

THE MATHEMATICS TEACHER

*An Official Journal of
The National Council of Teachers of Mathematics
(Incorporated)*



*Classified Index
Volume LXII
1969*

EDITORIAL OFFICE

*Irvin H. Brune, Bowling Green University
Bowling Green, Ohio*

Author Index

- ALLENDORFER, CARL B. The Dilemma in Geometry. Mar., 165-69.
- ASSOCIATION OF TEACHERS OF MATHEMATICS IN PUBLIC INSTRUCTION, FRANCE. The Chambery Plan—Stages and Perspectives in the Reform of Mathematics Instruction. Feb., 129-38.
- AYTON, JOSEPH. A Visit to a Mathematical Shrine. Oct., 479-80.
- BAILEY, WILLIAM T. Friday-the-Thirteenth. May, 363-64.
- BAKER, BETTY L. Developing a Meaningful Algorithm for Factoring Quadratic Trinomials. Dec., 629-31.
- BAKER, VIRGINIA H., and WHITE, LOUISE G. Systems in Nonmathematical Disciplines. Mar., 171-77.
- BECKENBACH, EDWIN F. On the Positive Square Root of Two. Apr., 261-67.
- BECKMANN, MILTON W. Teaching the Low Achiever in Mathematics. Oct., 443-46.
- BELL, E. T. Buddha's Advice to Students and Teachers of Mathematics. May, 373-83.
- BIDWELL, JAMES KING. The Teaching of Arithmetic in England from 1550 until 1800 as Influenced by Social Change. Oct., 484-90.
- BROTHER ARTHUR INDELICATO, F.S.C. Generating "Random" Numbers Using Modular Arithmetic. May, 385-91.
- BROWN, STEPHEN I. Signed Numbers: A "Product" of Misconception. Mar., 183-95.
- BRUNE, IRVIN H. Announcing a New Department. Apr., 335.
- BRUNE, IRVIN H. *Editor*, "Points and Viewpoints." Apr., 335; Dec., 679-80.
- BRYANT, P. J., and WILSTED, H. D. Summer Employment of Mathematics Teachers in Industry. Nov., 549-51.
- BUKER, WERNER E. Modern Mathematics or Traditional Mathematics. Dec., 639-41.
- BUSCHMAN, R. G. Pencils of Rays and the Sieve of Eratosthenes. Apr., 279-81.
- CADLE, CARMELITA C. Art by Carmelita C. Cadle. Mar., 217.
- CAMPBELL, LAWRENCE G. Mathematics in British Secondary Schools: Curriculum Projects. Apr., 329-33.
- COXFORD, ARTHUR F. Reviews of Films. Dec., 685-86.
- CRESWELL, JOHN L., and KNEITZ, MARGARET H. An Action Program in Mathematics for High School Dropouts. Mar., 213-17.
- CROSSWHITE, F. JOE, *Editor*, "Classics in Mathematics Education." Jan., 19-23; Mar., 205-12; Apr., 295-304; May, 373-83.
- DAMASKOS, NICKANDER J. A Case Study in Mathematics—the Cone Problem. Dec., 642-49.
- DODGE, CLAYTON W. Guido Fubini. Jan., 44-46.
- DOTSON, W. G., JR. On the Shape of Plane Curves. Feb., 91-94.
- EAKIN, RICHARD R. *Editor*, "Reviews and Evaluations," Jan., 57-64; Feb., 141-48; Mar., 241-43; May 418-27; Oct., 511-13; Nov., 595-600; Dec., 681-83.
- EVES, HOWARD. A Geometry Capsule Concerning the Five Platonic Solids. Jan., 42-44.
- EVES, HOWARD. *Editor*, "Historically Speaking —." Jan., 42-46; Feb., 121-27; Mar., 223-28; May 401-9; Oct., 479-90; Nov., 579-87; Dec., 665-72.
- FANT, ALFRED B., Half Man, Half Myth. Mar., 225-28.
- FEHR, HOWARD F. The Education of Mathematics Teachers in Other Countries. Jan., 48-56.
- FEHR, HOWARD F. *Editor*, "International Mathematical Education." Jan., 48-56; Feb., 129-38; Mar., 231-39; Apr., 329-33; May, 410-17; Oct., 505-9; Nov., 589-93; Dec., 673-78.
- FORSYTHE, ALEXANDRA. What Points Are Equidistant from Two Skew Lines? Feb., 97-101.
- FRANDSEN, HENRY. The Last Word on Solving Inequalities. Oct., 439-41.
- FREUND, JOHN. Pi (Poem). Apr., 348.
- GARFUNKEL, J. Exploring Geometric Maxima and Minima. Feb., 85-90.
- GEDDES, DOROTHY, and LIPSEY, SALLY I. The Hazards of Sets. Oct., 454-59.
- GEISELMANN, HARRISON A., and HENNEMANN, WILLARD W. Using Programmed Learning in the Classroom: A Case History. Jan., 27-32.
- GREENBLATT, M. H. Pi-three versus Pi-four. Mar., 223-25.
- HENNEMANN, WILLARD W., and GEISELMANN, HARRISON A. Using Programmed Learning in the Classroom: A Case History. Jan., 27-32.

