Assessment Notification

Faculty: Mathematics    Course: Extension 2    Year: 12

Assessment Task: 1

Assessment Weighting: 30%    Due: Term 4    Week 7    Date: 8am Wednesday 27th November 2019 in room B06

Task Type: Hand in Task    In Class Task    Practical Task

Outcomes assessed (NESA)
MEX 12-1; MEX 12-4; MEX 12-7; MEX 12-8

PLEASE NOTE: further information related to these codes can be found on the NESA website

Task Description/Overview
In this task you will explore the relationship between complex numbers and fractals. In particular you will investigate the Mandelbrot set.

Detailed Assessment Task Description
The assignment comprises six questions.
You will be assessed on how well you:
- accurately solve a variety of problems based on the scenario
- select and use appropriate mathematical process, technologies and language to investigate, organise and interpret problems
- provide reasoning and justification related to the problems

Test/Examination Structure

<table>
<thead>
<tr>
<th>Section Description</th>
<th>Marks Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions 1-4:- Understanding, Fluency and Communication</td>
<td>15</td>
</tr>
<tr>
<td>Questions 5-6:- Problem Solving, Reasoning and Justification</td>
<td>15</td>
</tr>
<tr>
<td>Total Marks for this task</td>
<td>30</td>
</tr>
</tbody>
</table>

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