1970-2016 TOPIC INDEX
for
The College Mathematics Journal
(including the Two Year College Mathematics Journal)

prepared by
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Each item in this index is listed under the topics for which it might be used in the
classroom or for enrichment after the topic has been presented. Within each topic entries
are listed in chronological order of publication. Each entry is given in the form:

Title, author, volume:issue, year, page range, [C or F], [other topic cross-listings]

where C indicates a classroom capsule or short note and F indicates a Fallacies, Flaws and
Flimflam note. If there is nothing in this position the entry refers to an article unless it is a
book review.

The topic headings in this index are numbered and grouped as follows:

0 Precalculus Mathematics (also see 9)
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  0.3 Synthetic geometry
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  0.8 Business mathematics
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1 Mathematics Education
  1.1 Teaching techniques and research reports
  1.2 Courses and programs

2 History of Mathematics
  2.1 History of mathematics before 1400
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3 Discrete Mathematics
  3.1 Graph theory
3.2 Combinatorics
3.3 Other topics in discrete mathematics (also see 6.3)
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4 Linear Algebra
4.1 Matrices, systems of linear equations, and matrix algebra
4.2 Determinants (also see 5.5)
4.3 Vector spaces and inner product spaces (also see 5.5)
4.4 Linear transformations
4.5 Eigenvalues and eigenvectors
4.6 Numerical methods of linear algebra
4.7 Other topics in linear algebra
4.8 Software for linear algebra

5 Calculus
5.1 Limits and differentiation
   5.1.1 Limits (including l'Hopital's rule)
   5.1.2 The derivative and mean value theorems
   5.1.3 Tangents, differentials, and differentiation
   5.1.4 Maxima and minima
   5.1.5 Graphs of functions
5.2 Integration
   5.2.1 Definition of integrals and the fundamental theorem
   5.2.2 Numerical integration
   5.2.3 Change of variable (substitution)
   5.2.4 Partial fraction decomposition
   5.2.5 Integration by parts
   5.2.6 Area
   5.2.7 Volume
   5.2.8 Arc length
   5.2.9 Other theory and applications of integration
   5.2.10 Improper integrals
5.3 Elementary and special functions
   5.3.1 Inverse trigonometric functions
   5.3.2 Exponential and logarithmic functions
   5.3.3 Hyperbolic functions and their inverses
   5.3.4 Special functions
5.4 Sequences and series
   5.4.1 Sequences
   5.4.2 Numerical series (convergence tests and summation)
   5.4.3 Taylor polynomials and power series
5.5 Vector algebra and geometry (and 3x3 determinants)
5.6 Curves and surfaces
5.6.1 Parametric and polar curves
5.6.2 Surfaces and coordinate systems in space

5.7 Multivariable calculus
5.7.1 Multivariable differential calculus
5.7.2 Multiple integrals
5.7.3 Line and surface integrals and vector analysis

5.8 Software for calculus

6 Differential Equations and Dynamical Systems
6.1 First order equations
6.2 Higher order linear equations and linear systems
6.3 Difference equations, dynamical systems, and fractals
6.4 Nonlinear differential equations
6.5 Numerical methods for differential equations
6.6 Other topics in differential equations
6.7 Software for differential equations and dynamical systems

7 Probability and Statistics
7.1 Games of chance (also see 9.2)
7.2 Probability
7.3 Statistics (also see 9.10)
7.4 Software for probability and statistics

8 Computer Science
8.1 Programming and algorithms
8.2 Data structures
8.3 Computer graphics
8.4 Other topics in computer science

9 Other Topics
9.1 Set theory and logic (also see 0.9)
9.2 Recreational mathematics (also see 7.1)
9.3 Number theory (also see 0.1)
9.4 Abstract algebra
9.5 Analysis
9.6 Numerical analysis
9.7 Modern and non-Euclidean geometry
9.8 Topology and differential geometry
9.9 Operations research, including linear programming
9.10 Mathematical modelling and simulation
9.11 Software for advanced topics

10 Book Reviews
1970 – 2016 Topic Index
for the College Mathematics Journal

0  Precalculus Mathematics (also see 9)

0.1  Arithmetic (also see 9.3)

Remedial or Developmental? Confusion over Terms, Don Ross, 1:2, 1970, 27-31, 1.2
Two-Pan Weighings, Chris Burditt, 3:2, 1972, 80-81, C
Computation of Repeating Decimals, James E. McKenna, 7:2, 1976, 55-58
Smith Numbers, A. Wilansky, 13:1, 1982, 21, 9.3
Cryptology: From Cesar Cipher to Public-Key Cryptosystems, Dennis Luciano and Gordon Prichett, 18:1, 1987, 2-17, 7.2, 9.3

What's Significant about a Digit?, David A. Smith, 20:2, 1989, 136-139, C, 9.6
FFF #85. Unto Everyone That Hath Shall Be Given, John W. Kenelly, 26:1, 1995, 36, F
Number Words in English, Steven Schwartzman, 26:3, 1995, 191-195
The Mathematical Judge: A Fable, William G. Frederick and James R. Hersberger, 26:5, 1995, 377-381, 1.1

The Square of Any Odd Number is the Difference Between Two Triangular Numbers (Proof Without Words), Roger B. Nelsen, 27:2, 1996, 118, C, 9.3
Fractions with Cycling Digit Patterns, Dan Kalman, 27:2, 1996, 109-115, 9.3
FFF #112. United in Purpose, Bruce Yoshiwara, 28:2, 1997, 119, F
FFF #138. Fifty per cent more for fifty per cent less, Norton Starr, 30:1, 1999, 39-40, F
Interval Arithmetic and Analysis, James Case, 30:2, 1999, 106-111, 9.5
FFF #140. Whose Real World?, Elizabeth Berman Appelbaum, 30:2, 1999, 130, F
FFF #144. Spoiled for Choice, Norton Starr, 30:3, 1999, 210, F, 3.2
Saving Digits, Mark McKinzie, 31:2, 2000, 146, C
FFF #167. Double from nothing, Richard Askey, 32:1, 2001, 48, F
FFF #173. Loss of face, R. Askey, 32:1, 2001, 50-51, F
Word Problems, Lawrence Braden, 32:1, 2001, 70-71, C
Miscellanea: The Doctor and the Mathematician, Edwin Rosenberg, 32:4, 2001, 318, C
FFF #192. Addition by juxtaposition, Brendan Kelly, 33:3, 2002, 226, F
FFF #193. Slide into poverty, by student, 33:3, 2002, 226-227, F
FFF #194. Hitting the sales, the editor, 33:3, 2002, 227, F
Musharraf Exposed, Margaux Marie Siegel, 33:3, 2002, 229, C
Adding Fractions, Dan Kalman, 34:1, 2003, 41, C, 5.1.2
A large square consisting only of digits 7, 8 and 9, Hisanori Mishima, 34:4, 2003, 303, C, 9.3
How Many Checks?, Ted Ridgway, 36:2, 2005, 113, C


Federal Money, Joseph Crukshank, 36:3, 2005, 208, C

FFF #242. Lighter than air, Marie S. Wilcox, 36:4, 2005, 316-317, F


Where are the missing “8-terms”? Johann Hoehn and Larry Hoehn, 37:1, 2006, 68, C

Watch Your Units!, Stan Wagon, 37:2, 2006, C

Teaching Tip: How large is n!?, Leonard J. Lipkin, 37:2, 2006, 109, C

Alligation, Joseph Crukshank, 37:2, 2006, 113, C

FFF #251. Hot stuff in Canada, Neal Madras, 27:2, 2006, 123, F

FFF #254. Computing the cost of a fence, Johnny Lott and Georgia Cobbs, 37:4, 2006, 291, F

Bad Ad Arithmetic, Stan Lipovetsky, 37:5, 2006, 363, C

FFF #262. Attributed to Vladimir Putin, Andre Toom, 38:1, 2007, 44, F

Freaky fractions, Rick Kreminsky, 38:1, 2007, 46, C, 9.3

Misusing “percent”, Ted Ridgway, 38:2, 2007, 95, C

Kong size percent, Art Friedel, 38:2, 2007, 123, C

Was He Serious?, Julian Fleron, 38:2, 2007, 130, C

Literate maybe, but numerate?, Alfinio Flores, 38:4, 2007, 277, C

 Compound Addition, Joseph Crukshank, 38:5, 2007, 377 and 387, C

It Was Only a Sign Error, David Cox, 39:2, 2008, 135, C

One-Upmanship in Creating Designer Decimals, James Smoak, 39:3, 2008, 211, C

Missteps in Mathematics Books, Jerome Dancis, 39:5, 2008, 280-382, F, 0.2

Three Poems, Caleb Emmons, 40:3, 2009, 188, 9.2

Family Occasion, Ian Stewart, 40:3, 2009, 203, C

Teaching Tip: Accepting that .999… = 1, David W. Cohen and James M. Henle, 40:4, 2009, 258, C

Brown Sharpie: .999… = 1 (Cartoon), Courtney Gibbars, 40:4, 2009, 262, C


341 is a Brilliant Number, P. D. James, 40:5, 2009, 368, C, 9.3

Visualizing Elections using Saari Triangles, Mariah Birgen, 41:4, 2010, 325-328, 0.3, 3.3


The Rascal Triangle, Alif Anggoro, Eddy Liu, and Angus Tulloch, 41:5, 2010, 393-395, 3.2

Sum-Difference Numbers, Yixun Shi, 41:5, 2010, 404-405, C, 9.3


Minuend & Subtrahend, Merriam-Webster Dictionary, 42:4, 2011, 316, C


Just Take the Limit!, Jody Picoult, 42:5, 2011, 431, C, 0.8, 9.10

A Numerical Challenge, Robert Wainright, 43:1, 2012, 19, 63, C


Carryless Arithmetic Mod 10, David Applegate, Marc LeBrun, and N. J. A. Sloane, 43:1, 2012, 43-50, 5.4.1, 9.2, 9.4