- HIGHT, DONALD W. Little Old Mega. Jan., 56; Feb., 90; Mar., 204; Apr., 348; Nov., 545.
- HIRSCH, JOSEPH. Prime Triplets. Oct., 467-71.
- HLAVATY, JULIUS H. Message from the President. Feb., 151; Mar., 245-50.
- . President's Report: The State of the Council—Golden Jubilee Year. Oct., 517-19.
- HOLMES, ALLEN, and SIMON, JULIAN L. A New Way to Teach Probability Statistics. Apr., 283-88.
- HOWLETT, JOHN H. A Study of Placement Methods for Entering College Freshmen in the Proper Mathematics Sequence at Michigan Technological University. Dec., 651-59.
- HUFFMAN, DAVID C. Independence of the Incidence Postulates. Apr., 269-77.
- HURWITZ, W. A. Excelsior. Feb., 94-95.
- ID, YUSUF. An Analemma Construction for Right and Oblique Ascensions. Dec., 669-72.
- ID, YUSUF, and KENNEDY, E. S. A Medieval Proof of Heron's Formula. Nov., 585-87.
- JEFFERY, JAY M. Psychological Set in Relation to the Construction of Mathematics Tests. Dec., 636-38.
- JEFFRIES, JAMES. Let's Play *Wff'n Proof*. Feb., 113-17.
- KEARNEY, KATHERYN. Algebra Class (Poem). Oct., 509.
- KENNEDY, E. S., and ID, YUSUF. A Medieval Proof of Heron's Formula. Nov., 585-87.
- KENNEDY, HUBERT C. The Witch of Agnesi—Exorcised. Oct., 480-82.
- KIEREN, THOMAS E. Quadratic Equations—Computer Style. Apr., 305-9.
- KING, ROBERT W. Using Programmed Instruction to Investigate the Effects of Group Interaction on Learning Mathematics. May, 393-98.
- KLEBER, RICHARD S. A Classroom Illustration of a Nonintuitive Probability. May, 361-62.
- KNEITZ, MARGARET H., and CRESWELL, JOHN L. An Action Program in Mathematics for High School Dropouts. Mar., 213-17.
- KOETKE, WALTER. *Editor*, "Computer-oriented Mathematics." Apr., 305-9; May, 385-91; Oct., 467-71; Nov., 563-67; Dec., 642-49.
- KRAUSE, EUGENE F. Homomorphism: A Unifying Concept. Dec., 617-22.
- KURTZ, RAY. Who Should Place College Freshmen in Mathematics? Nov., 557-59.
- LEFEBVRE, P. Mathematical Structures and the Role of Algebra in School Mathematics. Dec., 673-78.
- LEVINE, MAITA, and ROLWING, RAYMOND H. The Parallel Postulate. Dec., 665-69.
- LICK, DALE W. The Remarkable Bernoulli Family. May, 401-9.
- LIPSEY, SALLY I., and GEDDES, DOROTHY. The Hazards of Sets. Oct., 454-59.
- MARKUSHEVITZ, A. I., and MASLOVA G. G. Mathematics in the Schools of the USSR. Mar., 231-39.
- MASLOVA, G. G., and MARKUSHEVITZ, A. I. Mathematics in the Schools of the USSR. Mar., 231-39.
- MASSEY, TOM E. "George" Helps Students Multiply Binomials. Jan., 18.
- MATTHEWS, E. REBECCA. A Simple "7" Divisibility Rule. Oct., 461-64.
- MCCREERY, LOUIS R. Lively Functions for Algebra One. May, 365-68.
- MINNESOTA COUNCIL OF TEACHERS OF MATHEMATICS. Patterns for Professional Progress. Oct., 497-503.
- MORTON, ROBERT L. Simplified Procedures for Computing the Federal Income Tax. Jan., 5-11.
- MOSKOWITZ, SHEILA. The Crossnumber Puzzle Solves a Teaching Problem. Mar., 200-204.
- NADLER, MAURICE. The Demise of Analytic Geometry. Oct., 447-52.
- NANNINI, AMOS. A Property of "Reciprocal" Algebraic Equations. Apr., 293.
- NEWSOM, CARROLL V. A Philosophy for the Mathematics Teacher. Jan., 19-23.
- NICHOLS, EUGENE D. *Editor*, "Experimental Programs." Jan., 25-32; Feb., 113-17; Mar., 213-17; Apr., 311-15; May, 393-98; Oct., 473-75; Nov., 571-75; Dec., 651-59.
- NODDINGS, NELLIE L. Providing for Individual Rates of Learning in Mathematics. Nov., 543-45.
- NORRIS, FLETCHER R. Student Mathematics Achievement as Related to Teacher In-Service Work. Apr., 321-27.
- PEAK, PHILIP. *Editor*, "Have You Read . . . ?" Jan., 35-38; Feb., 119-20; Mar., 220-21; Apr., 317-18; May, 399-400; Oct., 477-78; Nov., 576-77; Dec., 663-64.
- POINCARÉ, HENRI. Intuition and Logic in Mathematics. Mar., 205-12.
- . Mathematical Definitions and Teaching. Apr., 295-304.
- PRIELIPP, ROBERT W. The Area of a Pythagorean Triangle and the Number Six. Nov., 547-48.
- . Digital Sums of Perfect Numbers and Triangular Numbers. Mar., 179-82.
- . Niels Henrik Abel. Oct., 482-84.
- . Three Famous Mathematicians. Feb., 125-27.
- READ, CECIL B. Anomalous Mathematical Nomenclature. Feb., 121-25.
- ROBERTS, FANNIE. Attitudes of College Freshmen Towards Mathematics. Jan., 25-27.
- ROLWING, RAYMOND H., and LEVINE, MAITA. The Parallel Postulate. Dec., 665-69.
- SCHRANK, WILBURN R., Academic Stimulation of Mathematics Pupils from Their Classroom Association with Brighter Pupils. Oct., 473-75.
- SCHULZ, RAYMOND H., JR. He That Has Eyes, Let Him See! Mar., 198-99.
- SHAFER, DALE M. A Proposal for the Mathematics Methods Course. Dec., 623-27.

