

*The Practical Approach™ Utilities for Maple™: Maple V, Release 3.* By Darren Redfern. Springer, New York. (1995). 312 pages. \$69.00 (including diskette).

Contents:

1. Introduction. 2. Installing the utilities. 3. Getting started with Maple. 4. ListTools. 5. ExpressionTools. 6. PatternTools. 7. ArrayTools. 8. DrawTools. 9. StringTools. 10. IOTools. 11. MiscTools. Index.

*Maple V: Programming Guide.* By M. B. Monagan, K. O. Geddes, K. M. Heal, G. Labahn and S. Vorkoetter. Springer-Verlag, New York. (1996). 379 pages. \$34.00.

Contents:

1. Introduction. 2. Fundamentals. 3. Advanced programming. 4. The Maple language. 5. Procedures. 6. Debugging Maple programs. 7. Numerical programming in Maple. 8. Programming with Maple graphics. 9. Input and output. Index.

*Maple V: Learning Guide.* By K. M. Heal, M. L. Hansen and K. M. Rickard. Springer-Verlag, New York. (1996). 269 pages. \$24.00.

Contents:

1. Interactive use of Maple. 2. Mathematics with Maple: The basics. 3. Finding solutions. 4. Graphics. 5. Evaluation and simplification. 6. Examples from calculus. 7. Input and output. Index.

*World Wide Web Journal: Fourth International World Wide Web Conference.* O'Reilly & Associates, Sebastopol, CA. (1995). 735 pages. \$39.95.

Contents:

Survey. Results from the third WWW user survey (James E. Pitkow and Colleen M. Kehoe). Collaborative systems. The open meeting: A Web-based system for conferencing and collaboration (Roger Hurwitz and John C. Mallery). Using versioning to provide collaboration on the WWW (Fabio Vitali and David G. Durand). Group asynchronous browsing on the World Wide Web (Kent Wittenburg, Duco Das, Will Hill and Larry Stead). Supporting collaborative information sharing with the WWW: The BSCW shared workspace system (Richard Bentley, Thilo Horstmann, Klaas Sikkell and Jonathan Trevor). Objects on W3. A Web of distributed objects (Owen Rees, Nigel Edwards, Mark Madsen, Mike Beasley and Ashley McClenaghan). W3Objects: Bringing object-oriented technology to the Web (David Ingham, Mark Little, Steve Caughey and Santosh Shrivastava). Caching (Making World Wide Web caching servers cooperate (Radhika Malpani, Jacob Lorch and David Berger). Caching proxies: Limitations and potentials (Marc Abrams, Charles R. Standridge, Ghaleb Abdulla, Stephen Williams and Edward A. Fox). Resource discovery. IFAF Templates in use as Internet metadata (Dave Beckett). A World Wide Web resource discovery system (Budi Yuwono, Savio L.Y. Lam, Jerry H. Ying and Dik L. Lee). The Krakatoa Chronicle: An interactive personalized newspaper on the Web (Tomonari Kamba, Krishna Bharat and Michael C. Albers). Web map: Concept mapping on the Web (Brian R. Gaines and Mildred L.G. Shaw). Tools for building Webs over databases. Swoop: An application generator for ORACLE/WWW systems (Andrew Hunter, Ian Ferguson and Steven Hedges). Multi-engine search and comparison using the MetaCrawler (Erik Selberg and Oren Etzioni). DB: Browsing object-oriented databases over the Web (C. Varela, D. Nekhayev, P. Chandrasekharan, C. Krishnan, V. Govindan, D. Modgil, S. Siddiqui, D. Lebedenko and M. Winslett). W3 applied to education. Toward a new educational environment (Ming-Chih Lai, Bin-Horng Chen and Shyan-Ming Yuan). CyberProf: An intelligent human-computer interface for asynchronous wide area training and teaching (Alfred W. Hubler and Andrew M. Assad). A modular training system for education in the WWW environment (U. Schroeder, B. Tritsch and A. Krjerriem-Jasnoch). A WWW learning environment for mathematics (Kostadin Antchev, Markku Luhtalahti, Jari Multisilta, Seppo Pohjolainen and Kari Suomela). W3 software design techniques (WWW meets Linda: Linda for global WWW-based transaction processing systems (Werner J. Schoenfeldinger). Interface-parasite gateways (Robert A. Barta and Manfred Hauswirth). Media. Not just decoration: Quality graphics for the Web (Chris Lilley). Bringing music to the Web (Jacco van Ossenbruggen and Anton Eliëns). Polymap: A versatile client-side image map for the Web (Cheong S. Ang, Michael D. Doyle and Peter Brantley). Translating ISO 12083 mathematical markup for electronic documents (Roger Thompson and Keith Shafer). Real-time video and audio in the World Wide Web (Zhigang Chen, See-Mong Tan, Roy H. Campbell and Yongcheng Li). Lessons for the World Wide Web from the text encoding initiative (David T. Barnard, Lou Burnard, Steven J. DeRose, David G. Durand and C.M. Sperberg-McQueen). Mobile code. Omnaware: A universal substrate for Web programming (Steven Lucco, Oliver Sharp and Robert Wahbe). Low level security in Java (Frank Yellin). Security. CCI-based Web security: A design using PGP (Judson D. Weeks, Adam Cain and Schneier). Client-side techniques. Introducing Candleweb and Å(awe), bringing animation power to the World Wide Web (Kjell Øystein Arisland, Svein Arne Johansen and Gunnar Rønning). Local control over filtered WWW access (Brenda S. Baker and Eric Grosse). Multi-head multi-tail mosaic (Brian C. Ladd, Michael V. Capps, P. David Stotts and Rick Furuta). Mobile GUI on the Web (Daniel Dardailler). Using graphic history in browsing the World Wide Web (Eric Z. Ayers and John T. Stasko). Agents. An HTTP-based infrastructure for mobile agents (Anselm Lingnau, Oswald Drobnik and Peter Dömel). Jasper: Communicating information agents for WWW (John Davies, Richard Weeks and Mike Revett). Constellation: A Web-based design framework for developing network applications (Nino Vidovic and Dalibor F. Vrsalovic). Hypertext and linking. Linking in a global information architecture (Karen R. Sollins and Jeffrey R. Van Dyke). Commercial hypertext publishing: Electronic books using trails and the author-publisher-