Squaring, Cubing, and Cube Rooting, Arthur T. Benjamin, 43:1, 2012, 58-63, 0.2, 9.2
50 Percent Plus One: Innumeracy or Mendacity?, William J. Polley, 44:3, 2013, 176, C
Proof Without Words: Triangular Sums, Yuko Kobayashi, 44:3, 2013, 189, C, 9.3
Zbikowski’s Divisibility Criterion, Yonah Cherniavsky and Artour Mouftakhov, 45:1, 2014, 17-21, 9.3
Proof Without Words: Limit of a Recursive Arithmetic Mean, Angel Plaza, 45:5, 2014, 364, C, 5.1.1, 5.4.1
Groupoid Cardinality and Egyptian Fractions, Julia E. Bergner and Christopher D. Walker, 46:2, 2015, 122-129, 9.3, 9.4
Proof Without Words: A Surprising Integer Result, Roger B. Nelsen, 47:2, 2016, 94, C, 0.3
Multiplying by 9, Arthur Benjamin and Rohan Chandra, 47:4, 2016, 281, C, 0.2
Mathematics, A Solitary Game, Olof Hanner, 1:2, 1970, 5-16, 4.1
Gog and Gug, Howard W. Eves, 1:1, 1970, 8, C
The Irrationality of Certain Numbers, Peter A. Lindstrom, 1:1, 1970, 30-31, 9.3
A Computer-Oriented Multiplication Algorithm, John Peterson, 1:2, 1970, 106, C
A Geometric Approach to the Orders of Infinity, Harold L. Schoen, 3:2, 1972, 74-76, C, 9.5
Pascal's k-Simplex, Dale Woods and Mary Jane Kohlenberg, 4:3, 1973, 38-43
Teaching Inequalities Involving Absolute Values, Frances W. Lewis, 4:2, 1973, 87-90, C
Maximize x(a-x), L. H. Lange, 5:1, 1974, 22-24, 0.7, 5.1.4
A Further Note on the Orders of Infinity, Harold L. Schoen, 5:1, 1974, 80-81, C, 9.5
Investigations of Linear and Reciprocal Functions by the Line-to-Line Technique, David R. Duncan and Bonnie H. Litwiller, 6:2, 1975, 2-7, 0.7
Distributivity with Respect to All Four Rational Operations, Myles Greene, 6:2, 1975, 10-12
Mathematical Induction: If Student k Understands It, Will Student k + 1?, Judith L. Gersting, 6:2, 1975, 18-20, 0.9
Easter Revisited, Daniel T. Bleck, 6:3, 1975, 38-40
Functional Notation—An Intuitive Approach, Ann D. Holley, 7:3, 1976, 14-15, 1.2
Finding Super Accurate Integers, Pasquale Scopelliti and Herbert Peebles, 7:3, 1976, 52-54, 0.7, 9.6
Mathematics and Computing without Computers, William S. Dorn, 8:2, 1977, 101-105
The Perfect Curve: at Least for Grades, Lawrence Sher, 8:3, 1977, 148-152
Operational and Intuitive Algebra, Betsey Whitman and Donald Cook, 8:3, 1977, 155-161
Stirling's Triangle of the First Kind-Absolute Value Style, Hugh Ouellette and Gordon Bennett, 8:4, 1977, 195-202, 6.3
An Elementary Construction of the Common Log Tables, James H. Jordan, 8:5, 1977, 274-278
Applicable Mathematics in Two Year Colleges, Ralph Mansfield, 9:3, 1978, 148-153
Some Pre-Calculus Algebra, John Staib, 10:2, 1979, 89-95
The Discovery of a Generalization: An Example in Problem Solving, Hugh Ouellette and Gordon Bennett, 10:2, 1979, 100-106, 0.3
Polygonal Roots, Barnabas B. Hughes, 10:5, 1979, 313-318, 0.7
Distance from a Point to a Line, Warren B. Gordon, 10:5, 1979, 348-349, C
A Technique for Determining When a General Quadratic Expression is Factorable, Leo Chosid, 10:5, 1979, 354-355, C, 0.7
Luddhar's Method of Solving a Cubic Equation with a Rational Root, R. S. Luthar, 11:2, 1980, 107-110, 0.7
Computer Solution of Alphametics, Sarah Brooks, 11:2, 1980, 111-114
Why Not Teach Synthetic Multiplication?, Kenneth R. Kundert, 11:2, 1980, 121-122, C
A Precalculus Approximation of n!, Norman Schaumberger, 11:3, 1980, 202-204, C, 5.4.2
An Error-Detecting Check by Substitution, Charles G. Moore, 11:5, 1980, 326-327, C
A "Proof" that M=N, W. Thurmon Whitley, 12:3, 1981, 211, C
Inventor's Paradox, Man-Keung Siu, 12:4, 1981, 267, C
Misguided Mathematical Maxim-Makers, Betsy Darken Smith, 12:5, 1981, 309-316, 1.2
Selection of a Fair Currency Exchange Rate, Allen J. Schwenk, 13:2, 1982, 154-155, C, 0.8
The Thrills of Abstraction, P. R. Halmos, 13:4, 1982, 243, 1.2
A Logarithm Algorithm for Four-Function Calculators, David Cusick, 14:4, 1983, 322, 5.3.2
The Address Problem, Michael Tennor, 14:5, 1983, 407-414, 9.3
Approximation of Square Roots, Leon Wejntrub, 14:5, 1983, 427-430, 0.7, 9.6
Is the Venn Diagram Good Enough?, Mou-Liang Kung and George C. Harrison, 15:1, 1984, 48-50, 9.1
A Geometrical Interpretation of the Weighted Mean, Larry Hoehn, 15:2, 1984, 135-139, 0.4, 7.3
On Problems with Solutions Attainable in More Than One Way, Jean Pedersen and George Polya, 15:3, 1984, 218-228, 0.4, 5.4.2
Complex Roots Made Visible, Alec Norton and Benjamin Lotto, 15:3, 1984, 248-249, C, 0.7
Pythagorean Systems of Numbers, Joseph Wiener, 15:4, 1984, 324-326, C, 0.4, 9.3
The Factorial Triangle and Polynomial Sequences, Steven Schwartzman, 15:5, 1984, 424-426, C, 5.4.1, 6.3
Right Triangles with Perimeter and Area Equal, William Parsons, 15:5, 1984, 429, C, 0.4
What Do I Know? A Study of Mathematical Self-Awareness, Philip J. Davis, 16:1, 1985, 22-41, 9.3
Nested Polynomials and Efficient Exponential Algorithms for Calculators, Dan Kalman and Warren Page, 16:1, 1985, 57-60, C, 0.7, 9.6
Behold! The Arithmetic-Geometric Mean Inequality, Roland H. Eddy, 16:3, 1985, 208, C, 0.3
Instances of Simpson's Paradox, Thomas R. Knapp, 16:3, 1985, 209-211, C, 7.3
Approximating Solutions for Exponential Equations, Norman Schaumberger, 16:3, 1985, 211-212, C
Graphing the Complex Roots of a Quadratic Equation, Floyd Vest, 16:4, 1985, 257-261, C , 0.7, 9.5
A New Divisibility Algorithm, Joseph Whittaker, 16:4, 1985, 268-276, 9.3
A Discrete Look at 1 + 2 + ... + n, Loren C. Larson, 16:5, 1985, 369-382, 0.9, 3.1, 3.2, 5.4.2, 6.3
Routine Problems, Sherman Stein, 16:5, 1985, 383-385, 5.1.5, 1.2
A Babylonian Geometrical Algebra, James K. Bidwell, 17:1, 1986, 22-31, 0.3
Irrationality Made Easy, Robert Bumcrot, 17:3, 1986, 243-244, C
The Change of Base Formula for Logarithms, Chris Freiling, 17:5, 1986, 413, C, 5.3.2
A Guide to Computer Algebra Systems, John M. Hosack, 17:5, 1986, 434-441, 4.1, 5.1.2, 5.1.5, 5.2.3, 5.2.4, 5.2.5
Behold! The Graphs of f and f inverse are Reflections about the Line y=x, Ayoub B. Ayoub, 18:1, 1987, 52, C, 5.3.2
Powers and Roots by Recursion, Joseph J. Aieta, 18:5, 1987, 411-416, 0.7, 6.3


FFF #25. Solving an Inequality, Ed Barbeau, 21:4, 1990, 303, F

Geometrical and Graphical Solutions of Quadratic Equations, E. John Hornsby, Jr., 21:5, 1990, 362-369, 0.4

China's 1989 National College Entrance Examination, Bart Braden, 21:5, 1990, 390-393, 0.4, 0.6, 1.2


FFF #49. Two Transcendental Equations, Ed Barbeau, 23:1, 1992, 36, F, 5.3.2

FFF #52. An Application of the Cauchy-Schwartz Inequality, Ed Barbeau, 23:2, 1992, 142, F, 9.5

Infinitely Many Different Quartic Polynomial Curves, Nitsa Movshovitz-Hader and Alla Shmukler, 23:3, 1992, 186-195, 0.7


Commutativity of Polynomials, Shmuel Avital and Edward Barbeau, 23:5, 1992, 386-395, 6.3, 0.7

FFF. Matrices and the TI-81 Graphics Calculator, Constance J. Gardner, 24:1, 1993, 64, F, 4.1

FFF #58. A Rational Combination of Two Transcendentals, Ed Barbeau, 24:3, 1993, 229, F, 5.3.2

FFF #59. A Formula that Works Only for n=1, Ed Barbeau, 24:3, 1993, 229-230, F, 0.9

FFF #60. A Two-Valued Function, Ed Barbeau, 24:3, 1993, 230, F, 5.3.2

FFF #65. Solving a Cubic, Ed Barbeau, 24:4, 1993, 344, F, 0.7 (also 25:4, 1994, 311)


FFF #70. Reading a Calculator Display, Sandra Z. Keith, 25:1, 1994, 36, F, 5.1.3

Approaches to the Formula for the nth Fibonacci Number, Russell Jay Hendel, 25:2, 1994, 139-142, C, 4.5, 5.4.2, 9.3, 9.5

Extending Bernoulli's Inequality, Ronald L. Persky, 25:3, 1994, 230, C, 9.5

FFF #84. A Method for Solving a Cubic Equation, Ed Barbeau, 26:1, 1995, 35-36, F, 0.7

FFF #86. Watch Your Ears!, Bruce Yoshiwara, 26:1, 1995, 36, F

FFF #87. Do You Know How to Split the Atom?, Milt Eisner, 26:1, 1995, 37, F

The Product of Four (Positive) Numbers in Arithmetic Progression is Always the Difference of Two Squares (Proof Without Words), Roger B. Nelsen, 26:2, 1995, 131, C

A Geometric Approach to Linear Functions, Jack E. Graver, 26:5, 1995, 389-394, C, 0.4, 6.3


FFF #120. A Quick (?) Proof of Irrationality, Richard Askey, 28:4, 1997, 286, F

Visualizing the Complex Roots of Quadratics (Proof Without Words), Shaun Pieper, 28:5, 1997, 359, C, 0.7

FFF #124. The Number of Tickets Sold, Robert W. Vallin, 29:1, 1998, 34-35, F

FFF. Distributing Addition over Multiplication, S. R. S. Sastry, 29:3, 1998, 221, F