- SHIMIZU, MILDRED T. Achievement in Senior Advanced Mathematics and First-Year College Mathematics. Apr., 311-15.
- SILVEY, LINDA. Letter to the Editor re Mathematics. Feb., 138.
- SIMON, JULIAN L., and HOLMES, ALLEN. A New Way to Teach Probability Statistics. Apr., 283-88.
- SMITH, FRANK. The Readability of Junior High School Mathematics Textbooks. Apr., 289-91.
- SNOW, C. P. Elitism and Excellence. Oct., 505-9.
- STOVER, DONALD W. Pretesting for the College Boards. Nov., 537-41.
- SWETZ, FRANK. Mathematical Education in Malaysia. May, 410-17.
- TRIGG, CHARLES W. Dig the Ten Digits (Poem). Apr., 291.
- VERNO, C. RALPH. A Hunch and a Proof. Jan., 17-18.
- VIERTEL, WILLIAM K. Why Not Relate the Conic Sections to the Cone? Jan., 13-15.
- WATERS, WILLIAM M., JR. Notes on an Extension of Pythagorean Triplets in Arithmetic Progression. Dec., 633-35.
- WEISS, SOL. What Mathematics Shall We Teach the Low Achiever? Nov., 571-75.
- WHITE, LOUISE G., and BAKER, VIRGINIA H. Systems in Nonmathematical Disciplines. Mar., 171-77.
- WHITMORE, EDWARD H. *Editor*, "In-Service Education in Mathematics." Apr., 321-27; Oct., 497-503.
- WILLSON, WILLIAM WYNNE. The Uniqueness of the Field of Complex Numbers. May, 369-72.
- WILSON, JOHN. A Heuristic Approach to Pythagorean Triples. May, 357-60.
- WILSTED, H. D., and BRYANT, P. J. Summer Employment of Mathematics Teachers in Industry. Nov., 549-51.
- WISCAMB, MARGARET. Graphing True-False Statements. Nov., 553-56.
- WREN, F. LYNWOOD. The "New Mathematics" in Historical Perspective. Nov., 579-85.
- ZOET, CHARLES J. Computers in Mathematics Education. Nov., 563-67.
- ZOLL, EDWARD J. Research in Programmed Instruction in Mathematics. Feb., 103-10.

