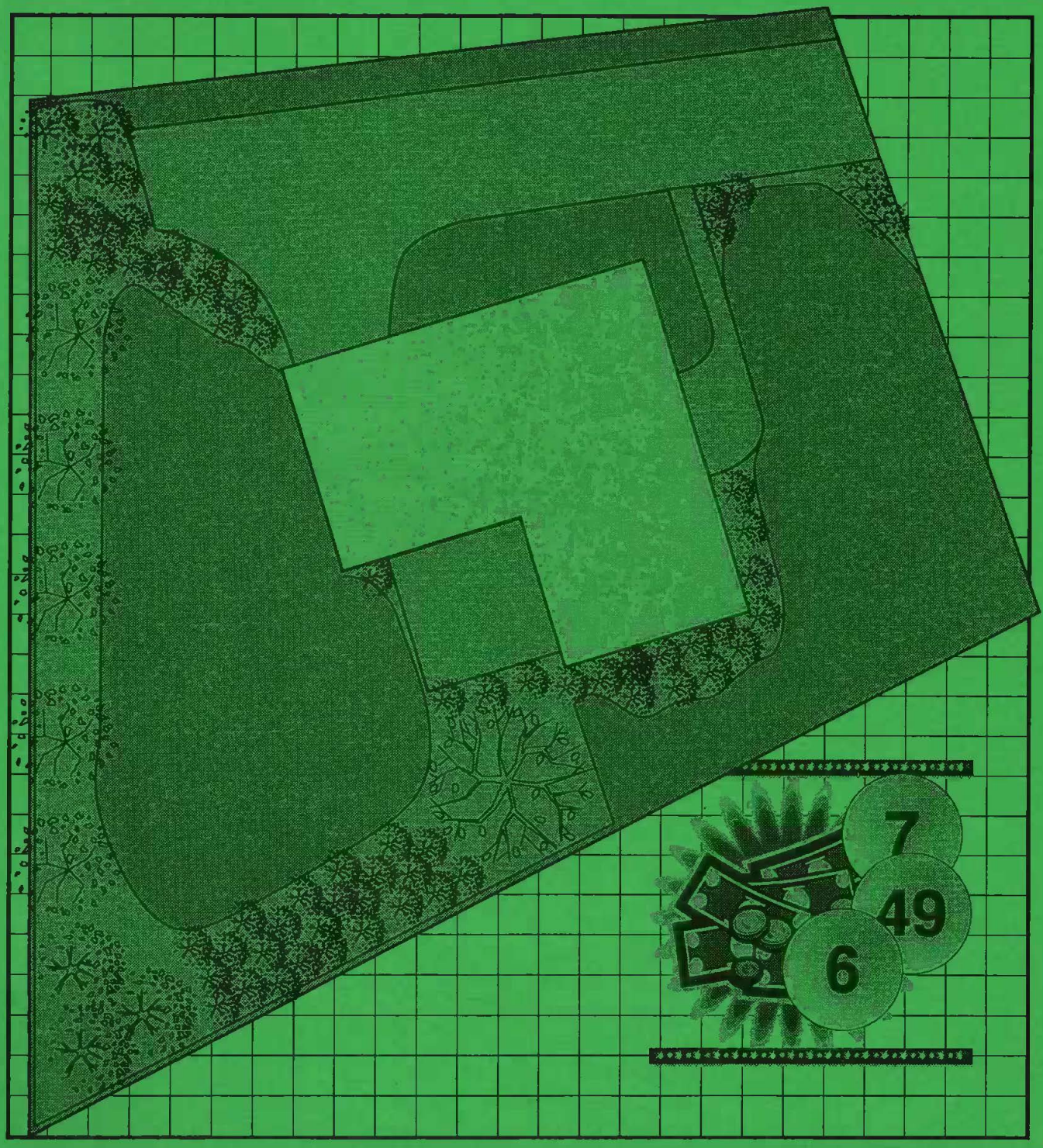
# delta-k

JOURNAL OF THE
MATHEMATICS COUNCIL
OF THE ALBERTA
TEACHERS' ASSOCIATION

Volume 41, Number 1

February 2004



# GUIDELINES FOR MANUSCRIPTS

*delta-K* is a professional journal for mathematics teachers in Alberta. It is published to

- promote the professional development of mathematics educators, and
- stimulate thinking, explore new ideas and offer various viewpoints.

Submissions are requested that have a classroom as well as a scholarly focus. They may include

- personal explorations of significant classroom experiences;
- descriptions of innovative classroom and school practices;
- reviews or evaluations of instructional and curricular methods, programs or materials;
- discussions of trends, issues or policies;
- a specific focus on technology in the classroom; and
- a focus on the curriculum, professional and assessment standards of the NCTM.