FFF #137. Drenching a sphere, David Cantrell, 30:1, 1999, 39, F
C, 0.6, 9.5
Polynomial Graphs and Symmetry, Geoff Goehle and Mitsuo Kobayashi, 44:1, 2013, 37-42, 0.7, 9.5
Proof Without Words: Completing the Square via the Difference of Squares, Munir Mahmood and Ibtihal Mahmood, 45:1, 2014, 21, C
Proof Without Words: Componendo et Dividendo, a Theorem on Proportions, Yukio Kobayashi, 45:2, 2014, 115, C, 0.3
Proof Without Words: Summing Squares by Counting Triangles, Roger B. Nelsen, 45:5, 2014, 349, C
Proof Without Words: A Trigonometric Proof of the Arithmetic Mean-Geometric Mean Inequality, Roger B. Nelsen, 46:1, 2015, 108, C, 0.3, 9.3
Sequences of Power Lines, Ricardo Alfaru, 46:2, 2015, 113-120, 0.7, 3.2, 5.1.1, 5.4.1, 9.2, 9.3
A Very Elementary Proof of Bernoulli’s Inequality, Cristinel Mortici, 46:2, 2015, 136-137, C, 9.5
To Be (a Circle) or Not to Be?, Hassan Boualem and Robert Brouzet, 46:3, 2015, 197-206, 0.5, 5.2.8, 5.6.1, 9.8
Waiter! One Classic Calculus Problem, Hold the Calculus, Ricardo E. Rojas, 47:1, 2016, 59-60, C, 5.1.4, 9.5
Proof Without Words: Arithmetic Mean of Two Means, Angel Plaza, 47:2, 2016, 125, C, 0.3, 9.5
Pedagogically Inconvenient Functions for Teaching Transformations, Todd Abel and Jeremy Brazas, 47:3, 2016, 200-206, 5.1.5, 9.5
Multiplying by 9, Arthur Benjamin and Rohan Chandra, 47:4, 2016, 281, C, 0.1

0.3 Synthetic geometry

Kepler’s explanation of the Timaeus associations, Howard Eves, 1:2, 1970, 31, C, 2.2
Shapes of the Future, Victor Klee, 2:2, 1971, 14-27, 3.1
Plaited Platonic Puzzles, Jean J. Pedersen, 4:2, 1973, 23-37
Partitions of the Plane, Nathan Hoffman, 5:2, 1974, 71-73, C, 3.1
Some Insight into the Convex Quadrilateral, Benjamin Greenberg, 5:3, 1974, 14-17
A Finite Field—A Finite Geometry and Triangles, Marc Swadener, 5:3, 1974, 22-26, 9.4
Polygons, Both Perfect and Regular, Richard L. Francis, 6:2, 1975, 20-21
Some Consequences of a Property of the Centroid of a Triangle, Norman Schaumberger, 8:3, 1977, 142-144
Guessing and Proving, George Polya, 9:1, 1978, 21-27
The Discovery of a Generalization: An Example in Problem Solving, Hugh Ouellette and Gordon Bennett, 10:2, 1979, 100-106, 0.2
Circles and Spheres, G. D. Chakerian, 11:1, 1980, 26-41
Inscribed Figures of Maximum Area: A Geometric Approach for a Geometric Problem, Peter Renz, 11:2, 1980, 147-149
The Pentagram and the Discovery of an Irrational Number, James R. Choike, 11:5, 1980, 312-316, 2.2
Euclid’s ‘Elements’-excerpts from a 1660 edition, 12:2, 1981, 117, 5.3.2, 5.3.3
From an Inequality to Inversion, Man-Keung Siu, 12:2, 1981, 149-151, C
A Space-Filling Torus, Dan Wheeler and David Sklar, 12:4, 1981, 246-248
Commadino's Theorem, Norman Schaumberger, 13:5, 1982, 331, C
The Butterfly Problem and Other Delicacies from the Noble Art of Euclidean Geometry—Part I, Ross Honsberger, 14:1, 1983, 2-8, 0.4
The Steiner-Lehmus Theorem as a Challenge problem, Ken Seydel and Carl Newman, 14:1, 1983, 72-75, 0.4, 0.6
Some Unusual Locus Problems, Shephen B. Maurer, 14:2, 1983, 146-153
The Butterfly Problem and Other Delicacies from the Noble Art of Euclidean Geometry—Part 2, Ross Honsberger, 14:2, 1983, 154-158, 0.4
How to Make a Bank Shot, Richard C. Bollinger, 14:2, 1983, 169-170, C
How Big is a Point?, Richard J. Trudeau, 14:4, 1983, 295-300
The Construction of Integral Cevians, Charles G. Moore, 14:4, 1983, 301-308
Ellipses from a Circular and Spherical Point of View, Alden R. Partridge, 14:5, 1983, 436-438, 0.5
Behold! The Arithmetic-Geometric Mean Inequality, Roland H. Eddy, 16:3, 1985, 208, C, 0.2
The International Mathematical Olympiad Training Session, Cecil Rousseau and Gregg Patruno, 16:5, 1985, 362-365, 2.2, 9.3
A Babylonian Geometrical Algebra, James K. Bidwell, 17:1, 1986, 22-31, 0.2
Three Ways to Maximize the Area of an Inscribed Quadrilateral, Leroy F. Meyers, 17:3, 1986, 238-239, 5.5
Behold! The Vertex Angles of a Star Sum to 180 degrees, Fouad Nakhli, 17:4, 1986, 338, C
Pythagorean Theorem: $aa' + bb' = cc'$, Enzo R. Gentile, 20:1, 1989, 58, C
Hippocrates and Archytas Double the Cube: A Heuristic Interpretation, Barnabas B. Hughes, 20:1, 1989, 42-48, 2.1
Surface Area of a Cone, Herb Holden, 20:5, 1989, 432, C
Trisection of an Angle in an Infinite Number of Steps, Eric Kincanon, 21:5, 1990, 393, C
Two Surprising Theorems on Cavalieri Congruence, Howard Eves, 22:2, 1991, 118-124, 2.2
Misconceptions about the Golden Ratio, George Markowsky, 23:1, 1992, 2-19, 2.1, 2.2
A "Very Pleasant Theorem", Roger Herz-Fischler, 24:4, 1993, 318-324, 2.2
The Geometer's Sketchpad and Cabri-Geometre (software review), Dennis DeTurck, 24:4, 1993, 370-376, 0.4, 0.10
Two Trisectrices for the Price of One Rolling Coin, Jack Eidswick, 24:5, 1993, 422-430, 0.4, 9.7
Tangents to Conics, Eccentrically, Frederick Gass, 25:1, 1994, 43-45, C, 0.5
Kepler Orbits More Geometrico, Andrew Lenard, 25:2, 1994, 90-98, 5.5
A Three-Circle Theorem, R. S. Hu, 25:3, 1994, 211, C
Nothing New Under the Sun (The "Three-Circle Theorem"), H. Guggenheimer, 26:1, 1995, 10
FFF. The Spirit Is Willing But the Ham Is Rotten, John Kinloch and Rick Norwood, 26:1, 1995, 37, F
Functions of a Curve: Leibniz's Original Notion of Functions and Its Meaning for the Parabola, David Dennis and Jere Confrey, 26:2, 1995, 124-131, 0.5, 2.2
FFF #89. A Case of Irregularity, Herb Bailey, 26:3, 1995, 221-222, F (see also 27:4, 1996, 284)
Inductive Tiling of the Plane by Penrose Aperiodic Rhombi (by picture), Dean Clark and E. R. Suryanarayan, 26:4, 1995, 266-267, C
The 9-Point Circle Is in Fact a 12-Point Circle (by picture), Jingcheng Tong and Sidney H. Kung, 26:5, 1995, 371, C
Volume of a Frustrum of a Square Pyramid (Proof Without Words), S. H. Kung, 27:1, 1996, 32, C
Geometry Class (Poem), JoAnne Growney, 27:2, 1996, 143, C
A Concurrency Theorem and Geometer's Sketchpad, Larry Hoehn, 28:2, 1997, 129-132, C
Tiling with Squares and Parallelograms (proof by picture), Alfinio Flores, 28:3, 1997, 171, C
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Is Presidential Greatness Related to Height?, Paul M. Sommers, 33:1, 2002, 14-16
Symmetric or Skewed?, Joseph G. Eisenhauer, 33:1, 2002, 48-51, C
Baseball’s All Stars: Birthplace and Distribution, Paul M. Sommers, 34:1, 2003, 24-30
A Calculus Theorem Motivated by a Statistics Problem, David L. Farnsworth, 35:2, 2004, 126-129, C
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Distortion of average class size: The Lake Wobegon effect, Allen Schwenk, 37:4, 2006, 293-296, C
The Pearson and Cauchy-Schwarz Inequalities, David Rose, 39:1, 2008, 64, C, 5.5, 9.5
Average Perceived Class Size and Average Perceived Population Density, Clifford H. Wagner, 40:4, 2009, 284-287, C
Teaching Tip: The Median is a Balance Point, Mark Lynch, 40:4, 2009, 292, C
Correlation of the Union of Two Bivariate Data Sets, Robert A. Fontenot, 40:5, 2009, 370-373, C
An Upper Bound for the Expected Range of a Random Sample, Manuel Lopez and James Marengo, 41:1,
2010, 42-48
The Distribution of the Sum of Signed Ranks, Brian Albright, 43:3, 2012, 232-236
Suspense at the Ballot Box, Nat Kell and Matt Kretchmar, 44:1, 2013, 9-16, 7.2, 9.10
Gender Bias?, Elizabeth A. Burroughs and Jessica M. Deshler, 44:2, 2013, 88, C
Quiz Today: Should I Skip Class?, Peter Zizler, 44:3, 2013, 166-170
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Computing Pi, Harley Flanders, 18:3, 1987, 230-235, 5.2.3, 5.4.2
Computing mth Roots, Keith Mathews, 19:2, 1988, 174-176
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The Tower and Glass Marbles Problem, Richard Denman, David Hailey, and Michael Rothenberg, 41:5, 2010, 350-356, 3.2
Winning a Pool is Harder Than You Thought, John P. Bonomo, 47:5, 2016, 347-354
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Generating Posets, Harley Flanders, 18:4, 1987, 323-327, 9.4
The Flowering of String Rewriting Systems, Anne M. Burns, 23:3, 1992, 225-235, 8.3

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Enhancing the Value of Graphics Programs, Clifford H. Wagner, 18:2, 1987, 142-152, 8.1
Drawing a Circle, Harley Flanders, 19:1, 1988, 72-78
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The Curious Fate of an Applied Problem, Alan H. Schoenfeld, 20:2, 1989, 115-123, 5.1.5, 9.5
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Complex Vectors and Image Identification, Lyndell Kerley and Jeff Knisley, 24:2, 1993, 166-174, 9.6
A Computer Lab for Multivariate Calculus, Casper R. Curjel, 24:2, 1993, 175-177, C, 1.2, 5.7.1
Making Mountains from a Sum of Molehills, Anne M. Burns, 26:1, 1995, 51-57
Modeling Trees with a Stochastic Matrix, Anne M. Burns, 29:3, 1998, 230-236, 3.1
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8.4 Other topics in computer science