Title Index

- Academic Stimulation of Mathematics Pupils from Their Classroom Association with Brighter Pupils. WILBURN R. SHRANK. Oct., 473-75.
- Achievement in Senior Advanced Mathematics and First-Year College Mathematics. MILDRED T. SHIMIZU. Apr., 311-15.
- An Action Program in Mathematics for High School Dropouts. MARGARET H. KNEITZ and JOHN L. CRESWELL. Mar., 213-17.
- Algebra Class (Poem). KATHERYN KEARNEY. Oct., 509.
- An Analemma Construction for Right and Oblique Ascensions. YUSUF ID. Dec., 669-72.
- Announcing a New Department. IRVIN H. BRUNE. Apr., 335.
- Annual Financial Report. Nov., 604.
- Anomalous Mathematical Nomenclature. CECIL B. READ. Feb., 121-25.
- The Area of a Pythagorean Triangle and the Number Six. ROBERT W. PRIELIPP. Nov., 547-48.
- Art by Carmelita C. Cadle. Mar., 217.
- Attitudes of College Freshmen towards Mathematics. FANNIE ROBERTS. Jan. 25-27.
- Buddha's Advice to Students and Teachers of Mathematics. E. T. BELL. May, 373-83.
- Bylaws. Oct., 521-23.
- A Case Study in Mathematics—the Cone Problem. NICKANDER J. DAMASKOS. Dec., 642-49.
- The Chambery Plan—Stages and Perspectives in the Reform of Mathematics Instruction. ASSOCIATION OF TEACHERS OF MATHEMATICS IN PUBLIC INSTRUCTION, FRANCE. Feb., 129-38.
- "Classics in Mathematics Education." F. JOE CROSSWHITE, *Editor*. Jan., 19-23; Mar., 205-12; Apr., 295-304; May, 373-83.
- A Classroom Illustration of a Nonintuitive Probability. RICHARD S. KLEBER. May, 361-62.
- Committees and Representatives, 1968/69, Supplemental List. Feb., 155, 157.
- "Computer-oriented Mathematics." WALTER KOETKE, *Editor*. Apr., 305-9; May 385-91; Oct., 467-71; Nov., 563-67; Dec., 642-49.
- Computers in Mathematics Education. CHARLES J. ZOET. Nov., 563-67.
- The Crossnumber Puzzle Solves a Teaching Problem. SHEILA MOSKOWITZ. Mar., 200-204.
- The Demise of Analytic Geometry. MAURICE NADLER. Oct., 447-52.
- Developing a Meaningful Algorithm for Factoring Quadratic Trinomials. BETTY L. BAKER. Dec., 629-31.
- Dig the Ten Digits (Poem). CHARLES W. TRIGG. Apr., 291.
- Digital Sums of Perfect Numbers and Triangular Numbers. ROBERT W. PRIELIPP. Mar., 179-82.
- The Dilemma in Geometry. CARL B. ALLEN-DOERFER. Mar., 165-69.
- The Education of Mathematics Teachers in Other Countries. HOWARD F. FEHR. Jan., 48-56.
- Elitism and Excellence. C. P. SNOW. Oct., 505-9.
- Excelsior; (Poem). W. A. HURWITZ. Feb., 94-95.
- "Experimental Programs." EUGENE D. NICHOLS, *Editor*. Jan., 25-32; Feb., 113-17; Mar., 213-17; Apr., 311-15; May 293-98; Oct., 473-75; Nov., 571-75; Dec., 651-59.
- Exploring Geometric Maxima and Minima. J. GARFUNKEL. Feb., 85-90.
- Friday-the-Thirteenth. WILLIAM T. BAILEY. May, 363-64.
- Generating "Random" Numbers Using Modular Arithmetic. BROTHER ARTHUR INDELICATO, F.S.C. May, 385-91.
- A Geometry Capsule Concerning the Five Platonic Solids. HOWARD EVES. Jan., 42-44.
- "George" Helps Students Multiply Binomials. TOM E. MASSEY. Jan., 18.
- Golden Jubilee Year Activities. Nov., 601-3.
- Golden Jubilee Year Activities of the Affiliated Groups. Dec., 687-93.
- Graphing True-False Statements. MARGARET WISCAMB. Nov., 553-56.
- Guido Fubini. CLAYTON W. DODGE. Jan., 44-46.
- Half Man, Half Myth. ALFRED B. FANT. Mar., 225-28.
- "Have You Read . . . ?" PHILIP PEAK, *Editor*. Jan., 35, 37-38; Feb., 119-20; Mar., 220-21; Apr., 317-18; May, 399-400; Oct., 477-78; Nov., 576-77; Dec., 663-64.
- The Hazards of Sets. DOROTHY GEDDES and SALLY I. LIPSEY. Oct., 454-59.
- He That Has Eyes, Let Him See! RAYMOND H. SCHULZ, JR. Mar., 198-99.
- A Heuristic Approach to Pythagorean Triples. JOHN WILSON. May, 357-60.
- "Historically Speaking—." HOWARD EVES, *Editor*. Jan., 42-46; Feb., 121-27; Mar., 223-28; May, 401-9; Oct., 479-90; Nov., 579-87; Dec., 665-72.

