Appendix E
Winners of Prizes for Expository Writing

This appendix is based on lists supplied by the Mathematical Association of America. The American Mathematical Society also awards prizes for mathematical writing; full details are available on the e-MATH Web page (see §14.1).

Winners of the Chauvenet Prize

Named after William Chauvenet (1820–1870), a professor of mathematics in the United States Navy, this prize is awarded for a "noteworthy paper published in English, such as will come within the range of profitable reading for a member of the Mathematical Association of America." The first twenty-four prize-winning papers (Bliss (1924)–Zalcman (1974)) are collected in the two volume *Chauvenet Papers* [1] (which, usefully, are indexed).

1925

Gilbert Ames Bliss, *Algebraic functions and their divisors*, Ann. Math., 26, 1924, pp. 95–124.

1929

T. H. Hildebrandt, *The Borel theorem and its generalizations*, Bull. Amer. Math. Soc., 32, 1926, pp. 423–474.

1932

G. H. Hardy, *An introduction to the theory of numbers*, Bull. Amer. Math. Soc., 35, 1929, pp. 778–818.

1935

Dunham Jackson, *Series of orthogonal polynomials*, Ann. Math., 2 (34), 1933, pp. 527–545; *Orthogonal trigonometric sums*, Ann. Math., 2 (34),

1933, pp. 799–814; *The convergence of Fourier series*, Amer. Math. Monthly, 1934.

1938

G. T. Whyburn, *On the structure of continua*, Bull. Amer. Math. Soc., 42, 1936, pp. 49–73.

1941

Saunders MacLane, *Modular fields*, Amer. Math. Monthly, 47 (5), 1940, pp. 259–274; *Some recent advances in algebra*, Amer. Math. Monthly, 46 (1), 1939, pp. 3–19.

1944

Robert H. Cameron, *Some introductory exercises in the manipulation of Fourier transforms*, National Mathematics Magazine, 1941, pp. 331–356.

1947

Paul R. Halmos, *The foundations of probability*, Amer. Math. Monthly, 51 (9), 1944, pp. 493–510.

1950

Mark Kac, *Random walk and the theory of Brownian motion*, Amer. Math. Monthly, 54 (7), 1947, pp. 369–391.

1953

E. J. McShane, *Partial orderings and Moore–Smith limits*, Amer. Math. Monthly, 59 (1), 1952, pp. 1–11.

1956

R. H. Bruck, *Recent advances in the foundations of Euclidean plane geometry*, Amer. Math. Monthly, 52 (7, Part II), 1955, pp. 2–17.

1960

Cornelius Lanczos, *Linear systems in self-adjoint form*, Amer. Math. Monthly, 65 (9), 1958, pp. 665–679.

1963

Philip J. Davies, *Leonhard Euler's integral: A historical profile of the gamma function*, Amer. Math. Monthly, 66 (10), 1959, pp. 849–869.

1964

Leon A. Henkin, *Are logic and mathematics identical?*, Science, 138 (3542), 1962, pp. 788–794.

1965

Jack K. Hale and Joseph P. LaSalle, *Differential equations: Linearity vs. nonlinearity*, SIAM Rev., 5 (3), 1963, pp. 249–272.

1966

No award

1967

Guido L. Weiss, *Harmonic analysis*, MAA Stud. Math., 3, 1965, pp. 124–178.

1968

Mark Kac, *Can one hear the shape of a drum?*, Amer. Math. Monthly, 73 (4, Part II), Slaught Papers No. 11, 1966, pp. 1–23.

1969

No award

1970

Shiing-Shen Chern, *Curves and surfaces in Euclidean space*, MAA Stud. Math., 1967, pp. 16–56.

1971

Norman Levinson, *A motivated account of an elementary proof of the prime number theorem*, Amer. Math. Monthly, 76 (2), 1969, pp. 225–245.

1972

Jean François Trèves, *On local solvability of linear partial differential equations*, Bull. Amer. Math. Soc., 76, 1970, pp. 552–571.

