things that I could do in my school, my district, and my state. Page after page challenged my mind, played with my emotions, and riveted my attention. I have never seen, read, or heard such a succinct, comprehensive presentation of how education could be. I plan to be sure my principal, school board members, and nearby education professors read this book. You should, too!—*William Rogge, 8221 E. Avon Lane, Lincoln, NE 68505.*

Statistics for the Twenty-First Century

(R), Florence and Sheldon Gordon, eds. 1992, xii + 318 pp., $22 paper. ISBN 0-88385-078-8. Mathematical Association of America, 1529 18th St., N.W., Washington, DC 20036.

The preface states, "The volume presents an overview of innovative and dynamic possibilities that can be used to bring any introductory statistics course alive: to make it more current, more realistic and more exciting to the students and to involve them directly in the subject as active participants." Indeed, this book is a gold mine of information for teaching statistics, consisting of twenty-five articles on various subjects written by leaders in statistical education. These articles are arranged in four categories: Issues in Statistical Education, Innovative Curricula for Statistical Education, Technology in Statistical Education, and Resources in Statistical Education. Many articles stress data analysis over more formal topics, such as combinatorics or hypothesis testing. The point is made that statistics borrows from mathematics but is not a branch of mathematics and should not be taught like mathematics. The authors suggest many classroom ideas, ranging from some specific interesting problems to semester-long student-research projects. Articles are included on simulation, the psychology of learning probability, using graphing calculators and computers, logging on to an e-mail network for statistics education, and finding real data from an annotated bibliography of over one hundred real-world data sets appropriate for teaching statistics. Anyone teaching statistics in college or high school will find this book is a valuable resource.—*Kevin Jones,* *Southwest Texas State University, San Marcos, TX 78666.*

Symbolic Computation in Undergraduate Mathematics Education

(C), Zaven A. Karian, ed. 1992, x + 181 pp., $20 paper. ISBN 0-88385-082-6. Mathematical Association of America, 1529 18th St., N.W., Washington, DC 20036.

This new publication from the MAA concerning symbolic computing systems is divided into five main parts. Part I: General Pedagogic Issues contains six essays each with its own substantial list of references. These essays involve general issues of learning mathematics and the role of symbolic computation in that process.

Part II: Symbolic Computation in Calculus consists of five essays describing various experiences in using SCS in the calculus. Part III: Symbolic Computation in Linear Algebra and Differential Equations contains five papers on using SCS in a variety of settings.

Part IV: Symbolic Computation in Advanced Undergraduate Courses gives the reader a look at using symbolic computing systems in probability and statistics and combinatorics courses. Part V: Getting Started and Review of the Literature is an excellent source of ideas on how to introduce SCS into the curriculum. Also included are a review of calculus laboratory materials and a large annotated bibliography.

If you are considering putting a symbolic computing system into your curriculum, this is one publication you should have. It does not stress one particular technology or system but rather covers the subject areas in which you may be interested.—*Russel M. Day, Washington, IL 61571.*

Products

From NCTM

Algebra for Everyone. 1992, 19-min. videotape and iv + 43-pp. discussion guide, $47.50. National Council of Teachers of Mathematics, 1906 Association Dr., Reston, VA 22091

This teaching package of a nineteen-minute videotape and discussion guide is a valuable resource for mathematics educators who want their students to be able to function and survive in today's workplace and in the increasingly technological world.

The videotape shows an unrehearsed student group doing small segments of three of the seven activities contained in the discussion guide. The students use various manipulatives and also graphing calculators. They present their ideas to each other and to the entire class. All the students are actively engaged in the activities and appear to be enjoying the activities.

The seven lessons presented in the discussion guide present outstanding beginnings for teachers in extending their curriculum by using manipulatives and the group approach to learning. Each lesson states the objectives, the materials needed, and the procedure. Some lessons have follow-up activities or group activities and materials that can be reproduced. With sufficient preparation each lesson can be completed in a normal fifty-minute class period. These lessons will create student interest and enthusiasm. The graphing-calculator lesson could easily be expanded past beginning algebra.

This entire program can be used in introductory mathematics staff-development programs with teachers of similar classes working in groups and developing lessons for their courses. The program strongly supports the NCTM's curriculum standards.

I recommend that those who are responsible for curriculum development in their schools or districts add this resource to their library.—*Judy B. Harrold, Orangeburg-Wilkinson High School, Orangeburg, SC 29115.*

Calendars for the Calculating, Vol. 2.

Set of 9 reusable calendars, Sept.–May, for JH & HS, arranged by date with over 200 mathematical challenges, $7/set. National Council of Teachers of Mathematics, 1906 Association Dr., Reston, VA 22091.

These calendars are a second helping of various mathematical problems at levels 9–12. The questions could be assigned as "problems of the day" or by judicious selection for appropriate classes as "problems of the week."

The topics covered include number theory, alphametics, probability, geometry, measurement, functions, sequences, rates, magic squares, and even a touch of calculus (10 Sept.). Also included are a few brief biographical portraits of such modern mathematicians as Martin Gardner, George Pólya, Constance Reid, and Garret Birkhoff—the latter one of the "Famous Five" at Miami of Ohio in the fall of 1976.

Solutions may be in the form of calculations, formal proofs, trial and error, and the like; they are found on the reverse of the calendar for each month.

Some of the problems are "old chestnuts" (4 Feb., 20 May), many others are refreshingly new (3 Mar., 29 Mar., 19 May), while a lot are variations on similar problems.

There should be, according to my calendar, 273 different entries, but 29 Dec. and 10 Mar. appear to be the same question. A few of the problems may be difficult to comprehend, and 23 Jan. refers to the $\sqrt{2x}$ but only $x\sqrt{2}$. (Does it matter? Is there a difference?)

Apart from these minor complaints, this package of puzzling problems is projected for possible perusal by pleasant pupils!—*David M. Handley, Quinte Secondary School, Belleville, ON K8P 2G3.*

From Other Publishers

Line Design Poster Sets. 1992, four posters per set, ea. set measures 11.5" × 11.5", $9.95 ea. set. Set A, ISBN 0-96651-