COMPUTER LAB WORKSHEETS

MAPLE lab worksheet for week 1: Introduction to MAPLE

MAPLE is a powerful mathematical package capable of advanced procedures covering numerical, algebraic and graphical aspects of mathematics. In this first laboratory session, we shall explore a few of the things MAPLE can do by following part of the New Users Tour. Login as usual and from the Start menu select Programs, then Numerical Modelling and then MAPLE. Then select New Users Full Tour. This introductory tutorial is meant to be self-explanatory, and so all you need to do is to follow carefully the instructions given on the screen. When the package loads up, you may wish to maximize the various windows so that you can see as much as possible on the screen at once. After reading the introductory page, work through the following sections:

(1) WORKING THROUGH THE NEW USERS TOUR

(2) NUMERICAL CALCULATIONS

(3) ALGEBRAIC COMPUTATIONS

(4) 2-DGRAPHICS

(6) CALCULUS

(12) ON-LINE HELP

(13) SUMMARY

Near the beginning of several sections, you will see the prompt [¿restart (in red); place the cursor after the semicolon and press Return. This will start the section for you. When you get to the end of some of the demonstrations you will see a blank prompt [¿ (in red) and so you can try out a few calculations yourself, following the syntax in the examples given. Remember to end your statements with a colon or semicolon. Explore the difference between ending a statement with a semicolon and ending the same statement with a colon. For other demonstrations the prompt is obtained by placing the cursor at the end of Click here to Return to the Main Menu and pressing Return. The two sections (8) DIFFERENTIAL EQUATIONS (9) LINEAR ALGEBRA will be useful later on in connection with MATH1020 "Calculus and Differential Equations" and MATH1048 "Linear Algebra I".