1973

Carl D. Olds, *The simple continued fraction expansion of e*, Amer. Math. Monthly, 77 (9), 1970, pp. 968–974.

1974

Peter D. Lax, *The formation and decay of shock waves*, Amer. Math. Monthly, 79 (3), 1972, pp. 227–241.

1975

Martin D. Davis and Reuben Hersh, *Hilbert's 10th problem*, Scientific American, 229 (5), November 1973, pp. 84–91.

1976

Lawrence Zalcman, *Real proofs of complex theorems (and vice versa)*, Amer. Math. Monthly, 81 (2), 1974, pp. 115–137.

1977

W. Gilbert Strang, *Piecewise polynomials and the finite element method*, Bull. Amer. Math. Soc., 79 (6), 1973, 1128–1137.

1978

Shreeram S. Abhyankar, *Historical ramblings in algebraic geometry and related algebra*, Amer. Math. Monthly, 83 (6), 1976, pp. 409–448.

1979

Neil J. A. Sloane, *Error-correcting codes and invariant theory: New applications of a nineteenth-century technique*, Amer. Math. Monthly, 84 (2), 1977, pp. 82–107.

1980

Heinz Bauer, *Approximation and abstract boundaries*, Amer. Math. Monthly, 85 (8), 1978, pp. 632–647.

1981

Kenneth I. Gross, *On the evolution of noncommutative harmonic analysis*, Amer. Math. Monthly, 85 (7), 1978, pp. 525–548.

1982

No award

1983

No award

1984

R. Arthur Knoebel, *Exponentials reiterated*, Amer. Math. Monthly, 88 (4), 1981, pp. 235–252.

1985

Carl Pomerance, *Recent developments in primality testing*, Mathematical Intelligencer, 3 (3), 1981, pp. 97–105.

1986

George Miel, *Of calculations past and present: The Archimedean algorithm*, Amer. Math. Monthly, 90 (17), 1983, pp. 17–35.

1987

James H. Wilkinson, *The perfidious polynomial*, in Gene H. Golub, ed., Studies in Numerical Analysis, vol. 24 of Studies in Mathematics, The Mathematical Association of America, Washington, D.C., 1984, pp. 1–28.

1988

Steve Smale, *On the efficiency of algorithms of analysis*, Bull. Amer. Math. Soc., 13 (2), 1985, pp. 87–121.

1989

Jacob Korevaar, *Ludwig Bieberbach's conjecture and its proof by Louis de Branges*, Amer. Math. Monthly, 93 (7), 1986, pp. 505–514.

1990

David Allen Hoffman, *The computer-aided discovery of new embedded minimal surfaces*, Mathematical Intelligencer, 9, 1987.

1991

W. B. R. Lickorish and Kenneth C. Millett, *The new polynomial invariants of knots and links*, Math. Mag., 61 (1), 1988, pp. 3–23.

1992

Steven G. Krantz, *What is several complex variables?*, Amer. Math. Monthly, 94 (3), 1987, pp. 236–256.

1993

J. M. Borwein, P. B. Borwein, and D. H. Bailey, *Ramanujan, modular equations, and approximations to Pi or how to compute one billion digits of Pi*, Amer. Math. Monthly, 96 (3), 1989, pp. 201–219.

1994

Barry Mazur, *Number theory as gadfly*, Amer. Math. Monthly, 98 (7), 1991, pp. 593–610.

1995

Donald G. Saari, *A visit to the Newtonian N-body problem via elementary complex variables*, Amer. Math. Monthly, 97 (2), 1990, pp. 105–119.

1996

Joan Birman, *New points of view in knot theory*, Bull. Amer. Math. Soc., 28, 1993, pp. 253–287.

1997

Tom Hawkins, *The birth of Lie's theory of groups*, The Mathematical Intelligencer, 1994, pp. 6–17.

Winners of the Lester R. Ford Award

An award for articles in the American Mathematical Monthly.

