Chemistry C3102-2006: Polymers Section

HOMEWORK #1

The aim of this short homework is to familiarise the student with Maple or Mathematica, as these programs will be used in other homeworks. Many may find they already know one of these programs, while others may find this rather difficult. If you are unable to complete this in an hour, or make headway with one of the programs, please email Edie at sevick@rsc.anu.edu.au to set up a consultation time. Once you know how to operate Maple, you should be able to complete this in 5 minutes.

Due Friday, April 7

Using Maple or Mathematica, solve the following integrals and display a numerical result. Produce a hardcopy or electronic copy of the program output to return as the completed homework. Electronic copy can be sent to sevick@rsc.anu.edu.au.

1. $\int_0^\infty x^2 \exp\left(-\frac{3x^2}{2}\right) dx$

2. $\int_0^1 x^2 \exp\left(-\frac{3x^2}{2}\right) dx$