reader model (Leslie D. Cuff). Ingrid: A self-configuring information navigation infrastructure (Paul Francis, Takashi Kambayashi, Shin-ya Sato and Susumu Shimizu). Application building tools. Application-specific proxy servers as HTTP stream transducers (Charles Brooks, Murray S. Mazer, Scott Meeks and Jim Miller). DynaWeb: Integrating large SGML repositories and the WWW (Gavin Thomas Nicol). RMC: A tool to design WWW applications (Alicia Díaz, Thomás Isakowitz, Vanesa Maiorana and Gabriel Gilabert). Programming the Web: An application-oriented language for hypermedia service programming (David A. Ladd and Christopher Ramming). Payment. Scalable, secure, cash payment for WWW resources with the PayMe protocol set (Michael Peirce and Donal O'Mahony). The Millicent protocol for inexpensive electronic commerce (Steve Glassman, Mark Manasse, Martin Abadi, Paul Gauthier and Patrick Sobalvarro). Authoring tools. A schema-based approach to HTML authoring (Marcus Kessler). Rules for extending a WWW client: The symposia API (Jean Paoli). The distributed link service: A tool for publishers, authors, and readers (Leslie Carr, David De Roure, Wendy Hall and Gary Hill). Structured cooperative authoring on the World Wide Web (Dominique Decouchant, Vincent Quint and Manuel Romero Salcedo). The boomerang white paper: A page as you like it (Curtis E. Dyreson and Anthony M. Sloane). Novel applications for W3. A World Wide Web Telerobotic remote environment browser (Eric Paulos and John Canny). Data transport within the distributed oceanographic data system (James Gallagher and George Milkowski). Requirements for taking applications beyond the enterprise (Graeme Port, Clifford Heath, Tim Segall and Phillip Merrick). Best papers from regional conferences. Classifying Internet objects (F. Luís Neves and José N. Oliveira). A generic map interface to query geographic information using the World Wide Web (David Crossley and Tony Boston).