1965

R. H. Bing, *Spheres in* E^3, Amer. Math. Monthly, 71 (4), 1964, pp. 353–364.

Louis Brand, *A division algebra for sequences and its associated operational calculus*, Amer. Math. Monthly, 71 (7), 1964, pp. 719–728.

R. G. Kuller, *Coin tossing, probability, and the Weierstrass approximation theorem*, Math. Mag., 37, 1964, pp. 262–265.

R. D. Luce, *The mathematics used in mathematical psychology*, Amer. Math. Monthly, 71 (4), 1964, pp. 364–378.

Hartley Rogers, Jr., *Information theory*, Math. Mag., 37, 1964, pp. 63–78.

Elmer Tolsted, *An elementary derivation of the Cauchy, Hölder, and Minkowski inequalities from Young's inequality*, Math. Mag., 37, 1964, pp. 2–12.

1966

C. B. Allendoerfer, *Generalizations of theorems about triangles*, Math. Mag., 38, 1965, pp. 253–259.

Peter D. Lax, *Numerical solution of partial differential equations*, Amer. Math. Monthly, 72 (2, Part II), Slaught Papers No. 10, 1965, pp. 74–84.

Marvin Marcus and Henryk Minc, *Permanents*, Amer. Math. Monthly, 72 (6), 1965, pp. 577–591.

1967

Wai-Kai Chen, *Boolean matrices and switching nets*, Math. Mag., 36, 1966, pp. 1–8.

D. R. Fulkerson, *Flow networks and combinatorial operations research*, Amer. Math. Monthly, 73 (2), 1966, pp. 115–138.

Mark Kac, *Can one hear the shape of a drum?*, Amer. Math. Monthly, 73 (4, Part II), Slaught Papers No. 11, 1966, pp. 1–23.

M. Z. Nashed, *Some remarks on variations and differentials*, Amer. Math. Monthly, 73 (4, Part II), Slaught Papers No. 11, 1966, pp. 63–76.

P. B. Yale, *Automorphisms of the complex numbers*, Math. Mag., 39, 1966, pp. 135–141.

1968

Frederic Cunningham, Jr., *Taking limits under the integral sign*, Math. Mag., 40, 1967, pp. 179–186.

W. F. Newns, *Functional dependence*, Amer. Math. Monthly, 74 (8), 1967, pp. 911–920.

Daniel Pedoe, *On a theorem in geometry*, Amer. Math. Monthly, 74 (6), 1967, pp. 627–640.

Keith L. Phillips, *The maximal theorems of Hardy and Littlewood*, Amer. Math. Monthly, 74 (6), 1967, pp. 648–660.

F. V. Waugh and Margaret W. Maxfield, *Side-and-diagonal numbers*, Math. Mag., 40, 1967, pp. 74–83.

Hans J. Zassenhaus, *On the fundamental theorem of algebra*, Amer. Math. Monthly, 74 (5), 1967, pp. 485–497.

1969

Harley Flanders, *A proof of Minkowski's inequality for convex curves*, Amer. Math. Monthly, 75 (6), 1968, pp. 581–593.

George E. Forsythe, *What to do till the computer scientist comes*, Amer. Math. Monthly, 75 (5), 1968, pp. 454–462.

M. F. Neuts, *Are many* 1-1*-functions on the positive integers onto?*, Math. Mag., 41, 1968, pp. 103–109.

Pierre Samuel, *Unique factorization*, Amer. Math. Monthly, 75 (9), 1968, pp. 945–952.

Hassler Whitney, *The mathematics of physical quantities*, I *and* II, Amer. Math. Monthly, 75 (2,3), 1968, pp. 115–138 and 227–256.

Albert Wilansky, *Spectral decomposition of matrices for high school students*, Math. Mag., 41, 1968, pp. 51–59.

1970

Henry L. Alder, *Partition identities—from Euler to the present*, Amer. Math. Monthly, 76 (7), 1969, pp. 733–746.

Ralph P. Boas, *Inequalities for the derivatives of polynomials*, Math. Mag., 42, 1969, pp. 165–174.