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9 Other Topics

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Factoring Functions, J. C. Bodenrader, 2:1, 1971, 23-26, 0.6, 5.1.2, 3.2
Some Applications of the Law of the Contrapositive, Morton J. Hellman, 4:3, 1973, 86-88, C, 0.9
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On the Definition of Implication: Classroom Discussion and Justification, Ray F. Snipes, 8:4, 1977, 247-252, C
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Boolean Algebra as a Proof Paradigm, Lawrence Sher, 9:3, 1978, 186-190
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The Asylum of Doctor Tarr and Professor Fether, Raymond Smullyan, 13:2, 1982, 142-146
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The Construction of Venn Diagrams, Branko Grunbaum, 15:3, 1984, 238-247
An Odd Induction Proof, Karl David, 15:3, 1984, 251, C
How to Live to be 100, Robert Geist, 15:4, 1984, 256-263
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Satan, Cantor, and Infinity, Raymond M. Smullyan, 16:2, 1985, 118-121
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FFF #93. An Invalid Argument, Annie Selden and John Selden, 27:1, 1996, 43-44, F
A New Theorem on Cardinality, Charles J. Kicey, 30:1, 1999, 66, C
FFF. There are no contradictions, Theodore G. Ammon, 31:1, 2000, 48-49, F
A Game-Like Activity for Learning Cantor’s Theorem, Shay Gueron, 32:2, 2001, 122-125, C
Comment on There are no contradictions, Calvin Jongma, 32:3, 2001, 199-200, F
Sets of Sets: A Cognitive Obstacle, Lawrence Brenton, 34:1, 2003, 31-38, 9.4
What Did Lincoln Really Mean?, Paul K. Stockmeyer, 35:2, 2004, 103-104
An Elementary Resolution of the Liar Paradox, James S. Walker, 35:2, 2004, 105-111
Mind Your ∀’s and ∃’s, Stephen M. Walk, 35:5, 2004, 362-369, 4.3
Mathematics in War and Peace, Arthur Neuman, 39:3, 2008, 202, C
Dependent Probability Spaces, William F. Edwards, Ray C. Shiflett, and Harris S. Shultz, 39:3, 2008, 221-226, 7.2
Two Applications of a Hamming Code, Andy Liu, 40:1, 2009, 2-5, 9.2, 9.3
Flaws, Fallacies, and Flimflam: The Limits of Reason, Andrea Rothbart, 42:4, 2011, 264, F
Is Parallelism an Equivalence Relation?, Andy Liu, 42:5, 2011, 372, C, 0.3
Matroids on Groups?, Jeremy S. LeCrone and Nancy Ann Neudauer, 45:2, 2014, 121-128, 3.1, 3.2, 9.4
 Knights, Knaves, Normals, and Neutrals, Jason Rosenhouse, 45:4, 2014, 297-306, 9.2
9.2 Recreational mathematics (also see 7.1)
The Game of Sprouts, Gordon D. Prichett, 7:4, 1976, 21-25, 3.1
Connect-It Games, Frank Harry and Robert W. Robinson, 15:5, 1984, 411-419, 3.1
Pascal's Triangle, Karl J. Smith, 4:1, 1973, 1-13, 0.6, 3.2
Fibonacci Numbers and Pineapple Phyllotaxy, Judithlynne Carson, 9:3, 1978, 132-136, 5.4.1
Computer-Generated Knight Tours, Michael Gilpin, 13:4, 1982, 252-259, 3.1, 3.3
Isomorphisms on Magic Squares, Ali R. Amir-Moez, 14:1, 1983, 48-51, 0.2, 9.3, 9.4
Sequences, Series, and Pascal's Triangle, Lenny K. Jones, 14:3, 1983, 253-256, 5.4.2, 6.3
Paths and Pascal Numbers, John F. Lucas, 14:4, 1983, 329-341, 3.2
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Musical Notes, Angela B. Shiflet, 19:4, 1988, 345-347, C, 7.2, 3.2
Permutation Puzzles: Student Research Project, John H. Wilson, 24:2, 1993, 163-165, 3.2
FFF. A Centennial Tribute to Sam Loyd, Dean Clark, 23:5, 1992, 402-404, F
Digits in Triangular Squares, Dipendra Sengupta, 30:1, 1999, 31, C
Modeling Mathematics With Playing Cards, Martin Gardner, 31:3, 2000, 173-177
On Lunda-Designs and the Construction of Associated Magic Squares of Order 4p, Paulus Gerdes, 31:3, 2000, 182-188, 0.3
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Graeco-Latin Squares and a Mistaken Conjecture of Euler, Dominic Klyve and Lee Stemkoski, 37:1, 2006, 2-15, 3.2, 9.4
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The Non-Attacking Queens Game, Hassan Noon and Glen Van Brummelen, 37:3, 2006, 223-227, C
The Number-Pad Game, Alex Fink and Richard Guy, 38:4, 2007, 260-264
Hermit Points on a Box, Richard Hess, Charles Grinstead, Marshall Grinstead, and Deborah Bergstrand,
39:1, 2008, 12-23, 0.4, 5.7.1

Number Place – The First Sudoku, Ed Pegg, Jr., 39:1, 2008, 33, C

Finding All Solutions to the Magic Hexagram, Alexander Karabegov and Jason Holland, 39:2, 2008, 102-106, 3.2

They Say Mathematics is Beautiful (poem), Kung-Ming Tiong, 39:2, 2008, 128, C


They Say Mathematics is Beautiful (poem), Kung-Ming Tiong, 39:2, 2008, 128, C


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Tuning with Triangles, Leon Harkleroad, 39:5, 2008, 367-373, 2.2


Sam Loyd’s Courier Problem with Diophantus, Pythagoras, and Martin Gardner, Owen O’Shea, 39:5, 2008, 387-391, C, 0.2, 0.7

Two Applications of a Hamming Code, Andy Liu, 40:1, 2009, 2-5, 9.1, 9.3

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L-Tromino Tiling of Mutilated Chessboards, Martin Gardner, 40:3, 2009, 162-168, 9.7


Set of Mutually Orthogonal Sudoku Latin Squares, Ryan M. Pedersen and Timothy L. Vis, 40:3, 2009, 174-180, 9.4

Jeeps Penetrating a Hostile Desert, Herb Bailey, 40:3, 2009, 182-188, 9.9, 9.10

Three Poems, Caleb Emmons, 40:3, 2009, 188, 0.1

Flipping Triangles!, Marc Zucker, 40:3, 2009, 189-193, 3.1

n-Card Tricks, Hang Chen and Curtis Cooper 40:3, 2009, 196-201, 3.2

Reflections on the N + k Queens Problem, R. Douglas Chatham, 40:3, 2009, 204-210, 3.2, 4.1

Crossword Puzzle: \[ \pi_1 \equiv Z \oplus Z \], Gary Kennedy, 40:3, 2009, 212

We shall find the Cube of the Rainbow (poem), Emily Dickinson, 40:5, 2009, 336, C

MoonPi, Bathsheba Grossman, 40:5, 2009, 344, C

To Divine Proportion (poem), Rafael Alberti, 40:5, 2009, 375, C

Brown Sharpie: Advanced Frisbee Calculus, Courtney ??, 41:1, 2010, 16, C

Groebner Basis Representations of Sudoku, Elizabeth Arnold, Stephen Lucas, and Laura Taalman, 41:2, 2010, 101-111, 9.4

Sonnet (poem), Susan Colley, 41:2, 2010, 144, C

Three Poems, Nicole Yunger Halpern, 41:3, 2010, 233-234, C

How Bound Tetrahedron Wraps a Real Tetrahedron, Roger Berry, 41:5, 2010, 356, C, 0.3

Poem: A Little Love Story, Bonnie Shulman, 41:5, 2010, C


How Iterated Mobsius was constructed, Anne Burns, 42:1, 2011, 14, C

Mathematical Jeopardy?, Andy Liu, 42:1, 2011, 24, C

Boundary Conditions (poem), Ursula Whitcher, 42:1, 2011, 56, C

Mathematics at the Movies, Martin J. Erickson, 42:3, 2011, 228, C

Folding Polyominoes from One Level to Two, Greg N. Frederickson, 42:4, 2011, 265-274, 0.3, 9.7

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Student Research Project: One-dimensional Czedli-type Islands, Eszter K. Horvath, Attila Mader, and Andreja Tepavecevic, 42:5, 2011, 374-378, C, 0.9, 3.2, 9.3