*Performance-Based Student Assessment: Challenges and Possibilities. Ninety-Fifth Yearbook of the National Society for the Study of Education, Part 1.* Edited by Joan Boykoff Baron and Dennie Palmer Wolf. University of Chicago Press, Chicago, IL. (1996). 318 pages. \$31.00 (£24.75).

Contents:

The National Society for the Study of Education. Board of Directors of the Society, 1995–96; Contributors to the yearbook. Acknowledgments. Editors' preface. 1. Toward access, capacity, psychometric soundness and coherence. I. Access to excellence through new forms of student assessment (Dennie Palmer Wolf and Sean F. Reardon). II. Can performance-based assessments contribute to the achievement of educational equity? (Edmund W. Gordon and Carol Bonilla-Bowman). III. Authentic assessment and school development (Linda Darling-Hammond and Jacqueline Ancess). IV. Can performance-based student assessments be psychometrically sound? (Robert L. Linn and Eva L. Baker). V. Coherence, assessment, and challenging content (Marshall S. Smith and Jessica Levin). 2. Realizations at the district and state levels. VI. Coherence, comprehensiveness, and capacity in assessment systems: The Pittsburgh experience (Paul G. LeMahieu and JoAnne T. Eresh). VII. Rewriting the tests: Lessons from the California State Assessment System (Bill Honig and Francie Alexander). VIII. Developing performance-based student assessments: The Connecticut experience (Joan Boykoff Baron). IX. Statewide portfolio assessment: The Vermont experience (Richard P. Mills). X. Assessment and accountability in Kentucky's school reform (Brian Gong and Edward F. Reidy). 3. Possibilities at the national level. XI. A vision for the role of new assessments in standards-based reform (Governor Roy Romer and Joy Fitzgerald). XII. Standards and portfolio assessment (Philip Daro). XIII. The evolution of college entrance examinations (Donald M. Stewart and Michael Johaneck). XIV. The evolution of the National Assessment of Educational Progress: Coherence with best practice (Edward H. Haertel and Ina V.S. Mullis). Questions for further study. Name index. Subject index. Information about membership in the society. Publications of the society.

*Representations, Targets, and Attitudes.* By Robert Cummins. MIT Press, Cambridge, MA. (1996). 153 pages. \$25.00.

Contents:

Acknowledgments. 1. Introduction. 2. Contents and targets; Attitudes and applications. 3. More about error. 4. Use and error. 5. Causal theories. 6. Atomism and holism. 7. Representation and isomorphism. 8. Target fixation. 9. Why there is no symbol grounding problem. 10. Language and communication. References. Index.

*Mathematical Algorithms in Visual Basic for Scientists & Engineers.* By Namir C. Shamma. McGraw-Hill, New York. (1996). 251 pages. \$45.00 (including diskette).

Contents:

Introduction. 1. Simultaneous linear equations. 2. Solving nonlinear equations. 3. Interpolation. 4. Numerical differentiation. 5. Numerical integration. 6. Solving ordinary differential equations. 7. Optimization. 8. Basic statistics. 9. The ANOVA tests. 10. Linear regression. 11. Multiple and polynomial regression. 12. The functions library. Index. About the author.

*The Maple Handbook, Maple V, Release 4.* By Darren Redfern. Springer-Verlag, New York. (1996). 495 pages. \$29.00.

Contents:

Introduction. Getting started with Maple. Calculus. Linear algebra. Solving equations. Polynomials and common transforms. Geometry. Combinatorics and graph theory. Number theory. Statistics. Standard functions and constants. Expression manipulation. Plotting. Programming and system commands. Miscellaneous. Index.