Faculty: Mathematics  Course: Mathematics Extension 2  Year: 12

Assessment Task: 3

Assessment Weighting: 30%  Due: Term 3  Week 4  Date: weeks 3 and 4

Task Type: Hand in Task ☐  In Class Task ☒  Practical Task ☐

Outcomes assessed (NESA)
MEX12-1, MEX12-2, MEX12-3, MEX12-4, MEX12-5, MEX12-6, MEX12-7, MEX12-8
PLEASE NOTE: further information related to these codes can be found on the NESA website

Task Description/Overview
This task will take place in the hall during the HSC Trial Examination period (weeks 3 and 4). The task will consist of multiple choice and short answer questions. Time allowed: 3 hours plus 10 minutes reading time. Equipment required: Black pen and NESA approved calculator.

Detailed Assessment Task Description
Topics to be assessed: All topics will be covered. For further details, refer to the 'Topic Overviews' distributed to all students and uploaded onto CANVAS.

* The Nature of Proof  * Further Proof by Mathematical Induction
* Further Work with Vectors  * Introduction to Complex Numbers
* Using Complex Numbers  * Further Integration
* Applications of Calculus to Mechanics

Test/Examination Structure

<table>
<thead>
<tr>
<th>Section Description</th>
<th>Marks Available</th>
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<tbody>
<tr>
<td>10 Multiple choice questions</td>
<td>10</td>
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<tr>
<td>Short answer questions</td>
<td>90</td>
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<tr>
<td>Total Marks for this task</td>
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Satisfactory completion of courses
A course has been satisfactorily completed, when the student has:
• Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
• Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course.
• Achieved some or all of the course outcomes