|                 |                            | 6%                        | Week 28| **Task 10:** Plan, research, conduct and communicate the findings of an investigation  
Real and complex numbers: Complex numbers and the complex plane |
| **Examination** | 40%                        | 15%                       | Week 15| **Task 6:** 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%                       | Week 30| **Task 12:** 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%                      |        |                        |