- Holiday Gratitude, IRVIN H. BRUNE. Dec., 683-84.
- Homomorphism: A Unifying Concept. EUGENE F. KRAUSE. Dec., 617-22.
- A Hunch and a Proof. C. RALPH VERNON. Jan., 17-18.
- Independence of the Incidence Postulates. DAVID C. HUFFMAN. Apr., 269-77.
- "In-Service Education in Mathematics." EDWARD H. WHITMORE, *Editor*. Apr., 321-27; Oct., 497-503.
- "International Mathematical Education." HOWARD F. FEHR, *Editor*. Jan., 48-56; Feb., 129-38; Mar., 231-39; Apr., 329-33; May, 410-17; Oct., 505-9; Nov., 589-93; Dec., 673-78.
- Intuition and Logic in Mathematics. HENRI POINCARÉ. Mar., 205-12.
- The Last Word on Solving Inequalities. HENRY FRANDSEN. Oct., 439-41.
- Let's Play *Wff'n Proof*. JAMES JEFFRIES. Feb., 113-17.
- Little Old Mega. DONALD W. HIGHT. Jan., 56; Feb., 90; Mar., 204; Apr., 348; Nov., 545.
- Lively Functions for Algebra One. LOUIS R. MCCREERY. May, 365-68.
- Mathematical Definitions and Teaching. HENRI POINCARÉ. Apr., 295-304.
- Mathematical Education in Malaysia. FRANK SWETZ. May, 410-17.
- Mathematical Structures and the Role of Algebra in School Mathematics. P. LEFEBVRE. Dec., 673-78.
- Mathematics in British Secondary Schools: Curriculum Projects. LAWRENCE G. CAMPBELL. Apr., 329-33.
- Mathematics in the Schools of the USSR. G. G. MASLOVA and A. I. MARKUSHEVITZ. Mar., 231-39.
- A Medieval Proof of Heron's Formula. YUSUF ID and E. S. KENNEDY. Nov., 585-87.
- Memberships and Subscriptions. Nov., 606-7.
- Message from the President. JULIUS H. HLAVATY. Feb., 151; Mar., 245-46.
- Minutes of the Annual Business Meeting. Oct., 520-21.
- Modern Mathematics or Traditional Mathematics. WERNER E. BUKER. Dec., 639-41.
- NCTM Affiliated Group Officers. Apr., 339-48.
- The "New Mathematics" in Historical Perspective. F. LYNWOOD WREN. Nov., 579-85.
- A New Way to Teach Probability Statistics. JULIAN L. SIMON, and ALLEN HOLMES. Apr., 283-88.
- Niels Henrik Abel. ROBERT W. PRIELIPP. Oct., 482-84.
- The 1969/70 Budget. Nov., 605-6.
- 1969 Elections. Report of the Committee on Nominations. Jan., 67.
- 1970 Elections. Mar., 249.
- Nominations for the 1970 Elections. Nov., 603-4.
- Nominees for 1969 Elections. Jan., 69-77.
- Notes on an Extension of Pythagorean Triplets in Arithmetic Progression. WILLIAM M. WATERS, JR. Dec., 633-35.
- Officers, Directors, Committees, Projects, and Representatives (1969/70). Oct., 523-28.
- On the Positive Square Root of Two. EDWIN F. BECKENBACH. Apr., 261-67.
- On the Shape of Plane Curves. W. G. DOTSON, JR. Feb., 91-94.
- The Parallel Postulate. RAYMOND H. ROLWING and MAITA LEVINE. Dec., 665-69.
- Patterns for Professional Progress. MINNESOTA COUNCIL OF TEACHERS OF MATHEMATICS. Oct., 497-503.
- Pencils of Rays and the Sieve of Eratosthenes. R. G. BUSCHMAN. Apr., 279-81.
- A Philosophy for the Mathematics Teacher. CARROLL V. NEWSOM. Jan. 19-23.
- Pi (Poem). JOHN FREUND. Apr., 348.
- Pi-three versus Pi-four. M. H. GREENBLATT. Mar., 223-25.
- "Points and Viewpoints." IRVIN H. BRUNE, *Editor*. Apr., 335; Dec., 678-80.
- President's Report: The State of the Council—Golden Jubilee Year. JULIUS H. HLAVATY. Oct., 517-19.
- Pretesting for the College Boards. DONALD W. STOVER. Nov., 537-41.
- Prime Triplets. JOSEPH HIRSCH. Oct., 467-71.
- Proceedings of the Nineteenth Annual Delegate Assembly. Feb., 153-55.
- Program of Mathematics for the First Year of Study in the Junior High School (Seventh School Year) in Belgium. Nov., 589-93.
- A Property of "Reciprocal" Algebraic Equations. AMOS NANNINI. Apr., 293.
- A Proposal for the Mathematics Methods Course. DALE M. SHAFER. Dec., 623-27.
- Proposed Bylaw Changes. Mar., 246-49.
- Providing for Individual Rates of Learning in Mathematics. NELLIE L. NODDINGS. Nov., 543-45.
- Psychological Set in Relation to the Construction of Mathematics Tests. JAY M. JEFFERY. Dec., 636-38.
- Quadratic Equations—Computer Style. THOMAS E. KIEREN. Apr., 305-9.
- The Readability of Junior High School Mathematics Textbooks. FRANK SMITH. Apr., 289-91.
- Registrations at NCTM Conventions. Nov., 607-8.
- The Remarkable Bernoulli Family. DALE W. LICK. May, 401-9.
- Research in Programmed Instruction in Mathematics. EDWARD J. ZOLL. Feb., 103-10.
- "Reviews and Evaluations." RICHARD R. EAKIN, *Editor*. Jan., 57-64; Feb., 141-48; Mar., 241-43; May, 418-27; Oct., 511-13; Nov., 595-600; Dec., 681-83.
- "Reviews of Films." ARTHUR F. COXFORD, *Editor*. Dec., 685-86.
- Signed Numbers: A "Product" of Misconception. STEPHEN I. BROWN. Mar., 183-95.
- A Simple "7" Divisibility Rule. E. REBECCA MATTHEWS. Oct., 461-64.
- Simplified Procedures for Computing the Federal Income Tax. ROBERT L. MORTON. Jan., 5-11.

