



**MAA Spring Meeting  
Central College  
Pella, Iowa**

**Conference Guide**

**Pocket Press**

**Friday, April 1, 2005**

Registration and Exhibits Science Center 140  
2:30-4:30

**Concurrent Session 1** Science Center 143  
3:00-3:20 Message Authentication Codes and  
Quasigroups

\*\* Kristen Meyer, Iowa State University  
3:30-3:50 A Multiple Integral of a Piecewise  
Algebraic Function

Michael Rieck, Drake University  
4:00-4:20 Don't Be So Sensitive! --On the Definition(s)  
of a Group

\*\* Jeremy Alm, Iowa State University  
**Concurrent Session 2** Science Center 241

3:00-3:20 The "Basic Four": Elementary Functions and  
Their Applications in College Algebra  
Scott Herriott, Maharishi University of  
Management

3:30-3:50 A Project Based Finite Math Course  
Brian Birgen, Wartburg College

4:00-4:20 A Unified R representation of Function  
Bernadette Baker, Drake University

**Concurrent Session 3** Science Center 243  
3:00-3:20 Generalized Arithmetic Triangles via  
Convolution

Sean Bradley, Clarke College  
3:30-3:50 The Efficiency of Morse Code as Data  
Compression.

Scott Searcy, Waldorf College  
4:00-4:20 Factoring Trinomials with Less Struggling and  
More Success!  
Monica Meissen, Clarke College

**Break**  
4:25-4:35

**Round Table Discussion** Science Center 180  
4:35-5:20 Calvin Van Nieuwaal, Coe College MAA

Strategic Planning - Professional Development  
**Round Table Discussion** Science Center 143

4:35-5:20 Mariah Birgen, Wartburg College  
Undergraduate Programs

**Dinner on your own** See Meals information section  
5:30-7:30

**Plenary Session 1** Science Center 180  
7:30-8:30 Planar Linkages: Robot Arms, Carpenters' Rulers,  
and Other Devices  
Nancy Hagelgans, Ursinus College

**Reception** Science Center lobby  
8:30----

Special thanks to Central College for hosting this year's  
Sectional meeting.



**Concurrent Session 7** Science Center 143  
1:45-2:05 The Røpplitz-Silverman Theorem  
Alexander Kleiner, Drake University

2:15-2:35 Prime divisors of Mersenne numbers and  
Dirichlet series  
Christian Roettiger, Iowa State University

**Concurrent Session 8** Science Center 243  
1:45-2:05 Knots of Constant Curvature  
\*\* Jenelle McAtee, University of Iowa

2:15-2:35 Equidissections of Trapezoids  
Charles Jespen, Grinnell College

**Concurrent Session 9** Science Center 241  
1:45-2:05 Mathematics and Civic Engagement  
Mariah Birgen, Wartburg College

2:15-2:35 Simple Teaching of Differential Calculus  
Phil Wood

**Break**  
2:40-2:45

**Concurrent Session 10** Science Center 163  
2:45-3:05 The Strange Case of Shapiro's Inequality  
A.M. Fink, Iowa State University

3:15-3:35 The History of Complex Dynamics: Part II  
Dan Alexander, Drake University

3:45-4:05 Prince Rupert's Rectangles  
\* Erika Hartung, Central College

**Concurrent Session 11** Science Center 143  
2:45-3:05 Escher's World and Green Jello World - A  
Concrete Introduction to Hyperbolic  
Geometry  
Ruth Berger, Luther College

3:15-3:35 Equidistant Sets and Similarity  
Transformations  
Eugene Herman, Grinnell College

**Concurrent Session 12** Science Center 241  
2:45-3:05 Getting Students to Read a Linear  
Algebra Text- Methods and Reactions  
Karen Shuman, Grinnell College

3:15-3:35 Refrain disparity via computer  
K Sroyan, University of Iowa

3:45-4:05 A tour of the new website for the IA  
section of the MAA  
Al Hibbard, Central College

**Saturday, April 2, 2005**

**Plenary Session 2** Science Center 180  
8:45-9:45 Undergraduate Programs and Courses in the  
Mathematical Sciences: CUPM Curriculum  
Guide 2004  
David Bressoud, Macalester College

**Break**  
9:45-10:00

**Concurrent Session 4** Science Center 143  
10:00-10:20 The Henrick Harmonic Analyser  
Joel Haack, University of Northern Iowa

10:30-10:50 Axioms of Kinship  
\* Cindee Calton, University of Northern Iowa  
11:00-11:20 Rigor in Analysis: From Newton to  
Cauchy

\* James Collingwood, Drake University  
**Concurrent Session 5** Science Center 241  
10:00-10:20 The Mathematics of Common  
Consent