W. A. Coppel, *J. B. Fourier—on the occasion of his two hundredth birthday*, Amer. Math. Monthly, 76 (5), 1969, pp. 468–483.

Norman Levinson, *A motivated account of an elementary proof of the prime number theorem*, Amer. Math. Monthly, 3, 1969, pp. 225–245.

John Milnor, *A problem in cartography*, Amer. Math. Monthly, 10, 1969, pp. 1101–1112.

Ivan Niven, *Formal power series*, Amer. Math. Monthly, 8, 1969, pp. 871–889.

1971

Jean A. Dieudonné, *The work of Nicholas Bourbaki*, Amer. Math. Monthly, 77 (2), 1970, pp. 134–145.

George E. Forsythe, *Pitfalls in computation, or why a math book isn't enough*, Amer. Math. Monthly, 77 (9), 1970, pp. 931–956.

Paul R. Halmos, *Finite-dimensional Hilbert spaces*, Amer. Math. Monthly, 77 (5), 1970, pp. 457–464.

Eric Langford, *A problem in geometric probability*, Math. Mag., 43, 1970, pp. 237–244.

P. V. O'Neil, *Ulam's conjecture and graph reconstructions*, Amer. Math. Monthly, 77 (1), 1970, pp. 35–43.

Olga Taussky, *Sums of squares*, Amer. Math. Monthly, 77 (8), 1970, pp. 805–830.

1972

G. D. Chakerian and L. H. Lange, *Geometric extremum problems*, Math. Mag., 44, 1971, pp. 57–69.

P. M. Cohn, *Rings of fractions*, Amer. Math. Monthly, 78 (6), 1971, pp. 596–615.

Frederic Cunningham, Jr., *The Kakeya problem for simply connected and for star-shaped sets*, Amer. Math. Monthly, 78 (2), 1971, pp. 114–129.

W. J. Ellison, *Waring's problem*, Amer. Math. Monthly, 78 (1), 1971, pp. 10–36.

Leon Henkin, *Mathematical foundations for mathematics*, Amer. Math. Monthly, 78 (5), 1971, pp. 463–487.

Victor Klee, *What is a convex set?*, Amer. Math. Monthly, 78 (6), 1971, pp. 616–631.

1973

Jean A. Dieudonné, *The historical development of algebraic geometry*, Amer. Math. Monthly, 79 (8), 1972, pp. 827–866.

Samuel Karlin, *Some mathematical models of population genetics*, Amer. Math. Monthly, 79 (7), 1972, pp. 699–739.

Peter D. Lax, *The formation and decay of shock waves*, Amer. Math. Monthly, 79 (3), 1972, pp. 227–241.

Thomas L. Saaty, *Thirteen colorful variations on Guthrie's four-color conjecture*, Amer. Math. Monthly, 79 (1), 1972, pp. 2–43.

Lynn A. Steen, *Conjectures and counterexamples in metrization theory*, Amer. Math. Monthly, 79 (2), 1972, pp. 113–132.

R. L. Wilder, *History in the mathematics curriculum: Its status, quality, and function*, Amer. Math. Monthly, 79 (5), 1972, pp. 479–495

1974

Patrick Billinglsey, *Prime numbers and Brownian motion*, Amer. Math. Monthly, 80 (10), 1973, pp. 1099–1115.

Garrett Birkhoff, *Current trends in algebra*, Amer. Math. Monthly, 80 (7), 1973, pp. 760–782.

Martin Davis, *Hilbert's tenth problem is unsolvable*, Amer. Math. Monthly, 80 (3), 1973, pp. 233–269.

I. J. Schoenberg, *The elementary cases of Landau's problem of inequalities between derivatives*, Amer. Math. Monthly, 80 (2), 1973, pp. 121–158.

Lynn A. Steen, *Highlights in the history of spectral theory*, Amer. Math. Monthly, 80 (4), 1973, pp. 359–381

Robin J. Wilson, *An introduction to matroid theory*, Amer. Math. Monthly, 80 (5), 1973, pp. 500–525.