Hexaflexagons, Martin Gardner, 43:1, 2012, 2-5, 0.3, 3.2, 9.4, 9.8
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From Hexaflexagons to Edge Flexagons to Point Flexagons, Les Pook, 43:1, 2012, 11-14, 0.3, 3.1, 9.4, 9.8
Cups and Downs, Ian Stewart, 43:1, 2012, 15-19, 3.2, 4.1
Martin Gardner’s Mistake, Tanya Khovanova, 43:1, 2012, 20-24, 0.3, 3.1, 3.2, 5.4.1, 9.8
Cups and Downs, Ian Stewart, 43:1, 2012, 15-19, 3.2, 4.1
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Carryless Arithmetic Mod 10, David Applegate, Marc LeBrun, and N. J. A. Sloane, 43:1, 2012, 43-50, 0.1, 5.4.1, 9.4
Bracing Regular Polygons As We Race into the Future, Greg N. Frederickson, 43:1, 2012, 51-57, 0.3
Squaring, Cubing, and Cube Rooting, Arthur T. Benjamin, 43:1, 2012, 58-63, 0.1, 0.2
A Platonic Sextet for Strings, Karl Schaffer, 43:1, 2012, 64-69, 0.3, 3.1
The Play’s the Thing! (crossword puzzle), Gary Kennedy and Stephen Kennedy, 43:1, 2012, 70-71, 9.2
Magic Knight’s Tours, John D. Beasley, 43:1, 2012, 72-75, 9.2
Polyomino Dissections, Tiina Hohn and Andy Liu, 43:1, 2012, 88-94, 0.3
30 Years of Bulgarian Solitaire, Brian Hopkins, 43:2, 2012, 135-140, 3.2, 9.3
RATWYT, Aviezri S. Fraenkel, 43:2, 2012, 160-164, 3.1, 3.2
The Spider and the Fly, Keith E. Mellinger and Raymond Viglione, 43:2, 2012, 169-172, 3.2, 9.4
Multi-Peg Tower of Hanoi, Paul Isihara and Doeke Buursma, 44:2, 2013, 110-116, 3.2
Sets, Planets, and Comets, Mark Baker, Jane Beltran, Jason Buell, Brian Conrey, Tom Davis, Brianna Donaldson, Jeanne Detorre-Ozeki, Leila Dibble, Tom Freeman, Robert Hammie, Julie Montgomery, Avery Pickford, and Justine Wong, 44:4, 2013, 258-264, 7.2, 9.1
Instant Insanity II, Tom Richmond and Aaron Young, 44:4, 2013, 265-272, 3.1, 3.2
Chomp in Disguise, Andrew MacLaughlin and Alex Meadows, 44:4, 2013, 284-292, 3.2
Tetris Sudoku, Philip Riley and Laura Taalman, 44:4, 2013, 292, C, 3.2
Boggle Logic Puzzles: Minimal Solutions, Jonathan Needleman, 44:4, 2013, 293-299, 3.1, 3.2
Domination and Independence on a Triangular Honeycomb Chessboard, Joe DeMaio and Hong Lien Tran, 44:4, 2013, 307-314, 3.1, 3.2
Cookie Monster Devours Naccis, Leigh Marie Braswell and Tanya Khovanova, 45:2, 2014, 129-135, 3.2
Towards God’s Number for Rubik’s Cube in the Quarter-Turn Metric, Tomas Rokicki, 45:4, 2014, 242-253, 9.4
Beyond Rubik’s Cube Exhibit, reviewed by Calvin Armstrong and Susan Goldstine, 45:4, 2014, 254-257, 9.4
On God’s Number(s) for Rubik’s Slide, Michael A. Jones, Brittany C. Shelton, and Miriam E. Weaverdyck, 45:4, 2014, 267-275, 3.1, 3.2, 9.4
Math Frenzy Crossword Puzzle, Charlie Smith, 45:4, 2014, 276-277, C
Graph Theory Problems from Hexagonal and Traditional Chess, Stan Wagon, 45:4, 2014, 278-287, 3.1
Imbalance Puzzles, Raul Salomon, 45:4, 2014, 288, C, 0.2
Chutes and Ladders with Large Spinners, Darcie Connors and Darren Glass, 45:4, 2014, 289-295, 3.2, 7.2
Story Puzzles, Oscar Levin, 45:4, 2014, 296, C, 9.1
Knights, Knaves, Normals, and Neutrals, Jason Rosenhouse, 45:4, 2014, 297-306, 9.1
A Prehistory of Nim, Lisa Rougetet, 45:5, 2014, 358-363, 2.2, 3.2
Sequences of Power Lines, Ricardo Alfaro, 46:2, 2015, 113-120, 0.2, 0.7, 3.2, 5.1.1, 5.4.1, 9.3
MAA 100th Anniversary CMJ Puzzle A, David Nacin, 46:4, 2015, 254, C
Candy Crush Combinatorics, Dana Rowland, 46:4, 2015, 255-262, 3.2
MAA 100th Anniversary CMJ Puzzle C, David Nacin, 46:4, 2015, 263, C
Square-Sum Pair Partitions, Gordon Hamilton, Kiran S. Kedlaya, and Henri Picciotto, 46:4, 2015, 264-269, 0.1, 9.3
The Uniqueness of Rock-Paper-Scissors-Lizard-Spock, Brian J. Birgen, 46:4, 2015, 270-273, 3.2
MAA 100th Anniversary CMJ Puzzle J, David Nacin, 46:4, 2015, 274, C
MAA 100th Anniversary CMJ Puzzle M, David Nacin, 46:4, 2015, 294, C
A Magic Trick Leads to an Identity: Some Induction Fun, Robert W. Vallin, 46:4, 2015, 295-298, C, 0.9, 3.2
Proof Without Words: Centered Triangular Numbers, Roger B. Nelsen, 46:5, 2015, 335, C, 0.2, 3.2, 9.3
Abbott-and-Costello Numbers, Howard Sporn, 47:2, 2016, 126-132, 4.1, 9.3
Phillip Larkin’s Koan, Paisley Rekdal, 47:2, 2016, 133, C
Proof Without Words: Matchstick Triangles, Tom Edgar, 47:3, 2016, 207, C, 9.3
Babbage and Carroll in the Silent Workshop, 1867, Neil Aitken, 47:3, 2016, 215, C
Rankings Over Time, Michael A. Jones, Alexander Webb, and Jennifer Wilson, 47:4, 2016, 242-248, 5.4.2, 9.8
MAA 101st Anniversary CMJ Puzzle A, David Nacin, 47:4, 2016, 249, C
Statistics on the Bonus Round of Wheel of Fortune, Kathleen Ryan and Brittany Shelton, 47:4, 2016, 250-253, 7.3
MAA 101st Anniversary CMJ Puzzle C, David Nacin, 47:4, 2016, 254, C
MAA 101st Anniversary CMJ Puzzle J, David Nacin, 47:4, 2016, 264, C
Algebra From Geometry in the Card Game SET, Timothy E. Goldberg, 47:4, 2016, 265-273, 9.4, 9.7
MAA 101st Anniversary CMJ Puzzle M, David Nacin, 47:4, 2016, 274, C
Horse Racing Odds: Can You Beat the Track by Hedging Your Bets?, Joel Pasternack and Stewart Venit, 47:4, 2016, 275-280, 4.1, 7.2
The FA Cup Draw and Pairing Up Probabilities, Patrick Sullivan, 47:4, 2016, 282-292, 3.2, 7.2
MAA 101st Anniversary CMJ Puzzles Solutions, David Nacin, 47:4, 2016, 293, C
Form (poem), Sarah Blake, 47:5, 2016, 333, C, 9.8
Do the Twist! (on Polygon-Base Boxes), sarah-marie belcastro and Tamara Veenstra, 47:5, 2016, 340-345, 0.3, 0.6

9.3 Number theory (also see 0.1)

The Irrationality of Certain Numbers, Peter A. Lindstrom, 1:1, 1970, 30-31, 0.2
F(1) Rejection Theorem, Howard Sarr, 1:2, 1970, 39-40
F(1) and F(d) Rejection Theorems, William I. Miller, 2:2, 1971, 95-96
Pythagorean Triples by Geometry, Steven L. Kleiman, 3:1, 1972, 39-41
Anomalous Cancellation, R. P. Boas, Jr., 3:2, 1972, 21-24
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Fermat Numbers, W. G. Leavitt, 4:3, 1973, 7-10
Random Sieving and the Prime Number Theorem, Karl Greger, 5:1, 1974, 41-46, 5.3.2
The Computer as an Aid to Discovery, Frederick H. Young, 5:3, 1974, 55-57
On Generalized h-Base, Norman Woo, 6:3, 1975, 16-17
Quasi-Pythagorean Triples for an Oblique Triangle, Kay Dundas, 8:3, 1977, 152-155, 0.6
Methods of Random Number Generation, Edwin G. Landauer, 8:5, 1977, 296-303
A Note on Angle Construction, Richard L. Francis, 9:2, 1978, 73-75
The Pigeonhole Principle, Kenneth R. Rebman, 10:1, 1979, 3-13, 3.1
Triangular Squares, Bill Leonard and Harris S. Schultz, 10:3, 1979, 169-171
Two Distinguished Integers, Ross Honsberger, 10:3, 1979, 195-197
Billiard Balls and a Number Theory Result, Charles H. Jepsen, 10:5, 1979, 306-312
The Use of Generating Functions to Discover and Prove Partition Identities, Henry L. Alder, 10:5, 1979, 318-329
On Sets of Points in the Plane and A Property of the Binomial Coefficients, Ross Honsberger, 11:2, 1980, 116-119, 0.3
Another Derivation of a Double Inequality, Norman Schaumberger, 11:4, 1980, 273, C
An Elementary Gem Concerning pi(n), the Number of Primes less than or equal to n, Ross Honsberger, 11:5, 1980, 305-312
Factoring Factorials, Richard J. Friedlander, 12:1, 1981, 12-20
Short Stories in Number Theory, Ross Honsberger, 12:1, 1981, 34-40
Some Conjectures on Fermat's Last Conjecture, Lawrence Sher and David Sher, 12:1, 1981, 51-52, C
Applying Complex Arithmetic, Herbert L. Holden, 12:3, 1981, 190-194, 0.6, 5.3.1, 9.5
Forward and Backward with Euclid, Gary E. Stevens, 12:5, 1981, 302-306
A Classroom Approach to x^2 + y^2 + z^2 = w^2, Norman Schaumberger, 12:5, 1981, 331-332, C, 0.4
Synthetic Division Shortened, Warren Page and Leo Chosid, 12:5, 1981, 334-336, C, 0.7
Smith Numbers, A. Wilansky, 13:1, 1982, 21, 0.1
Semi-Regular Lattice Polygons, Ross Honsberger, 13:1, 1982, 36-44, 3.1
A Simple Divisibility Algorithm, David Y. Hsu, 13:1, 1982, 58-59, C, 0.2
Remark on an Elementary Gem Concerning Pi(n), Branislav Martic, 13:2, 1982, 158-159, C
Sums of Powers of the First n Integers, David Y. Hsu, 13:3, 1982, 196-197, C
Isomorphisms on Magic Squares, Ali R. Amir-Moez, 14:1, 1983, 48-51, 0.2, 5.4.1, 9.2, 9.4
A Prime-Generating Function, Donald D. Elliot, 14:1, 1983, 57, C
The Alluring Lore of Cyclic Numbers, Michael W. Ecker, 14:2, 1983, 105-109
License Numbers and Divisibility Rules, Harry Hutchins, 14:2, 1983, 122-125
Minimization Based on the Greatest Common Divisor, David Y. Hsu, 14:2, 1983, 165-166, C
Congruences of Cyclotomic Polynomials, Phyllis Lefton, 14:3, 1983, 257-258, C
SSD Persistence: A Mathematical System for Student Investigation, John Scheding, 14:4, 1983, 309-312, 1.2
A Tiling of the Plane with Triangles, Paul T. Mielke, 14:5, 1983, 377-381
The Address Problem, Michael Tennor, 14:5, 1983, 407-414
Digital Roots of Mersenne Primes and Even Perfect Numbers, Syed Asadulla, 15:1, 1984, 53-54
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The Distribution of First Digits, Stephen H. Friedberg, 15:2, 1984, 120-125
Repeating Decimals, W. G. Leavitt, 15:4, 1984, 299-308
Pythagorean Systems of Numbers, Joseph Wiener, 15:4, 1984, 324-326
What Do I Know? A Study of Mathematical Self-Awareness, Philip J. Davis, 16:1, 1985, 22-41
Generalized Pythagorean Triples, W. J. Hildebrand, 16:1, 1985, 48-52
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The House Number Problem and its Variations, Joey Paul, 16:2, 1985, 108-117
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The International Mathematical Olympiad Training Session, Cecil Rousseau and Gregg Patruno, 16:5, 1985, 362-365
Computing Large Factorials, Gerard Kiernan, 16:5, 1985, 403-412
From None to Infinity: Challenging Problems in Cardinality Classification, Richard L. Francis, 17:3, 1986, 226-230
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Involutions and Problems Involving Perimeters and Area, Joseph Wiener and Henjin Chi and Hushang Poorkarimi, 19:3, 1988, 250-252
Sieves of Strongly Composite Integers and Invisible Lattice Points, Peter Schumer, 21:1, 1990, 37-40
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The Birth of the Eotvos Competition, Agnes Arvai Wieschenberg, 21:4, 1990, 286-293
Polar Summation, Loretta McCarty, 21:5, 1990, 397-398
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Summation by Parts, Gregory Fredricks and Roger B. Nelsen, 23:1, 1992, 39-44, C, 5.1.2, 5.4.1, 5.4.2
The Probability that (a, b)=1, Aaron D. Abrams and Matteo J. Paris, 23:1, 1992, 47, C
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The Repeating Integer Paradox, Paul Fjelstad, 26:1, 1995, 11-15
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Digital Permutations, Bryan Dawson, 28:1, 1997, 26, C
A Long Sequence of Composite Numbers, Ed Pegg, Jr., 28:2, 1997, 121, C
Two Identities for Triangular Numbers (proof by picture), Roger B. Nelsen, 28:3, 1997, 197, C
On Dividing Coconuts: A Linear Diophantine Problem, Sahib Singh and Dip Bhattacharya, 28:3, 1997, 203-204, C, 5.4.3
Are There Functions That Generate Prime Numbers?, Paulo Ribenboim, 28:5, 1997, 352-359
The Brahmagupta Triangles, Raymond A. Beauregard and E. R. Suryanarayan, 29:1, 1998, 13-17, 0.4
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From Euler to Fermat, Hidefumi Katsuura, 30:2, 1999, 118-119, 9.5
Palindromic Primes, Harvey Dubner, 30:4, 1999, 292, C
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Progress on the Tarry-Escott-Prouhet Problem, the editor, 31:1, 2000, 68, C
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A Polynomial with a Root Mod m for Every m, Allen J. Schwenk, 31:5, 2000, 403-405, C, 9.4
The Lord Over Better and Worse Births, John Fossa and Glenn Erickson, 32:3, 2001, 185-193, 9.2
Powers Made Easy, James Kirby, 32:5, 2001, 329, C, 0.1
Close!, Noam Elkies, 33:1, 2002, 16, C
A Visit With Six, Monte J. Zerger, 33:2, 2002, 74-87, 9.2
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A Magic Trick from Fibonacci, James Smoak and Thomas J. Osler, 34:1, 2003, 58-60, C
Recursive Enumeration of Pythagorean Triples, Darryl McCullough and Elizabeth Wade, 34:2, 2003, 107-111
Rational Boxes, Sidney Kung, 34:3, 2003, 182, C, 5.1.4
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Looking at Order of Integration and a Minimal Surface, Thomas Hern and Cliff Long and Andy Long, 29:2, 1998, 128-133, 5.7.2
Normal Lines and Curvature, Kirby C. Smith, 31:1, 2000, 54-56, C, 5.1.3
Conformality, the Exponential Function, and World Map Projections, Timothy G. Feeman, 32:5, 2001, 334-342, 9.7
Lissajous Figures and Chebyshev Polynomials, Julio Castineira Merino, 34:2, 2003, 122-127, 5.6.1
An Illuminating Example of the Gauss Map, David Richeson, 35:1, 2004, 14, C
The Growth of Trees (Student Research Projects), Philip K. Hotchkiss and John Meier, 35:2, 2004, 143-151, 3.1
A Non-Smooth Band Around a Non-Convex Region, J. Aarao, A. Cox, C. Jones, M. Martelli, and A. Westfahl, 37:4, 2006, 269-278, 5.1.1, 5.7.3
Pairs of Equal Surface Functions, Daniel Cass and Gerald Wildenberg, 30:1, 2008, 51-54, C, 5.2.6, 5.6.2
Topology Explains Why Automobile Sunshades Fold Oddly, Curtis Feist and Ramin Naimi, 40:2, 2009, 93-98
Generalized Parabolas, Dan Joseph, Gregory Hartman, and Caleb Gibson, 42:4, 2011, 275-282, 0.3, 0.5, 5.6.1, 5.7.3
Hexaflexagons, Martin Gardner, 43:1, 2012, 2-5, 0.3, 3.2, 9.2, 9.4
The V-flex, Triangle Orientation, and Catalan Numbers in Hexaflexagons, Ionut E. Iacob, Bruce McLean, and Hua Wang, 43:1, 2012, 6-10, 0.3, 3.1, 3.2, 5.4.1, 9.2
From Hexaflexagons to Edge Flexagons to Point Flexagons, Les Pook, 43:1, 2012, 11-14, 0.3, 3.1, 9.2, 9.4
About Iterated Trefoil Knot, R. Fathauer, 43:2, 2012, 134, C
When Abelian = Hausdorff, Timothy Kohl, 43:3, 2012, 213-215, 9.4
An Ellipse Morphs to a Cosine Graph!, L. R. King, 44:2, 2013, 117-123, 0.4, 0.5, 5.2.8
On Combining and Convolving Fractals, Nicholas Cotton, Cam McLeman, and Daneil Pinchock, 46:2, 2015, 99-108, 0.3, 9.7
Parametric Equations at the Circus: Trochoids and Poi Flowers, Eleanor Farrington, 46:3, 2015, 173-177, 5.6.1
Rational and Implicit Equations for Some Polar Curves, Dave Boyles, 46:3, 2015, 189-196, 0.3, 5.4.3, 5.6.1, 9.7
To Be (a Circle) or Not to Be?, Hassan Boualem and Robert Brouzet, 46:3, 2015, 197-206, 0.2, 0.5, 5.2.8, 5.6.1
On the Inverse Curvature Problem, Adam Glesser, James Shade, and Bogdan D. Suceava, 46:3, 2015, 207-214, 5.2.9, 5.5, 5.6.1, 6.4
An Inductive Proof of the Compactness of the Closed Unit Ball of an Arbitrary Dimension, Haryono Tandra, 46:3, 2015, 218-219, C
Discrete and Smooth Bicycle “Unicycle” Paths, Amy Nesky and Clara Redwood, 47:3, 2016, 180-189, 9.10
Rankings Over Time, Michael A. Jones, Alexander Webb, and Jennifer Wilson, 47:4, 2016, 242-248, 5.4.2, 9.2
Form (poem), Sarah Blake, 47:5, 2016, 333, C, 9.2

