DEPARTMENT OF MATHEMATICS

MATHS 260 Tutorial 8

WARNING: In Maple TA, the imaginary number 'i' is represented by the upper case letter 'I'. If you use the lower case 'i' you will not get the correct answer.

In Tutorial 8, you will be working through two Maple TA quizzes, called "Complex Numbers Quiz 1: Basic Manipulation" and "Complex Numbers Quiz 2: Eigenvalues and Eigenvectors". Your mark for the tutorial will depend on your performance on these quizzes during the tutorial. You will be required to do the Maple TA quizzes during Tutorial 8 even if you have already attempted them in your own time.

You may do the quizzes as often as you like - you will get different questions each time you do a quiz, and your answers will be automatically marked as soon as you have completed the quiz. Once you have successfully completed the quizzes, show your tutor your final scores to receive your mark for Tutorial 8.

Format of answers

These quizzes have written answer questions. For these questions you must be sure to write your answer in the correct format. Each question states carefully the format of the answer. Once you have typed in an answer, click on the 'Preview' button to check that your formatting is correct.

Some solutions to common formatting problems are given below.

- If you are asked to give a list of solutions, such as eigenvalues, you need to separate your answers with commas. The order of your answers does not matter. For example 3, 8 or 8, 3.
- If you are asked to give an answer which is a vector, you should answer in the format <1,2>. This corresponds to the vector $\begin{pmatrix} 1\\2 \end{pmatrix}$.
- If you are asked for a complex number, the imaginary number 'i' is represented by the upper case letter 'I'. Note that you will not get the correct answer if you use the lower case 'i'.
- $\sqrt{2}$ is written as sqrt(2) or 2^(1/2) in Maple.
- e^{2t} is written as exp(2*t) in Maple.
- Always put an asterisk (i.e., the symbol *) between terms in a product.

How to log in to Maple TA

You can access Maple TA at:

http://maple-ta.math.auckland.ac.nz:8180/mapleta/login/login.do

If this is your first time logging in to Maple TA, you should log in using your UPI as your username and your University ID number as your password. Once you have logged in for the first time, you can change your password.

The first time you log in, you need to validate your user details and register for the class. Check your user details are correct and click on 'Submit' to continue. If you want to change your password, click 'Password Update' at the top of the page. Click on 'Find classes open for registration', select 'Maths 260 2010 Semester 2 ', click 'Register' and then 'Confirm'. You only have to do this the first time you log in.

How to use Maple TA

Once you log in to Maple TA, you should see a screen entitled 'Classes I Am Taking', and a link to 'Maths 260 2010 Semester 2'. Click on this link and a list of the available assignments will appear. Click on the link 'Complex Numbers' Quiz 1' to start the first quiz.

You can navigate through the quiz questions using the 'Back' and 'Next' buttons at the top of the page, or using the 'Question Menu'. Once you have answered each question, click on 'Preview' to check that you have typed your answer in the right format. When are you satisfied with your answer, click 'Next' to move on. You can go back and change you answers at any time. There is no time limit to the test.

Once you have completed all the questions, click the 'Grade' button at the top of the page. Maple TA will warn you if there are questions you have left unanswered. Once you have your score, you can click the 'View Details' button at the top of the page to see which questions were answered incorrectly.