1975

Raymond Ayoub, *Euler and the zeta function*, Amer. Math. Monthly, 81 (10), 1974, pp. 1067–1086.

James Callahan, *Singularities and plane maps*, Amer. Math. Monthly, 81 (3), 1974, pp. 211–240.

Donald E. Knuth, *Computer science and its relation to mathematics*, Amer. Math. Monthly, 81 (4), 1974, pp. 323–343.

Johannes C. C. Nitsche, *Plateau's problems and their modern ramifications*, Amer. Math. Monthly, 81 (9), 1974, pp. 945–968.

S. K. Stein, *Algebraic tiling*, Amer. Math. Monthly, 81 (5), 1974, pp. 445–462.

Lawrence Zalcman, *Real proofs of complex theorems (and vice versa)*, Amer. Math. Monthly, 81 (2), 1974, pp. 115–137.

1976

M. L. Balinski and H. P. Young, *The quota method of apportionment*, Amer. Math. Monthly, 82 (7), 1975, pp. 701–730.

E. A. Bender and J. R. Goldman, *On the applications of Mobius inversion in combinatorial analysis*, Amer. Math. Monthly, 82 (8), 1975, pp. 789–803.

Branko Grünbaum, *Venn diagrams and independent families of sets*, Math. Mag., 48, 1975, pp. 12–23.

J. E. Humphreys, *Representations of $SL(2,p)$*, Amer. Math. Monthly, 82 (1), 1975, pp. 21–39.

J. B. Keller and D. W. McLaughlin, *The Feynman integral*, Amer. Math. Monthly, 82 (5), 1975, pp. 451–465.

J. J. Price, *Topics in orthogonal functions*, Amer. Math. Monthly, 82 (6), 1975, pp. 594–609.

1977

Shreeram S. Abhyankar, *Historical ramblings in algebraic geometry and related algebra*, Amer. Math. Monthly, 83 (6), 1976, pp. 409–448.

Joseph B. Keller, *Inverse problems*, Amer. Math. Monthly, 83 (2), 1976, pp. 107–118.

D. S. Passman, *What is a group ring?*, Amer. Math. Monthly, 83 (3), 1976, pp. 173–185.

James P. Jones, Diahachiro Sato, Hideo Wada, and Douglas Wiens, *Diophantine representation of the set of prime numbers*, Amer. Math. Monthly, 83 (6), 1976, pp. 449–464.

J. H. Ewing, W. H. Gustafson, P. R. Halmos, S. H. Moolgavkar, W. H. Wheeler, and W. P. Ziemer, *American mathematics from* 1940 *to the day before yesterday*, Amer. Math. Monthly, 83 (7), 1976, pp. 503–516.

1978

Ralph P. Boas, Jr., *Partial sums of infinite series, and how they grow*, Amer. Math. Monthly, 84 (4), 1977, pp. 237–258.

Louis H. Kauffman and Thomas F. Banchoff, *Immersions and mod-2 quadratic forms*, Amer. Math. Monthly, 84 (3), 1977, pp. 168–185.

Neil J. A. Sloane, *Error-correcting codes and invariant theory: New applications of a nineteenth-century technique*, Amer. Math. Monthly, 84 (2), 1977, pp. 82–107.

1979

Bradley Efron, *Controversies in the foundations of statistics*, Amer. Math. Monthly, 85 (4), 1978, pp. 231–246.

Ned Glick, *Breaking records and breaking boards*, Amer. Math. Monthly, 85 (1), 1978, pp. 2–26.

Kenneth I. Gross, *On the evolution of noncommutative harmonic analysis*, Amer. Math. Monthly, 85 (7), 1978, pp. 525–548.

Lawrence A. Shepp and Joseph B. Kruskal, *Computerized tomography: The new medical X-ray technology*, Amer. Math. Monthly, 85 (6), 1978, pp. 420–439.