9.9 Operations research, including linear programming

A Strategy for a Class of Games, R. S. Pierce, 2:2, 1971, 55-62
A Coin Game, Thomas P. Dence, 8:4, 1977, 244-246, 5.4.2, 9.10
Three Person Winner-Take-All Games with McCarthy's Revenge Rule, Philip D. Straffin, Jr., 16:5, 1985, 386-394
A Division Game: How Far Can You Stretch Mathematical Induction?, William H. Ruckle, 18:3, 1987, 212-218, 0.9, 3.2
The Simplex Method of Linear Programming on Microcomputer Spreadsheets, Frank S. T. Hsiao, 20:2, 1989, 153-160, 1.2
A Tool for Teaching Linear Programming within MATLAB, David R. Hill, 21:1, 1990, 55-56, C, 4.1
Optimal Locations, Bennett Eisenberg and Samir Khabbaz, 23:4, 1992, 282-289, 0.4, 3.1
How to Pump a Swing, Stephen Wirkus and Richard Rand and Andy Ruina, 29:4, 1998, 266-275, 6.6
The Bus Driver’s Sanity Problem, Todd G. Will, 30:3, 1999, 187-194
An Introduction to Simulated Annealing, Brian Albright, 38:1, 2007, 37-42, 5.1.4
Student Research Project: Making Change Efficiently, Jack E. Graver, 42:4, 2011, 317-322, 0.1, 3.2, 5.1.4
Lake Wobegon Dice, Jorge Moraleda and David G. Stork, 43:2, 2012, 152-159, 3.3, 7.2, 9.2
Asset Pricing, Financial Markets, and Linear Algebra, Marcio Diniz, 44:1, 2013, 2-8, 4.1, 4.3, 7.2
The Advantage of the Coin Toss for the New Overtime System in the National Football League, Jacqueline Leake and Nicholas Pritchard, 47:1, 2016, 2-9, 4.1, 7.2