- Student Mathematics Achievement as Related to Teacher In-Service Work. FLETCHER R. NORRIS. Apr., 321-27.
- A Study of Placement Methods for Entering College Freshmen in the Proper Mathematics Sequence at Michigan Technological University. JOHN H. HOLLETT. Dec., 651-59.
- Summer Employment of Mathematics Teachers in Industry. H. D. WILSTED and P. J. BRYANT. Nov., 549-51.
- Systems in Nonmathematical Disciplines. LOUISE G. WHITE and VIRGINIA H. BAKER. Mar., 171-77.
- The Teaching of Arithmetic in England from 1550 until 1800 as Influenced by Social Change. JAMES KING BIDWELL. Oct., 484-90.
- Teaching the Low Achiever in Mathematics. MILTON W. BECKMANN. Oct., 443-46.
- Three Famous Mathematicians. ROBERT W. PRIELIPP. Feb., 125-27.
- The Uniqueness of the Field of Complex Numbers. WILLIAM WYNNE WILLSON. May, 369-72.
- Using Programmed Instruction to Investigate the Effects of Group Interaction on Learning Mathematics. ROBERT W. KING. May, 393-98.
- Using Programmed Learning in the Classroom: A Case History. WILLARD W. HENNEMANN and HARRISON A. GEISELMANN. Jan., 27-32.
- A Visit to a Mathematical Shrine. JOSEPH AYTON. Oct., 479-80.
- What Mathematics Shall We Teach the Low Achiever? SOL WEISS. Nov., 571-75.
- What Points Are Equidistant from Two Skew Lines? ALEXANDRA FORSYTHE. Feb., 97-101.
- "What's New?" Jan., 47; Feb., 101, 110; Mar., 243; Apr., 318-19; May, 400; Oct., 490-94; Nov., 556, 600, 610; Dec., 686.
- Who Should Place College Freshmen in Mathematics? RAY KURTZ. Nov., 557-59.
- Why Not Relate the Conic Sections to the Cone? WILLIAM K. VIERTTEL. Jan., 13-15.
- The Witch of Agnesi—Exorcised. HUBERT C. KENNEDY. Oct., 480-82.
- Your Professional Dates. Jan., 77-78; Feb., 157-59; Mar., 251-53; Apr., 350-51; May, 433-34; Oct., 528-29; Nov., 609-10; Dec., 693-94.

San Diego Meeting—March 12-14

Celebrate the Golden Jubilee Year in the Golden State!

And the program of the March 12-14, 1970, Name-of-Site Meeting in San Diego gives good reason to celebrate. After section meetings Thursday afternoon, Dr. Edward Teller will give the keynote address that evening, followed by a reception.

A full-day schedule of general sessions, section meetings, demonstration classes, and workshops will be held on both Friday and Saturday. Among the general session speakers are David Page, Lou Cohen, Ernest Ranucci, Henry Pollack, and Raymond Redheffer. Patrick Suppes will give a three-lecture series on logic for the upper elementary grades. More than sixty section meetings will be held in special grade-level or subject-matter areas. Fifteen workshops and five demonstration classes are also part of the extensive program.

Julius Hlavaty, president of the NCTM, will discuss the next fifty years of the NCTM at the Friday night banquet, and Frank Sullivan of Loyola University in Los Angeles will be the luncheon speaker on Saturday.

In all, the meeting will be a great way to end the NCTM's first fifty years and to begin California's second two hundred. We'll see you there.

Subject Index

ABILITY GROUPING

- Academic Stimulation of Mathematics Pupils from Their Classroom Association with Brighter Pupils, 473-75.
- What Mathematics Shall We Teach the Low Achiever?, 571-75.

ALGEBRA

Curriculum

- Mathematical Structures and the Role of Algebra in School Mathematics, 673-78.
- Mathematics in the Schools of the USSR, 231-39.