1980

Desmond P. Fearnley-Sander, *Hermann Grassmann and the creation of linear algebra*, Amer. Math. Monthly, 86 (10), 1979, pp. 809–817.

David Gale, *The game of hex and the Brouwer fixed-point theorem*, Amer. Math. Monthly, 86 (10), 1979, pp. 818–826.

Karel Hrbacek, *Nonstandard set theory*, Amer. Math. Monthly, 86 (8), 1979, pp. 659–677.

Cathleen S. Morawetz, *Nonlinear conservation equations*, Amer. Math. Monthly, 86 (4), 1979, pp. 284–287.

Robert Osserman, *Bonnesen-style isoperimetric inequalities*, Amer. Math. Monthly, 86 (1), 1979, pp. 1–29.

1981

R. Creighton Buck, *Sherlock Holmes in Babylon*, Amer. Math. Monthly, 87 (5), 1980, pp. 335–345.

Brune H. Pourciau, *Modern multiplier rules*, Amer. Math. Monthly, 87 (6), 1980, pp. 433-452.

Alan H. Schoenfeld, *Teaching problem-solving skills*, Amer. Math. Monthly, 87 (10), 1980, pp. 794–805.

Edward R. Swart, *The philosophical implications of the four-color problem*, Amer. Math. Monthly, 87 (9), 1980, pp. 697–707.

Lawrence A. Zalcman, *Offbeat integral geometry*, Amer. Math. Monthly, 87 (3), 1980, pp. 161–175.

1982

Philip J. Davis, *Are there coincidences in mathematics?*, Amer. Math. Monthly, 88 (5), 1981, pp. 311–320.

R. Arthur Knoebel, *Exponentials reiterated*, Amer. Math. Monthly, 88 (4), 1981, pp. 235–252.

1983

Robert F. Brown, *The fixed point property and Cartesian products*, Amer. Math. Monthly, 89 (9), 1982, pp. 654–678.

Tony Rothman, *Genius and biographers: The fictionalization of Evariste Galois*, Amer. Math. Monthly, 89 (2), 1982, pp. 84–106.

Robert S. Strichartz, *Radon inversion—variations on a theme*, Amer. Math. Monthly, 89 (6), 1982, pp. 377–384 and 420–423 (solutions of problems).

1984

Judith V. Grabiner, *Who gave you the epsilon? Cauchy and the origins of rigorous calculus*, Amer. Math. Monthly, 90 (3), 1983, pp. 185–194.

Roger Howe, *Very basic Lie theory*, Amer. Math. Monthly, 90 (9), 1983, pp. 600–623.

John Milnor, *On the geometry of the Kepler problem*, Amer. Math. Monthly, 90 (6), 1983, pp. 353–365.

Joel Spencer, *Large numbers and unprovable theorems*, Amer. Math Monthly, 90 (10), 1983, pp. 669–675.

William C. Waterhouse, *Do symmetric problems have symmetric solutions?*, Amer. Math. Monthly, 90 (6), 1983, pp. 378–387.

1985

John D. Dixon, *Factorization and primality tests*, Amer. Math. Monthly, 91 (6), 1984, pp. 333–352.

Donald G. Saari and John B. Urenko, *Newton's method, circle maps, and chaotic motion*, Amer. Math. Monthly, 91 (1), 1984, pp. 3–17.

1986

Jeffrey C. Lagarias, *The $3x+1$ problem and its generalizations*, Amer. Math. Monthly, 92 (1), 1985, pp. 3–23.

Michael E. Taylor, *Review of Lars Hörmander's "The Analysis of linear partial differential operations, I and II"*, Amer. Math. Monthly, 92 (10), 1985, pp. 745–749.

1987

Stuart S. Antman, *Review of Ann Hibler Koblitz's "A convergence of lives—Sophia Kovalevskaia: Scientist, Writer, Revolutionary"*, Amer. Math. Monthly, 93 (2), 1986, pp. 139–144.