Ronald Smith, Graceland University  
10:30-10:50 Searching For Images Embedded  
in Mathematics  
Charles Ashbacher

11:00-11:20 The Evolution of Cooperation  
Rick Spellerberg, Simpson College

**Concurrent Session 6** Science Center 243  
10:00-10:20 The Graph Traces of Finite  
C\*-Algebras  
\*\* Matthew Johnson, University of Iowa

10:30-10:50 On the Negative Mass Assigned  
By the Univariate Zao-Tsaiis and Wang  
Estimators

11:00-11:20 Explanation of Lepton and Meson  
Masses  
\*\* Joseph Keller, Iowa State University

**Break**  
11:25-11:30

**Iowa Section Business Meeting** Science Center 18  
11:30-12:15 Al Hibbard, Central College,  
Chair of the Iowa Section of the MAA

**Lunch** together or on your own Central Market  
12:15-1:45 (Those who are interested in  
Section Next should gather at a table in the Central  
Market.)

# PALM SIZE PRESS: FOLDING INSTRUCTIONS

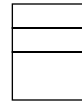
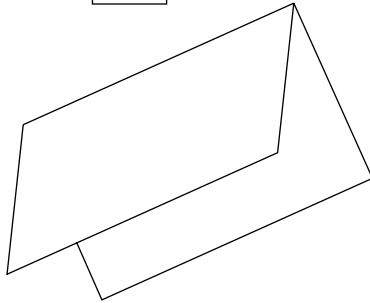
You can print out the second page of this PDF file and fold and cut according to the following instructions—then you'll have another addition to your little library of tips!



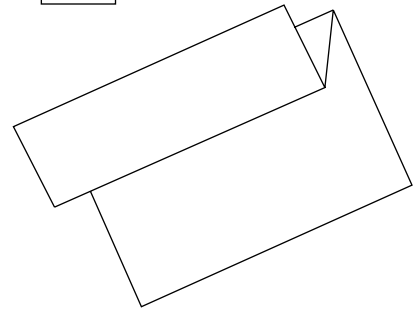
**1.** Start with the 8.5x11 piece of paper you printed out.



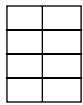
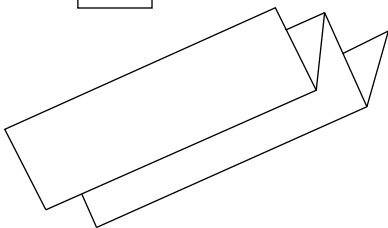
**2.** Fold in half shortwise, printed side out.



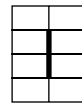
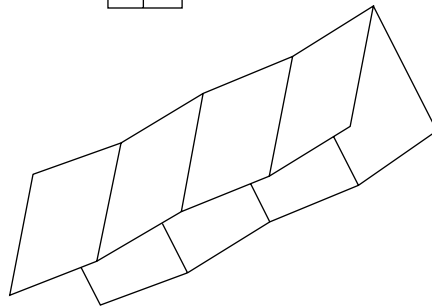
**3.** Fold back one edge to the middle fold.



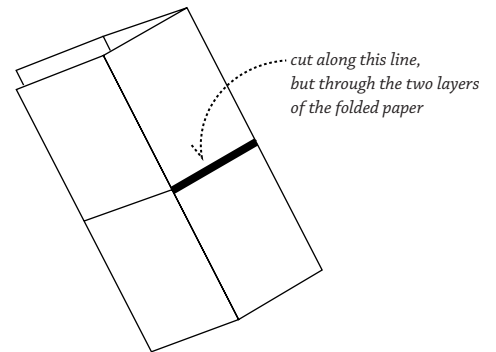
**4.** Fold back the other edge to the middle fold.



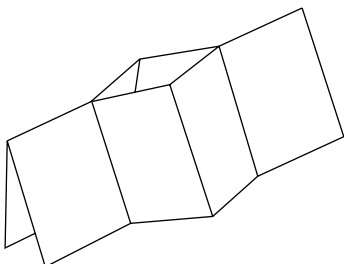
**5.** After unfolding the sheet, fold longwise, printed side out.



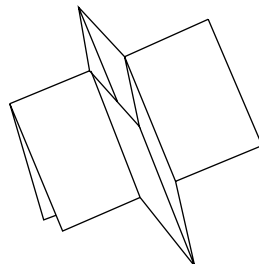
**6.** Refold shortwise, then use scissors to cut along the line marked here in bold.



**7.** Holding each end, push to the middle to open up where you made the cut.



**8.** Push all the way in.



**9.** Fold the left edge over to create the cover. Now it is a book!