## Manuscript Guidelines

1. All manuscripts should be typewritten, double-spaced and properly referenced.
2. Preference will be given to manuscripts submitted on 3.5-inch disks using WordPerfect 5.1 or 6.0 or a generic ASCII file. Microsoft Word and AmiPro are also acceptable formats.
3. Pictures or illustrations should be clearly labelled and placed where you want them to appear in the article. A caption and photo credit should accompany each photograph.
4. If any student sample work is included, please provide a release letter from the student's parent allowing publication in the journal.
5. Limit your manuscripts to no more than eight pages double-spaced.
6. A 250-350-word abstract should accompany your manuscript for inclusion on the Mathematics Council's website.
7. Letters to the editor or reviews of curriculum materials are welcome.
8. *delta-K* is not refereed. Contributions are reviewed by the editor(s), who reserve the right to edit for clarity and space. **The editor shall have the final decision to publish any article.** Send manuscripts to A. Craig Loewen, Editor, 414 25 Street S, Lethbridge, Alberta T1J 3P3; fax (403) 329-2412, e-mail loewen@uleth.ca.

## Submission Deadlines

*delta-K* is published twice a year. Submissions must be received by August 31 for the fall issue and December 15 for the spring issue.

### MCATA Mission Statement

***Providing leadership to encourage the continuing enhancement of teaching, learning and understanding mathematics.***

delta-K

Volume 41, Number 1 February 2004

# CONTENTS



 *delta-K* is published by the ATA for the Mathematics Council (MCATA). EDITOR: Klaus Puhlmann, PO Box 6482, Edson, Alberta T7E 1T9; fax (780) 723-2414, e-mail klaupuhl@gyrd.ab.ca. EDITORIAL AND PRODUCTION SERVICES: Document Production staff, ATA. Opinions expressed herein are not necessarily those of MCATA or of the ATA. Address correspondence regarding this publication to the editor. *delta-K* is indexed in the Canadian Education Index. ISSN 0319-8367

Individual copies of this journal can be ordered at the following prices: 1 to 4 copies, $7.50 each; 5 to 10 copies, $5.00 each; over 10 copies, $3.50 each. Please add 5 per cent shipping and handling and 7 per cent GST. Please contact Distribution at Barnett House to place your order. In Edmonton, dial (780) 447-9400, ext. 321; toll free in Alberta, dial 1-800-232-7208, ext. 321.

## NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS



## TEACHING IDEAS



## FEATURE ARTICLES



## MATHEMATICAL PROBLEM SOLVING FOR THINKERS



## HISTORICAL CORNER

# COMMENTS ON CONTRIBUTORS

*Jerry Ameis* is a professor of mathematics education at the University of Winnipeg in Winnipeg, Manitoba. He has a special interest in the meaningful learning of mathematics and in using the Internet to support mathematical learning.

*Cynthia Ballheim* is a vice-principal at Father Lacombe High School in Calgary, Alberta.

*Harry Bohan* is a professor of mathematics education at Sam Houston State University in Huntsville, Texas.

*David E. Dobbs* is a professor of mathematics at the University of Tennessee in Knoxville, Tennessee.

*Nancy Drickey* is an assistant professor of education at Linfield College in McMinnville, Oregon.

*David R. Duncan* is a professor of mathematics at the University of Northern Iowa in Cedar Falls, Iowa.

*William Dunham* is the Koehler professor of mathematics at Muhlenberg College in Allentown, Pennsylvania, and the author of *Journey Through Genius: The Great Theorems of Mathematics* and of *Euler: The Master of Us All.*

*Natali Hritonenko* is a professor of mathematics at the University of Texas in Dallas, Texas.

*Beverly Irby* is a professor in mathematics education at Sam Houston State University in Huntsville, Texas.

*Art Jorgensen* is a retired junior high school principal from Edson, Alberta, and a former longtime MCATA executive member.

*Werner Liedtke* is a professor emeritus, University of Victoria in Victoria, British Columbia.

*Bonnie H. Litwiller* is a professor of mathematics at the University of Northern Iowa in Cedar Falls, Iowa.

*Andy Liu* is a professor of mathematics in the Department of Mathematical and Statistical Sciences at the University of Alberta in Edmonton, Alberta.

*A. Craig Loewen* is a professor at the University of Lethbridge in Lethbridge, Alberta.

*Emeric T. Noone* teaches at Longwood College in Farmville, Virginia. He is primarily interested in undergraduate probability and statistics.

*Klaus Puhlmann* is a retired superintendent of schools for Grande Yellowhead Regional Division No. 35 and MCATA journal editor.

*Sandra M. Pulver* is a professor of mathematics at Pace University in New York.

*Deanna Shostak* is high school mathematics teacher at Alberta College in Edmonton, Alberta, and is on secondment with Alberta Learning as the Applied Mathematics 30 exam manager. She is also MCATA's Alberta Learning representative.

*John C. Uccellini* teaches at Indiana Area Senior High School in Indiana, Pennsylvania. He is actively involved with training elementary and middle school teachers in quantitative literacy.

*Dolly Vogel* is a graduate student at Sam Houston State University and a teacher of sixth-grade mathematics at Houser Intermediate School, Conroe Independent School District in Conroe, Texas.

*Yuri Yatsenko* is a professor in computer information systems at Houston Baptist University in Texas. His interests include teaching and research in mathematics, economics and computer-related areas.