Joan Cleary, Sidney A. Morris and David Yost, *Numerical geometry—numbers for shapes*, Amer. Math. Monthly, 93 (4), 1986, pp. 260–275.

Howard Hiller, *Crystallography and cohomology of groups*, Amer. Math. Monthly, 93 (10), 1986, pp. 765–779.

Jacob Korevaar, *Ludwig Bieberbach's conjecture and its proof by Louis de Branges*, Amer. Math. Monthly, 93 (7), 1986, pp. 505–514.

Peter M. Neumann, *Review of Harold M. Edwards' "Galois Theory"*, Amer. Math. Monthly, 93 (5), 1986, pp. 407–411.

1988

James F. Epperson, *On the Runge example*, Amer. Math. Monthly, 94 (4), 1987, pp. 329–341.

Stan Wagon, *Fourteen proofs of a result about tiling a rectangle*, Amer. Math. Monthly, 94 (7), 1987, pp. 601–617.

1989

Richard K. Guy, *The strong law of small numbers*, Amer. Math. Monthly, 95 (8), 198, pp. 697–712.

Gert Almkvist and Bruce Berndt, *Gauss, Landen, Ramanujan, the arithmetic-geometric mean, ellipses, π and the "Ladies Diary"*, Amer. Math. Monthly, 95 (7), 1988, pp. 585–608.

1990

Jacob E. Goodman, János Pach and Chee K. Yap, *Mountain climbing, ladder moving and the ring-width of a polygon*, Amer. Math. Monthly, 96 (6), 1989, pp. 494–510.

Doron Zeilberger, *Kathy O'Hara's constructive proof of the unimodality of the Gaussian polynomials*, Amer. Math. Monthly, 96 (7), 1989, pp. 590–602.

1991

Marcel Berger, *Convexity*, Amer. Math. Monthly, 97 (8), 1990, pp. 650–678.

Ronald L. Graham and Frances Yao, *A whirlwind tour of computational geometry*, Amer. Math. Monthly, 97 (8), 1990, pp. 687–701.

Joyce Justicz, Edward R. Scheinerman and Peter M. Winkler, *Random intervals*, Amer. Math. Monthly, 97 (10), 1990, pp. 881–889.

1992

Clement W. H. Lam, *The search for a finite projective plane of order 10*, Amer. Math. Monthly, 98, 1991, pp. 305–318.

1994

Bruce C. Berndt and S. Bhargava, *Ramanujan—For lowbrows*, Amer. Math. Monthly, 100, 1993, pp. 644–656.

Reuben Hersh, *Szeged in* 1934, Amer. Math. Monthly, 100, 1993, pp. 219–230.

Leonard Gillman, *An axiomatic approach to the integral*, Amer. Math. Monthly, 100, 1993, pp. 16–25.

Joseph H. Silverman, *Taxicabs and sums of two cubes*, Amer. Math. Monthly, 100, 1993, pp. 331–340.

Dan Velleman and István Szalkai, *Versatile coins*, Amer. Math. Monthly, 100, 1993, pp. 26-33.

1995

Fernando Q. Gouvea, *A marvelous proof*, Amer. Math. Monthly, 101, 1994, pp. 203–222.

Jonathan L. King, *Three problems in search of a measure*, Amer. Math. Monthly, 101, 1994, pp. 609–628.

I. Kleiner and N. Movshovitz-Hadar, *The role of paradoxes in the evolution of mathematics*, Amer. Math. Monthly, 102, 1994, pp. 963–974.

William C. Waterhouse, *A counterexample for Germain*, Amer. Math. Monthly, 101, 1994, pp. 140–150.

1996

Martin Aigner, *Turan's graph theorem*, Amer. Math. Monthly, 102, 1995, pp. 808–816.

Sheldon Axler, *Down with determinants*!, Amer. Math. Monthly, 102, 1995, pp. 139-154.

John Oprea, *Geometry and the Foucault pendulum*, Amer. Math. Monthly, 102, 1995, pp. 515–522.