9.10 Mathematical modelling and simulation

A Program for Keno, Karl J. Smith, 3:2, 1972, 16-20, 7.1
Dividing Inheritances, Howard E. Reinhardt, 4:2, 1973, 30-33
A Geometric Approach to Linear Programming in the Two-Year College, Pat Semmes, 5:1, 1974, 37-40, 0.2
Some Applications of Modeling in Mathematics for Two-Year Colleges, Robert S. Fisk, 6:4, 1975, 10-13
What is an Application of Mathematics?, Clifford Sloyer, 7:3, 1976, 19-26, 5.1.4
Some Effects of Rationing, James A. Burns, 8:4, 1977, 203-206
A Coin Game, Thomas P. Dence, 8:4, 1977, 244-246, 5.4.2, 9.9
An Environmental Problem, Roland H. Lamberson, 8:4, 1977, 252-253
Foresight-Insight-Hindsight, James C. Frauenthal and Thomas L. Saaty, 10:4, 1979, 245-254
Binomial Baseball, Eugene M. Levin, 12:4, 1981, 260-266, 7.2
Minimally Favorable Games, Michael W. Chamberlain, 14:2, 1983, 159-164, 7.2
A Monte Carlo Simulation Related to the St. Petersburg Paradox, Allan J. Caesar, 15:4, 1984, 339-342, 7.2
Differential Equations and the Battle of Trafalgar, 16:2, 1985, 98-102, 6.1, 6.2
Harvesting a Grizzly Bear Population, Michael Caulfield and John Kent and Daniel McCaffery, 17:1, 1986, 34-46, 4.1, 4.6
The Problem of Managing a Strategic Reserve, David Cole and Loren Haarsma and Jack Snoeyink, 17:1, 1986, 48-60, 5.1.4, 6.1
How to Balance a Yardstick on an Apple, Herbert R. Bailey, 17:3, 1986, 220-225, 6.5
Facility Location Problems, Fred Buckley, 18:1, 1987, 24-32, 3.1
Transitions, Jeanne L. Agnew and James R. Choike, 18:2, 1987, 124-133, 0.7, 5.1.3, 5.6.1
The Probability that the "Sum of the Rounds" Equals the "Round of the Sum", Roger B. Nelsen and James E. Schultz, 18:5, 1987, 390-396, 7.2, 7.3
Constructing a Map from a Table of Intercity Distances, Richard J. Pulskamp, 19:2, 1988, 154-163, 3.1, 4.5
Theory, Simulation and Reality, Peter Flusser, 19:3, 1988, 210-222, 7.2, 7.3
Ties at Rotation, Howard Lewis Penn, 19:3, 1988, 230-239, 3.2
Using Simulation to Study Linear Regression, LeRoy A. Franklin, 23:4, 1992, 290-295, 7.3
Inverse Problems and Torricelli's Law, C. W. Groetsch, 24:3, 1993, 210-217, 9.5
The Best Shape for a Tin Can, P. L. Roe, 24:3, 1993, 233-236, C, 5.1.4
Fitting a Logistic Curve to Data, Fabio Cavallini, 24:3, 1993, 247-253, 9.6
Determining Sample Sizes for Monte Carlo Integration, David Neal, 24:3, 1993, 254-262, C, 5.2.2, 7.3
Quenching a Thirst with Differential Equations, Martin Ehrismann, 25:5, 1994, 413-418, 6.4
A Balloon Experiment in the Classroom, Thomas Gruszka, 25:5, 1994, 442-444, C, 6.1, 6.4
Projectile Motion with Arbitrary Resistance, Tilak de Alwis, 26:5, 1995, 361-367, 6.2
The Meeting of the Plows: A Simulation, Jerome L. Lewis, 26:5, 1995, 395-400
A Home Heating Model for Calculus Students, Prashant S. Sansgiry and Constance C. Edwards, 27:5,
1996, 394-397, C, 6.2
The Average Distance Between Points in Geometric Figures, Steven R. Dunbar, 28:3, 1997, 187-197, 7.2
The Long Arm of Calculus, Ethan Berkove and Rich Marchand, 29:5, 1998, 376-386, 5.7.1
The Probability of Passing a Multiple-Choice Test, Milton P. Eisner, 29:5, 1998, 421-426, 7.2
Spirals and Conchospirals in the Flight of Insects, Khristo N. Boyadzhiev, 30:1, 1999, 23-31, 5.6.1
Minimizing Aroma Loss, Robert Barrington Leigh and Richard Travis Ng, 30:5, 1999, 356-358, 3.2
Modeling the Gaitpath of a Running Animal, John Lorch, 31:2, 2000, 93-97
Perfecting the Analog of a Deck of Cards or Why Evolution Can’t Be Left to Chance, J. G. Simmonds, 33:1, 2002, 17-20, 7.2
Why cars in the next lane seem to go faster, Sung Soo Kim, 33:3, 2002, 228-229, C
Can a Bicycle Create a Unicycle Track?, David L. Finn, 33:4, 2002, 283-292, 5.6.1
A Modified Discrete SIR Model, Jennifer M. Switkes, 35:4, 2004, 399-402, C
First Order Differential Equations and the Atmosphere, Gerhard Strohmer, 35:2, 2004, 93-96, 6.1
Algebra in Respiratory Care, David F. Snyder, 35:4, 2004, 300-302, C, 0.2
Projectile Motion with Resistance and the Lambert W Function, Edward W. Packel and David S. Yuen, 35:5, 2004, 337-350, 5.3.4, 6.2
Breaking the Holiday Inn Priority Club CAPTCHA, Edward Aboufadel, Julia Olsen, and Jesse Windle, 36:2, 2005, 101-108, 4.7, 8.3
Another Broken Symmetry, C. W. Groetsch, 36:2, 2005, 109-113, 6.2
Follow-up on Disease Detection, Witold Jarnicki, Michael Schweitzer, and Stan Wagon, 38:2, 2007, 134, C
Epidemic Models for SARS and Measles, Edward Rozema, 38:4, 2007, 246-259, 5.3.4, 6.1
The Depletion Ratio, C. W. Groetsch, 39:1, 2008, 43-48, 5.1.1, 5.2.1
Variations of the Sliding Ladder Problem, Stelios Kapranidis and Reginald Koo, 39:5, 2008, 374-379
Evolutionary Stability in the Traveler’s Dilemma, Andrew T. Barker, 40:1, 2009, 33-38
Ethanol: Not All It Seems To Be, Thomas Jackson, Kelly Roache, Afanasiy Yermakov, Jason Zukus, and Raymond Eng, 40:1, 2009, 48-54, C
Mechanical Circle-Squaring, Barry Cox and Stan Wagon, 40:4, 2009, 238-247, 0.4, 5.6.1, 9.7
Maximizing the Spectacle of Water Fountains, Andrew J. Simoson, 40:4, 2009, 263-274, 5.1.4, 5.2.6, 5.2.7, 5.2.8
The Draining Cylinder, James Graham-Eagle, 40:5, 2009, 337-343, 6.1
Waiting to Turn Left?, Maureen T. Carroll, Elyn K. Rykken, and Jody M. Sorensen, 41:1, 2010, 60-63, C, 5.2.1
POEM’s and Newton’s Aerodynamic Frustrum, Jaime Cruz-Sampedro and Margarita Tetlalmatzi-Montiel, 41:2, 2010, 145-153, 0.4, 0.5, 5.1.4
Application of the Lambert W Function to the SIR Epidemic Model, Frank Wang, 41:2, 2010, 156-159, C, 5.3.4, 6.3, 6.4
Newton’s Radii, Maupertuis’ Arc Length, and Voltaire’s Giant, Andrew J. Simoson, 42:3, 2011, 183-190, 5.2.8, 5.6.1
Random Breakage of a Rod into Unit Lengths, Joe Gani and Randall Swift, 42:3, 2011, 201-205, 7.2
An Empirical Approach to the St. Petersburg Paradox, Dominic Klyve and Anna Lauren, 42:4, 2011, 260-263, 5.4.2, 7.1, 7.2
Do Dogs Know the Trammel of Archimedes?, Mark Schwartz, 42:4, 2011, 299-308, 0.3, 0.5, 5.1.4, 5.6.1
The Center of Mass of a Soft Spring, Juan D. Serna and Amitabh Joshi, 42:5, 2011, 389-393, C, 5.2.5, 5.2.9
Just Take the Limit!, Jody Picoult, 42:5, 2011, 431, C, 0.1, 0.8
An Exactly Solvable Model for the Spread of Disease, Ronald E. Mickens, 43:2, 2012, 114-120, 6.4
Eradicating a Disease: Lessons from Mathematical Epidemiology, Matthew Glomski and Edward Ohanian, 43:2, 2012, 123-132, 2.2, 6.4
Retrolife and the Pawns Neighbors, Yossi Elran, 43:2, 2012, 147-151, 3.3, 9.2
Student Research Project: The optimal level of insulation in a home attic, Paul Martin and Kirthi Premadasa, 43:2, 2012, 165-168, 5.1.4
Designing Medical Tests: The Other Side of Bayes’ Theorem, Andrew M. Ross, 43:3, 2012, 251-253, C, 7.2
An Optimal Basketball Free Throw, D. N. Seppala-Holtzman, 43:5, 2012, 387-394
Winning a Racquetball Match, Tom Brown and Brian Pasko, 43:5, 2012, 395-400, 7.2
Suspense at the Ballot Box, Nat Kell and Matt Kretchmar, 44:1, 2013, 9-16, 7.2, 7.3
Modeling Terminal Velocity, Neal Brand and John A. Quintanilla, 44:1, 2013, 57-61, C, 6.2
Slouching in the Rain, Herb Bailey, 44:2, 2013, 136-138, C, 5.1.4
Sharing the Work, Walden Freedman, 44:3, 2013, 229-232, C, 5.2.9
Underground Mathematics, Charles Hadlock, 44:5, 2013, 364-375, 6.5
Collaborative Understanding of Cyanobacteria in Lake Ecosystems, Meredith L. Greer, Holly A. Ewing, Kathryn L. Cottingham and Kathleen C. Weathers, 44:5, 2013, 376-385, 6.2, 6.5
Seasonal Variation in Epidemiology, Osvaldo Marrero, 44:5, 2013, 386-398, 7.3
How Inge Lehmann Discovered the Inner Core of the Earth, Christiane Rousseau, 44:5, 2013, 399-408, 0.4, 2.2
Climate Modeling in the Calculus and Differential Equations Classroom, Emek Kose and Jennifer Kunze, 44:5, 2013, 424-427, C, 5.1.4, 6.5
Student Research Project: About the Pace of Climate Change: Write a Report to the President, Lily Khadjavi, 44:5, 2013, 428-432, C, 5.1.5, 7.3
Traveling Waves and Taylor Series: Do They Have Something in Common?, Adam Besenyei, 45:1, 2014, 29-32, 5.4.3
The Fastest Way Not to Run a Four-Minute Mile, Michael Bolt, Anthony Meyer, and Nicholas Visser, 45:2, 2014, 101-107, 9.5
Truck Versus Human: Mathematics Under Pressure, Elizabeth Field, Rachael Ivison, Amanda Reyher, and Steven Warner, 45:2, 2014, 116-120, 5.1.4
Elvis Lives: Mathematical Surprises Inspired by Elvis, the Welsh Corgi, Steve J. Bacinski, Mark J. Panaggio, and Timothy J. Pennings, 46:2, 2015, 82-91, 5.1.2, 5.1.4, 5.7.1
The Fastest Path Between Two Points, with a Symmetric Obstacle, Kathleen Bell, Shania Polson, and Tom Richmond, 46:2, 2015, 92-97, 5.1.2, 5.1.4
Predicting Wins and Losses: A Volleyball Case Study, Elizabeth Knapper and Hope McIlwain, 46:5, 2015, 352-358, 4.1, 7.3
Empirical Modeling: Choosing Models and Fitting Them to Data, Glenn Ledder, 47:2, 2016, 109-119, 7.3
Discrete and Smooth Bicycle “Unicycle” Paths, Amy Nesky and Clara Redwood, 47:3, 2016, 180-189, 9.8

9.11 Software for advanced topics
A Mathematics Software Database, R. S. Cunningham and David A. Smith, 17:3, 1986, 255-266, 0.10, 3.4, 4.8, 5.8, 6.7, 7.4
A Mathematics Software Database Update, R. S. Cunningham and David A. Smith, 18:3, 1987, 242-247, 0.10, 3.4, 4.8, 5.8, 6.7, 7.4
The Compleat Mathematics Software Database, R. S. Cunningham and David A. Smith, 19:3, 1988, 268-289, 0.10, 3.4, 4.8, 5.8, 6.7, 7.4
EXP, Version 3.02 for Windows, Jon Wilkin, 27:1, 1996, 68-73, 0.10
Scientific WorkPlace, Jerry Thornhill, 27:4, 1996, 305-311
Cyclone the Implicit 3D Plotter, Jon Wilkin, 30:1, 1999, 54-59, 5.8
SAGE: Open Source Mathematics Software System, reviewed by J. K. Denny, 44:2, 2013, 149-155, C, 4.8, 5.8, 6.7, 7.4

