Maple

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Contents

Chapter 1

Introduction to Maple

1.1 What is Maple?

- Maple is a Symbolic Computation System or Computer Algebra System which can be used to obtain exact analytical solutions to many mathematical problems, including integrals, systems of equations, differential equations, and problems in linear algebra.
- It also has the capability of plotting functions in 2D and 3D and displaying animations.
- Maple can perform calculations in binding speed, but one has to be responsible for making these calculations meaningfully and mathematically correct.

1.2 Using a Maple Worksheet

The following figure shows the Maple window with a blank Maple worksheet and this window contains:

- a menu bar across the top with menus:
- a tool bar immediately below the menu bar, with button-based short cuts to common operations;
- a context bar directly below the tool bar, with controls specific to the task being performed;

- a window, containing a Maple prompt [>, called a worksheet;
- a status bar at the bottom, with boxes marked Ready, Time and Memory

Figure 1.1: The menu bar, tool bar, and context bar.
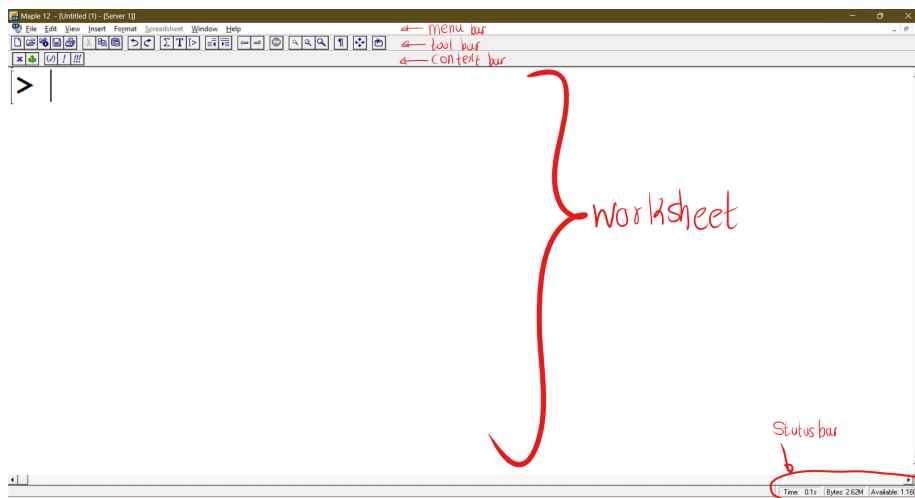
From the File menu, select the options **Save** or **Save As** to save the active Maple classic worksheet. Maple classic worksheets are saved with the extension ".mws", but in the standard interface, Maple worksheets are saved with the extension ".mw"

1.3   Entering Maple Commands

- The " > " is the command prompt in Maple. That is where you type your commands or statements.

- Every command in Maple should end with a semicolon(;) or a colon(:).
  (If you use a semicolon then the result of the command will be displayed. If you use a colon then the result will not be displayed.)