Miscellaneous

- The Hazards of Sets, 454-59.
- The Witch of Agnesi—Exorcised, 480-82.

Teaching Methods

- "George" Helps Students Multiply Binomials, 18.
- Homomorphism: A Unifying Concept, 617-22.
- The Last Word on Solving Inequalities, 439-41.
- Quadratic Equations—Computer Style, 305-9.

Topics in

- Developing a Meaningful Algorithm for Factoring Trinomials, 629-31.
- A Heuristic Approach to Pythagorean Triples, 357-60.
- A Hunch and a Proof, 17-18.
- Lively Functions for Algebra One, 365-68.
- Niels Henrik Abel, 482-84.
- Notes on an Extension of Pythagorean Triplets in Arithmetic Progression, 633-35.
- A Property of "Reciprocal" Algebraic Equations, 293.
- Quadratic Equations—Computer Style, 305-9.
- Signed Numbers: A "Product" of Misconception, 183-95.
- The Uniqueness of the Field of Complex Numbers, 369-72.
- What Points are Equidistant from Two Skew Lines? 97-101.
- Why Not Relate the Conic Sections to the Cone? 13-15.

APPLICATIONS

Business and Consumer

- Simplified Procedures for Computing the Federal Income Tax, 5-11.

Miscellaneous

- Art by Carmelita C. Cadle, 217.

Systems in Nonmathematical Disciplines, 171-77.

Science and Engineering

- A Case Study in Mathematics—the Cone Problem, 642-49.
- Lively Functions for Algebra One, 365-68.
- Summer Employment of Mathematics Teachers in Industry, 549-51.

ARITHMETIC

Miscellaneous

- The Hazards of Sets, 454-59.
- Simplified Procedures for Computing the Federal Income Tax, 5-11.
- The Teaching of Arithmetic in England from 1550 until 1800 as Influenced by Social Change, 484-90.
- Teaching the Low Achiever in Mathematics, 443-46.

Teaching Methods

- An Action Program in Mathematics for High School Dropouts, 213-17.
- Homomorphism: A Unifying Concept, 617-22.

Topics in

- A Simple "7" Divisibility Rule, 461-64.

ARTICULATION

- Who Should Place College Freshmen in Mathematics?, 557-59.

ASTRONOMY

- An Analemma Construction for Right and Oblique Ascensions, 669-72.

CALCULUS

Miscellaneous

- Achievement in Senior Advanced Mathematics and First-Year College Mathematics, 311-15.
- The Demise of Analytic Geometry, 447-52.

Teaching Methods

- Using Programmed Learning in the College Classroom: A Case History, 27-32.

Topics in

- A Case Study in Mathematics—the Cone Problem, 642-49.
- On the Shape of Plane Curves, 91-94.

CALENDARS

- Friday-the-Thirteenth, 363-64.

COMPUTATION

Approximation

- He That Has Eyes, Let Him See! 198-99.

Miscellaneous

- A Case Study in Mathematics—the Cone Problem, 642-49.

