



Front Matter

The American Mathematical Monthly, Vol. 106, No. 1. (Jan., 1999)

Stable URL:

<http://links.jstor.org/sici?sici=0002-9890%28199901%29106%3A1%3C%3AFM%3E2.0.CO%3B2-7>

The American Mathematical Monthly is currently published by Mathematical Association of America.

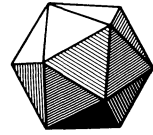
Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/maa.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

The JSTOR Archive is a trusted digital repository providing for long-term preservation and access to leading academic journals and scholarly literature from around the world. The Archive is supported by libraries, scholarly societies, publishers, and foundations. It is an initiative of JSTOR, a not-for-profit organization with a mission to help the scholarly community take advantage of advances in technology. For more information regarding JSTOR, please contact support@jstor.org.

MTHE AMERICAN MATHEMATICAL MONTHLY



Volume 106, Number 1

January 1999

P. J. McKenna	Large Torsional Oscillations in Suspension Bridges Revisited: Fixing an Old Approximation	1
Geoffrey R. Goodson	Inverse Conjugacies and Reversing Symmetry Groups	19
Dmitry Fuchs Serge Tabachnikov	More on Paperfolding	27
L. R. Bragg	Trigonometric Integrals and Hadamard Products	36
Richard Blecksmith Paul Erdős J. L. Selfridge	Cluster Primes	43
<hr/>		
NOTES		
John A. Zuehlke	Fermat's Last Theorem for Gaussian Integer Exponents	49
M. J. Jamieson	On Rational Function Approximations to Square Roots	50
A. J. van der Poorten P. G. Walsh	A Note on Jacobi Symbols and Continued Fractions	52
THE EVOLUTION OF . . .		
I. G. Bashmakova G. S. Smirnova	The Birth of Literal Algebra	57
PROBLEMS AND SOLUTIONS		
REVIEWS		
Arnold Allen	<i>Mathematics: From the Birth of Numbers.</i> By Jan Gullberg	77
Harold P. Boas	Editor's Corner	82
Jeffrey Shallit	<i>Handbook of Applied Cryptography.</i> By Alfred J. Menezes, Paul C. van Oorschot, and Scott A. Vanstone	85
	<i>The Cryptographic Imagination: Secret Writing from Edgar Poe to the Internet.</i> By Shawn James Rosenheim	85
TELEGRAPHIC REVIEWS		
		89

NOTICE TO AUTHORS

The MONTHLY publishes articles, as well as notes and other features, about mathematics and the profession. Its readers span a broad spectrum of mathematical interests, and include professional mathematicians as well as students of mathematics at all collegiate levels. Authors are invited to submit articles and notes that bring interesting mathematical ideas to a wide audience of MONTHLY readers.

The MONTHLY's readers expect a high standard of exposition; they expect articles to inform, stimulate, challenge, enlighten, and even entertain. MONTHLY articles are meant to be read, enjoyed, and discussed, rather than just archived. Articles may be expositions of old or new results, historical or biographical essays, speculations or definitive treatments, broad developments, or explorations of a single application. Novelty and generality are far less important than clarity of exposition and broad appeal. Appropriate figures, diagrams, and photographs are encouraged.

Notes are short, sharply focussed, and possibly informal. They are often gems that provide a new proof of an old theorem, a novel presentation of a familiar theme, or a lively discussion of a single issue.

Articles and Notes should be sent to the Editor:

ROGER A. HORN
1515 Mineral Square, Room 142
University of Utah
Salt Lake City, UT 84112

Please send your email address and 3 copies of the complete manuscript (including all figures with captions and lettering), typewritten on only one side of the paper. In addition, send one original copy of all figures without lettering, drawn carefully in black ink on separate sheets of paper.

Letters to the Editor on any topic are invited; please send to the MONTHLY's Utah office. Comments, criticisms, and suggestions for making the MONTHLY more lively, entertaining, and informative are welcome.

See the MONTHLY section of MAA Online for current information such as contents of issues, descriptive summaries of forthcoming articles, tips for authors, and preparation of manuscripts in \TeX :

<http://www.maa.org/>

Proposed problems or solutions should be sent to:

DANIEL ULLMAN, MONTHLY Problems
Department of Mathematics
The George Washington University
2201 G Street, NW, Room 428A
Washington, DC 20052

Please send 2 copies of all problems/solutions material, typewritten on only one side of the paper.

EDITOR: ROGER A. HORN
monthly@math.utah.edu

ASSOCIATE EDITORS:

WILLIAM ADKINS	VICTOR KATZ
DONNA BEERS	STEVEN KRANTZ
HAROLD BOAS	JIMMIE LAWSON
RICHARD BUMBY	CATHERINE COLE McGEOCH
JAMES CASE	RICHARD NOWAKOWSKI
JANE DAY	ARNOLD OSTEBEE
JOHN DUNCAN	KAREN PARSHALL
PETER DUREN	EDWARD SCHEINERMAN
GERALD EDGAR	ABE SHENITZER
JOHN EWING	WALTER STROMQUIST
JOSEPH GALLIAN	ALAN TUCKER
ROBERT GREENE	DANIEL ULLMAN
RICHARD GUY	DANIEL VELLEMAN
PAUL HALMOS	ANN WATKINS
GUERSHON HAREL	DOUGLAS WEST
DAVID HOAGLIN	HERBERT WILF

EDITORIAL ASSISTANTS:

ARLEE CRAPO
MEGAN TONKOVICH

Reprint permission:
DONALD ALBERS, Director of Publication

Advertising Correspondence:
Mr. JOE WATSON, Advertising Manager

Change of address, missing issues inquiries, and other subscription correspondence:
MAA Service Center
maahq@maa.org

All at the address:

The Mathematical Association of America
1529 Eighteenth Street, N.W.
Washington, DC 20036

Microfilm Editions: University Microfilms International,
Serial Bid coordinator, 300 North Zeeb Road, Ann Arbor, MI 48106.

The AMERICAN MATHEMATICAL MONTHLY (ISSN 0002-9890) is published monthly except bimonthly June-July and August-September by the Mathematical Association of America at 1529 Eighteenth Street, N.W., Washington, DC 20036 and Montpelier, VT. Copyrighted by the Mathematical Association of America (Incorporated), 1999, including rights to this journal issue as a whole and, except where otherwise noted, rights to each individual contribution. "Permission to make copies of individual articles, in paper or electronic form, including posting on personal and class web pages, for educational and scientific use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear the following copyright notice: [Copyright the Mathematical Association of America 1999. All rights reserved.] Abstracting, with credit is permitted. To copy otherwise or to republish, requires specific permission of the MAA's Director of Publication and possibly a fee." Second class postage paid at Washington, DC, and additional mailing offices. **Postmaster:** Send address changes to the American Mathematical Monthly, Membership / Subscription Department, MAA, 1529 Eighteenth Street, N.W., Washington, DC, 20036-1385.