J|A|C|S

COMPUTER SOFTWARE REVIEWS

Mathematica 4.2. Wolfram Research Inc. 100 Trade Center Dr., Champaign, IL 61820-7237. www.wolfram.com. Suggested Retail Price: $1880. Academic List Price: $895. Student Version: $139.

The Mathematica software package is specifically designed to allow a plethora of data analysis and graphical applications. Currently supported operating systems include Windows, MacOS, MacOS X, Linux (PC, Alpha, PowerPC), Solaris, HP-UX, IRIX, AIX, and Compaq Tru64 Unix. Although minimum system requirements vary by platform, they are typically modest by current standards.

The short paperback ("Getting Started") included with the Mathematica software package provides a convenient reference for basic capabilities. This booklet documents the simplest considerations and available operations, such as the mathematical notation of the program, the use of cells and notebooks, interfacing with the World Wide Web via hyperlinks, and the process of creating graphical and auditory representations of data. However, this document is not just for the novice user — even experienced users will return to this source for its quick references to more detailed information in the hardback manual. Additionally, the "10 Minute Tutorial" provides further examples of standard applications in a concise point-by-point style.

Among the most significant new additions to Mathematica 4.2 include compatability with XML and Java applications, with extensions of the former being available that allow direct storage and manipulation of notebooks as XML files. Furthermore, a newly implemented slide show environment affords users further opportunity to expand their use of Mathematica in real-time presentations.

Despite the expanding scope of the interfacing capabilities of Mathematica, its real strength rests in its ability to stand alone as a tool for data manipulation and graphical applications. Indeed, experienced and patient users will find little need for the robust importing and exporting features.

Kurt W. Sattelmeyer,
University of Georgia