10 Book Reviews
The History of the Calculus, Carl Boyer, 1:1, 1970, 60-86, summarized by Carl Boyer
Intermediate Algebra, Joseph Newmyer and Gus Klentes, 5:1, 1974, 60-61, reviewed by Edward B. Wright
Elementary Linear Algebra, Paul C. Shields, 5:1, 1974, 61-62, reviewed by Frank Hacker
Elementary Functions with Coordinate Geometry, Earl Swokowski, 5:1, 1974, 62, reviewed by Harry L. Hancock
Programmed Mathematics for Nurses, George Sackheim and Lewis Robins, 5:1, 1974, 63-64, reviewed by Allen P. Angel
Business Mathematics—A Collegiate Approach, Nelda W. Roueche, 5:2, 1974, 55-56, reviewed by Lawrence Clar
Mathematical Ideas, 2nd ed., Charles D. Miller and Vern E. Heeren, 5:2, 1974, 57, reviewed by Peter A. Lindstrom
Elementary Statistics, Robert R. Johnson, 5:2, 1974, reviewed by Philip F. Reichmeider
Basic Algebra Techniques: Concepts and Manipulations, W. Burryl McWaters and Anita McWaters and Robert L. Drennen, 5:3, 1974, 41-42, reviewed by Eugene P. Cooper
Mathematics with Applications in the Management, Natural, and Social Sciences, Margaret L. Lial and Charles D. Miller, 5:3, 1974, 42, reviewed by H. Eugene Hall
Applied Mathematics for Technical Programs (Trigonometry), Robert G. Moon, 5:3, 1974, 42-43, reviewed by Amogene F. DeVaney
Mathematics and Liberal Arts, Jack C. Gill, 5:4, 1974, 31-32, reviewed by Cameron Douthitt
Analytic Geometry with Vectors, Douglas F. Riddle, 5:4, 1974, 32, reviewed by Don Gallagher
Linear Algebra, Paul J. Knopp, 5:4, 1974, 32-33, reviewed by Shelba Morman
Linear Mathematics, Philip Gillett, 5:4, 1974, 34, reviewed by Peter A. Lindstrom
Precalculus Mathematics: A Functional Approach, James Connelly and Robert Fratangelo, 6:1, 1975, 28-29, reviewed by Lawrence Gillagan
Elementary Algebra, 1st ed., Robert G. Moon and Robert D. Davis, 6:1, 1975, 29, reviewed by Thomas L. Alexander
Conceptions of Space, Beginning Geometries for College, William Hemmer, 6:3, 1975, 27-28, reviewed by Jean B. Smith
Basic Mathematics for Management and Economics, Lyman C. Peck, 6:3, 1975, 28, reviewed by Cherry Mauk
Fundamental Math—A Mixed Media Program, Units I-IV, 6:3, 1975, 28-29, reviewed by R. DeJean
Mathematics—A Human Endeavor, Harold R. Jacobs, 6:4, 1975, 19, reviewed by Gerald M. Smith
Introduction to Finite Mathematics, 3rd ed., John G. Kemeny and J. Laurie Snell and Gerald L. Thompson, 6:4, 1975, 19-20, reviewed by Bruce King
Plane Trigonometry, A New Approach, C. L. Johnson, 7:1, 1976, 24-25, reviewed by Nancy Holder
Contemporary Mathematics, Bruce E. Meserve and Max A. Sobel, 7:1, 1976, 25-26, reviewed by James G. Troutman
Elementary Algebra: A Worktext, Vivian Shai Groza, 7:1, 1976, 25, reviewed by Ken Seydel
Introductory Algebra, Alphonse Gobran, 7:2, 1976, 40-41, reviewed by John P. Pace
Developing Skills in Algebra: A Lecture Work-text, J. Louis Nanny and John L. Cable, 7:2, 1976, 41-42, reviewed by Wesley W. Tom
Elementary Functions and Analytic Geometry, Flanders and Price, 7:3, 1976, 39-40, reviewed by Mary Ann DeVincenzo
Carl Friedrich Gauss, A Biography, Tord Hall, 7:3, 1976, 40, reviewed by Ralph Mansfield
Ingenuity in Mathematics, Ross Honsberger, 7:4, 1976, 26-27, reviewed by Peter A. Lindstrom
Mathematical Gems, Ross Honsberger, 8:1, 1977, 35-36, reviewed by Peter A. Lindstrom
Fortran IV Programming and Applications, C. Joseph Sass, 8:1, 1977, 36-37, reviewed by Mary Ann DeVincenzo
Statistics, Norma Gilbert, 8:2, 1977, 88-89, reviewed by Leland D. Graber
Calculus, A Practical Approach, Kenneth Kalmanson and Patricia C. Kenschaft, 8:2, 1977, 89, reviewed by Dennis M. Rodriguez
Fundamental Mathematics (filmstrips), James Streeter and Gerald Alexander, 8:3, 1977, 165-166, reviewed by John McGregor
Differential Equations and Their Applications: An Introduction to Applied Mathematics, Martin Braun, 8:4, 1977, 231-232, reviewed by David Farnsworth
The Mathematics of the Elementary School, Edward G. Begle, 8:5, 1977, 281-282, reviewed by David E. Moxness
The Power of Relevant Mathematics: Basic Concepts, Kenneth L. Whipkey and Mary Nell Whipkey and Joanne Jarocki, 8:5, 1977, 282, reviewed by Jean B. Smith
Essentials of Precalculus Mathematics, Dennis T. Christy, 9:3, 1978, 167-168, reviewed by Jean Lane
The Ages of Mathematics(4 volumes), Michael Moffatt and Charles Flinn and Cynthia Conwell Cook and Peter D. Cook, 9:4, 1978, 222-224, reviewed by Frank Swetz
Understanding and Programming Computers, Samiha Mourad, 9:5, 1978, 288-289, reviewed by Mary Ann DeVincenzo
The Psychology of Learning Mathematics, Richard R. Skemp, 10:1, 1979, 44-45, reviewed by Shelia Jean Mormon
Analytic Trigonometry with Applications, Raymond A. Barnett, 10:1, 1979, 45-46, James C. Kropa
Analytic Geometry and the Calculus, 3rd ed., A. W. Goodman, 10:2, 1979, 123-124, reviewed by Donald C. Fuller
Why the Professor Can't Teach: Mathematics and the Dilemma of University Education, Morris Kline, 10:3, 1979, 205-206, reviewed by Elaine Johnson Tatham
Mathematical Recreations and Essays, W. W. Rouse Ball and H. S. M. Coxeter, 10:4, 1979, 283-286, reviewed by G. L. Alexanderson
Elementary Number Theory, David M. Burton, 10:4, 1979, 287-288, reviewed by Henry J. Ricardo
The Historical Roots of Elementary Mathematics, Lucas N. H. Bunt, 10:4, 1979, 288-289, reviewed by Barnabas Hughes
An Introduction to Mathematical Models in the Life and Social Sciences, Michael Olinick, 10:5, 1979, 355-356, reviewed by Kenneth E. Martin
What is the Name of This Book?, Raymond M. Smullyan, 11:1, 1980, 56-58, reviewed by Klaus Galda
Mathematical Morsels, Ross Honsberger, 11:2, 1980, 127-128, reviewed by Leon Bankoff
Mathematically Speaking, Morton Davis, 12:1, 1981, 58-59, reviewed by Marilyn Mays Gilchrist
Overcoming Math Anxiety, Sheila Tobias, 12:1, 1981, 59-61, reviewed by Henry Africk
Mind Over Math, Stanley Kogelman and Joseph Warren, 12:1, 5-61, reviewed by Henry Africk
Mathematics: The Loss of Certainty, Morris Kline, 12:2, 1981, 141-142, reviewed by R. P. Boas
The Mathematical Experience, Philip J. Davis and Reuben Hersh, 13:1, 1982, 72-73, reviewed by Henry S. Tropp
The Real World and Mathematics, Hugh Burkhardt, 14:1, 1983, 81-82, reviewed by H. O. Pollak
Great Moments in Mathematics (Before 1650 and After 1650), Howard Eves, 14:3, 1983, reviewed by R. P. Boas
Infinite Processes/Background to Analysis, A. Gardner, 14:4, 1983, 365-366, reviewed by G. L. Alexanderson
Maxima and Minima Without Calculus, Ivan Niven, 14:5, 1983, 415, reviewed by Lester H. Lange
Neyman—from life, Constance Reid, 15:1, 1984, 82-84, reviewed by Robert V. Hogg
The Fractal Geometry of Nature, Benoit B. Mandelbrot, 15:2, 1984, 175-177, reviewed by Don Chakerian
Mir Publishers' Series (Moscow), 15:3, 1984, 281-282, reviewed by Peter J. Hilton
Lectures in Geometry: Analytic Geometry, M. M. Postnikov, 15:3, 1984, 282-283, reviewed by Peter J. Hilton
The Future of College Mathematics, Anthony Ralston and Gail S. Young, eds., 15:5, 1984, 458-460, reviewed by Stephen B. Maurer
Geometry and Algebra in Ancient Civilizations, B. L. Van der Waerden, 16:2, 185, 169-170, reviewed by H. S. M. Coxeter
Selecta: Expository Writing, P. R. Halmos, 16:2, 1985, 171, reviewed by R. P. Boas
A Convergence of Lives—Sofia Kovalevskaia: Scientist, Writer, Revolutionary, Ann Hibner Koblitz,
16:3, 1985, 240-242, reviewed by D. Bushaw
New Directions in Two-Year College Mathematics, Donald J. Albers, ed., 16:3, 1985, 242-247, reviewed by Philip Cheifetz
Superior Beings. If The Exist, How Would We Know?: Game-Theoretic Implications of Omniscience, Omnipotence, Immortality, and Incomprehensibility, Steven J. Brams, 16:5, 1985, 430-431, reviewed by Thomas P. Faase
Problem-Solving Through Problems, Loren C. Larson, 16:5, 1985, 432, reviewed by G. L. Alexanderson
Mathematics: People, Problems, Results, Douglas M. Campbell and John C. Higgins, eds., 17:1, 1986, 108-109, reviewed by Philip J. Davis
Mathematical People—Profiles and Interviews, Donald J. Albers and G. L. Alexanderson, eds., 17:3, 1986, 275, reviewed by Ivan Niven
Mathematics and Optimal Form, Stefan Hildebrandt and Anthony Tromba, 18:1, 1987, 84-85, reviewed by Ross Honsberger
Mathematical Applications of Electronic Spreadsheets, Dean E. Arganbright, 18:2, 1987, 175, reviewed by Edward Page
Cross-Cultural Studies in Cognition and Mathematics, David F. Lancy, 18:3, 1987, 259-261, reviewed by John W. Berry
The Mathematical Description of Shape and Form, E. A. Lord and C. B. Wilson, 19:2, 1988, 201, reviewed by Thomas F. Banchoff
The Shape of Space, Jeffrey R. Weeks, 19:2, 1988, 202, reviewed by Thomas Banchoff
A Budget of Trisections, Underwood Dudley, 20:2, 1989, 180-181, reviewed by Doris Schattscneider
For All Practical Purposes: Introduction to Contemporary Mathematics, COMAP, 21:1, 1990, 78-80, reviewed by Martin E. Flashman
For All Practical Purposes: Introduction to Contemporary Mathematics, Module 1: Management Science, COMAP, 21:2, 1990, 164-165, reviewed by Martin E. Flashman
For All Practical Purposes: Introduction to Contemporary Mathematics, Modules 4 and 5: On Size and Shape and Computer Science, COMAP, 21:5, 1990, 436-437, reviewed by Martin E. Flashman
Chaos, Fractals, and Dynamics: Computer Experiments in Mathematics, Robert L. Devaney, 22:1, 1991,
Advanced Mathematical Thinking, Tommy Dreyfus, et al., 22:3, 1991, 268, reviewed by Annie Selden
Escalante, the Best Teacher in America, Jay Mathews, 23:2, 1992, 173-175, reviewed by Peter Ross
Not Knot (video), Geometry Center of the University of Minnesota, 24:2, 1993, 197-198, reviewed by Mark Kidwell
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