1997

Robert G. Bartle, *Return to the Riemann integral*, Amer. Math. Monthly, 103, 1996, pp. 625–632.

A. F. Beardon, *Sums of powers of integers*, Amer. Math. Monthly, 103, 1996, pp. 201–213.

John Brillhart and Patrick Morton, *A case study in mathematical research: The Golay-Rudin-Shapiro sequence*, Amer. Math. Monthly, 103, 1996, pp. 854–869.

Winners of the George Polya Award

An award for articles in the College Mathematics Journal—formerly the Two-Year College Mathematics Journal.

1977

Julian Weisglass, *Small groups: An alternative to the lecture method*, 7 (1), 1976, pp. 15–20.

Anneli Lax, *Linear algebra, A potent tool*, 7 (2), 1976, pp. 3–15.

1978

Allen H. Holmes, Walter J. Sanders and John W. LeDuc, *Statistical inference for the general education student—it can be done*, 8 (4), 1977, pp. 223–230.

Freida Zames, *Surface area and the cylinder area paradox*, 8 (4), 1977, pp. 207–211.

1979

Richard L. Francis, *A note on angle construction*, 9 (2), 1978, pp. 75–80.

Richard Plagge, *Fractions without quotients: Arithmetic of repeating decimals*, 9 (1), 1978, pp. 11–15.

1980

Hugh F. Ouellette and Gordon Bennett, *The discovery of a generalization*, 10 (2), 1979, pp. 100–106.

Robert Nelson, *Pictures, probability and paradox*, 10 (3), 1979, pp. 182–190.

1981

Gulbank D. Chakerian, *Circles and spheres*, 11 (1), 1980, pp. 26–41.

Dennis D. McCune, Robert G. Dean and William D. Clark, *Calculators to motivate infinite composition of functions*, 11 (3), 1980, pp. 189–195.

1982

John A. Mitchem, *On the history and solution of the four-color problem*, 12 (2), 1981, pp. 108–116.

Peter L. Renz, *Mathematical proof: What it is and what it ought to be*, 12 (2), 1981, pp. 83–103.

1983

Douglas R. Hofstadter, *Analogies and metaphors to explain Gödel's theorem*, 13 (2), 1982, pp. 98–114.

Paul R. Halmos, *The thrills of abstraction*, 13 (4), September 1982, pp. 243–251.

Warren Page and V. N. Murty, *Nearness relations among measures of central tendency and dispersion, Part* 1, 13 (5), 1982, pp. 315–327.

1984

Ruma Falk and Maya Bar-Hillel, *Probabilistic dependence between events*, 14 (3), 1983, pp. 240–247.

Richard J. Trudeau, *How big is a point?*, 14 (4), 1983, pp. 295–300.

1985

Anthony Barcellos, *The fractal geometry of Mandelbrot*, 15 (2), 1984, pp. 98–114.

Kay W. Dundas, *To build a better box*, 15 (1), 1984, pp. 30–36.

1986

Philip J. Davis, *What do I know? A study of mathematical self-awareness*, 16 (1), 1985, pp. 22–41.

1987

Constance Reid, *The autobiography of Julia Robinson*, 17 (1), 1986, pp. 3–21.

Irl C. Bivens, *What a tangent line is when it isn't a limit*, 17 (2), 1986, pp. 133–143.

1988

Dennis M. Luciano and Gordon M. Prichett, *From Caesar ciphers to public-key cryptosystems*, 18 (1), 1987, pp. 2–17.

V. Frederick Rickey, *Isaac Newton: Man, myth and mathematics*, 18 (5), 1987, pp. 362–389.

1989

Edward Rozema, *Why should we pivot in Gaussian elimination?*, 19 (1), 1988, pp. 63–72.

Beverly L. Brechner and John C. Mayer, *Antoine's necklace or how to keep a necklace from falling apart*, 19 (4), 1988, pp. 306–320.

1990

Israel Kleiner, *Evolution of the function concept: A brief survey*, 20 (4), 1989, pp. 282–300.

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