

The Discrete Reviewer

by Janice Kowalczyk



The Discrete Reviewer provides recommendations and suggestions from teachers for discrete mathematics resources for the classroom. The material in this issue comes mostly from the recent summer institutes of the *Leadership Program in Discrete Mathematics*, which were geared towards K-8 teachers for the first time. We would greatly appreciate your comments and recommendations for this column. Your feedback on any resources that you try as a result of this column is also very useful. In a future column we plan to focus on discrete mathematics in literature: please send your suggestions and ideas.

ACTIVITY BOOKS

(K-8) **INSides, OUTsides, LOOPS AND LINES**, by Herbert Kohl,
W.H. Freeman, 41 Madison Ave, New York, NY, 10010
Cost: \$12.95
ISBN: 0-7167-6586-1

If I had to recommend one resource book to elementary and middle grade teachers in discrete mathematics this would be it. Discovered in the children's section of the Border's book store this past summer by Leadership Program participants, this book provides playful introductory activities in a number of areas of discrete mathematics. The five chapter titles give you the best flavor for its contents: *Lost in the Garden* — simple closed curves; *Map Coloring* — figuring out the rules; *Tracings* — simple beginnings lead to complicated patterns; *Stretching, Bending and Twisting* — a new way to look at shapes; and *Mobius Strips* — some thoughts on doing mathematics, with a twist.

(4-8) **Let's Investigate Series**, by Marion Smoothey,
Marshal Cavendish Corp., 2415 Jerusalem Ave.,
P.O. Box 587, North Bellmore, NY, 11710
Cost: \$16.95 each

Let's Investigate Number Patterns: ISBN: 1-85435-458-2
... *Codes and Sequences*: ISBN: 1-85435-774-3
... *Shape Patterns*: ISBN: 1-85435-465-5

"This three-book series is an excellent reference set to have in your classroom or school library. A wide variety of math topics are covered, and there are enough activities to pique everyone's interest."

—Judy Ann Brown, Pleasant Valley Middle School,
Brodheads ville, PA

READINGS ON MODERN MATHEMATICS

Nature's Numbers, by Ian Stewart
Basic Books, 10 East 53rd St., New York, NY 10022-5299
Cost: \$20.00
ISBN: 0-465-07273-9

A 1995 publication, this book is intended for a broad audience and is wonderful reading for anyone interested in the connections between mathematics and nature. "*Nature's Numbers* will equip you with a mathematician's eyes. It will take you sightseeing in a mathematical universe. And it will change the way you view your own world." (From the preface.)

Five Golden Rules: Great Theories of 20th-Century Mathematics — and Why They Matter, by John L. Casti,
Wiley & Sons, 605 Third Ave., New York, NY 10158-0012
Cost: \$24.95
ISBN: 0-471-00261-5

Five Golden Rules is the engaging story of five great mathematical breakthroughs of this century and how they are shaping our lives and our thinking. Discrete mathematics is a theme throughout the book. The author's ideas are illustrated with a resplendent array of real world problems that have been solved by these mathematical discoveries. Fascinating reading.

NEWSLETTER ON CLASSROOM TECHNOLOGY

CLIME Connections, Ihor Charischak,
Stevens Institute of Technology - CIESE Center,
Hoboken, NJ 07030
icharisc@stevens-tech.edu
Hardcopy: \$2.00/Issue, or \$10/Yr.
On-Line version: Free.

CLIME stands for the *Council for Logo & Technology in Mathematics Education*. It is affiliated with the NCTM; its purpose is to help teachers use technology effectively in their classrooms. I have been a member for a number of years, and have worked in the past with the founder, Ihor Charischak. Over the years I have used many of their materials. The latest issue of the newsletter has a list of the top ten mathematics software products, based on a survey of 40 teachers in a NSF-funded mentorship project at Stevens. Can you guess what their top-rated software is? (See page 6.)