

Java Threads. By Scott Oaks and Henry Wong. O'Reilly, Sebastopol, CA. (1997). 252 pages. \$29.95.

Contents:

Preface. 1. Introduction to threading. 2. The Java threading API. 3. Synchronization techniques. 4. Wait and notify. 5. Useful examples of Java thread programming. 6. Java thread scheduling. 7. Advanced synchronization topics. 8. Thread groups. Appendices. A. Miscellaneous topics. B. Exceptions and errors. C. Threading within the Java API. D. Thread debugging. Index.

Arrow Logic and Multi-Modal Logic. Edited by Maarten Marx, László Pólos and Michael Masuch. CSLI Publications/FoLLI, Stanford, CA. (1996). 247 pages. \$59.95 (hardback), \$22.95 (paperback).

Contents:

Contributors. Preface. I. Arrow logic. 1. A crash course in arrow logic (Yde Venema). 2. Investigations in arrow logic (Maarten Marx, Szabolcs Mikulás, István Németi and Ildikó Sain). 3. Causes and remedies for undecidability in arrow logics and in multi-modal logics (Hajnal Andréka, Ágnes Kurucz, István Németi, Ildikó Sain and András Simon). 4. Associativity does not imply undecidability without the axiom of modal distribution (Viktor Gyuris). 5. Dynamic arrow logic (Maarten Marx). 6. Complete calculus for conjugated arrow logic (Szabolcs Mikulás). 7. Many-dimensional arrow structures: Arrow logics II (Dimiter Vakarelov). II. Multi-modal logic. 8. What is modal logic? (Maarten de Rijke). 9. Content versus wrapping: An essay in semantic complexity (Johan van Benthem). 10. A fine-structure analysis of first-order logic (István Németi).

Animating Calculus: Mathematica® Notebooks for the Laboratory. By Ed Packel and Stan Wagon. Springer-Verlag, New York. (1997). 292 pages. DM 54.00, öS 394.20, sFr 48.00.

Contents:

Preface. To the instructor. To the student. 1. Initiation. 2. Plotting. 3. Derivatives: Measuring the rate of change. 4. The race to infinity. 5. Indeterminate limits and L'Hôpital's rule. 6. Using calculus to land an airplane. 7. Max-min methods: Mind meets machine. 8. Staying on track with Newton's method. 9. Population dynamics, iteration, and chaos. 10. What is an integral? 11. The fundamental theorem. 12. The needle problem. 13. Integration by machine. 14. Numerical integration. 15. Differential equations and Euler's method. 16. Probability and calculus. 17. Roses, snails, and butterflies. 18. Rolling wheels. 19. Infinite series of constants. 20. Rhythm and dissonance in the harmonic series. 21. Polynomial approximation and Taylor series. 22. A deceptive definite integral. Appendices. 1. Troubleshooting. 2. Usage messages for *Animating Calculus* objects. Index of *Mathematica* objects. Subject index. Common causes of errors in *Mathematica*. *Mathematica* commands for calculus.