- Simplified Procedures for Computing the Federal Income Tax, 5-11.
- COMPUTERS AND CALCULATORS**
 Announcing a New Department, 335.
 A Case Study in Mathematics—the Cone Problem, 642-49.
 Computers in Mathematics Education, 563-67.
 Generating “Random” Numbers Using Modular Arithmetic, 385-91.
 He That Has Eyes, Let Him See! 198-99.
 Prime Triplets, 467-71.
 Quadratic Equations—Computer Style, 305-9.
 Summer Employment of Mathematics Teachers in Industry, 549-51.
- CURRICULUM**
College
 The Demise of Analytic Geometry, 447-52.
High School
 The Demise of Analytic Geometry, 447-52.
 Mathematics in British Secondary Schools: Curriculum Projects, 329-33.
Junior High School
 Program of Mathematics for the First Year of Study in the Junior High School (Seventh School Year) in Belgium, 589-93.
 The Readability of Junior High School Mathematics Textbooks, 289-91.
 What Mathematics Shall We Teach the Low Achiever?, 571-75.
- Miscellaneous**
 The Dilemma in Geometry, 165-69.
 Homomorphism: A Unifying Concept, 617-22.
 Mathematical Structures and the Role of Algebra in School Mathematics, 673-78.
- EVALUATION**
 Pretesting for the College Boards, 537-41.
 A Proposal for the Mathematics Methods Course, 623-27.
- GENERAL MATHEMATICS**
 What Mathematics Shall We Teach the Low Achiever?, 571-75.
- Teaching Methods**
 Teaching the Low Achiever in Mathematics, 443-46.
- GEOMETRY**
Curriculum
 The Dilemma in Geometry, 165-69.
 Mathematics in the Schools of the USSR, 231-39.
Miscellaneous
 Buddha's Advice to Students and Teachers of Mathematics, 373-83.
 The Demise of Analytic Geometry, 447-52.
 Guido Fubini, 44-46.
Teaching Methods
 The “New Mathematics” in Historical Perspective, 579-85.
Topics in
 An Analemma Construction for Right and Oblique Ascensions, 669-72.
 The Area of a Pythagorean Triangle and the Number Six, 547-48.
- Exploring Geometric Maxima and Minima, 85-90.
 A Geometry Capsule Concerning the Five Platonic Solids, 42-44.
 A Heuristic Approach to Pythagorean Triples, 357-60.
 Independence of the Incidence Postulates, 269-77.
 A Medieval Proof of Heron's Formula, 585-87.
 Modern Mathematics or Traditional Mathematics, 639-40.
 On the Positive Square Root of Two, 261-67.
 On the Shape of Plane Curves, 91-94.
 The Parallel Postulate, 665-69.
 Pencils of Rays and the Sieve of Eratosthenes, 279-81.
 What Points are Equidistant from Two Skew Lines? 97-101.
 Why Not Relate the Conic Sections to the Cone? 13-15.
- GRAPHS AND GRAPHING**
 Graphing True-False Statements, 553-56.
 The Last Word on Solving Inequalities, 439-41.
- GUIDANCE**
 A Study of Placement Methods for Entering College Freshmen in the Proper Mathematics Sequence at Michigan Technological University, 651-59.
 Who Should Place College Freshmen in Mathematics?, 557-59.
- HISTORY OF MATHEMATICS**
Famous Mathematicians
 A Geometry Capsule Concerning the Five Platonic Solids, 42-44.
 Guido Fubini, 44-46.
 Half Man, Half Myth, 225-28.
 Intuition and Logic in Mathematics, 205-12.
 Niels Henrik Abel, 482-84.
 The Remarkable Bernoulli Family, 401-9.
 Three Famous Mathematicians, 125-27.
 A Visit to a Mathematical Shrine, 479-80.
 The Witch of Agnesi—Exorcised, 480-82.
- Miscellaneous**
 The “New Mathematics” in Historical Perspective, 579-85.
- Topics in**
 An Analemma Construction for Right and Oblique Ascensions, 669-72.
 Anomalous Mathematical Nomenclature, 121-25.
 A Geometry Capsule Concerning the Five Platonic Solids, 42-44.
 A Medieval Proof of Heron's Formula, 585-87.
 The Parallel Postulate, 665-69.
 The Teaching of Arithmetic in England from 1550 until 1800 as Influenced by Social Change, 484-90.
- HUMOR, DRAMA, POETRY**
 Algebra Class (Poem), 509.
 Dig the Ten Digits (Poem), 291.
 Excelsior! (Poem), 94-95.

- Pi (Poem), 348.
Pi-Three versus Pi-Four, 223-25.
- INDUCTION, MATHEMATICAL**
Psychological Set in Relation to the Construction of Mathematics Tests, 636-38.
- LANGUAGE OF MATHEMATICS**
Mathematical Definitions and Teaching, 295-304.
- LITERATURE**
A Philosophy for the Mathematics Teacher, 19-23.
Research in Programmed Instruction in Mathematics, 103-110.
- Miscellaneous**
Have You Read. . . ?, 35-38; 119-20; 220-21; 317-18; 399-400; 477-78; 576-77; 663-64.
A Study of Placement Methods for Entering College Freshmen in the Proper Mathematics Sequence at Michigan Technological University (bibliography), 651-59.
What's New? 47; 101, 110; 243; 318-19; 400-27; 490-94; 556, 600, 610; 686.
- Reviews**
Reviews and Evaluations, 57-64; 141-48; 241-43; 418-27; 511-13; 595-600; 681-83.
Reviews of Films, 685-86.
- Logic**
Graphing True-False Statements, 553-56.
Homomorphism: A Unifying Concept, 617-22.
Intuition and Logic in Mathematics, 205-12.
Let's Play *Wff'n Proof*, 113-17.
Systems in Nonmathematical Disciplines, 171-77.
- MATHEMATICS, GENERAL**
Education
Mathematical Structures and the Role of Algebra in School Mathematics, 673-78.
Foundations of
Independence of the Incidence Postulates 269-77.
Intuition and Logic in Mathematics, 205-12.
- MATHEMATICS IN OTHER COUNTRIES**
The Chambery Plan—States and Perspectives in the Reform of Mathematics Education, 129-38.
The Education of Mathematics Teachers in Other Countries, 48-56.
Elitism and Excellence, 505-9.
Mathematical Education in Malaysia, 410-17.
Mathematical Structures and the Role of Algebra in School Mathematics, 673-78.
Mathematics in British Secondary Schools: Curriculum Projects, 329-33.
Mathematics in the Schools of the USSR, 231-39.
Program of Mathematics for the First Year of Study in the Junior High School (Seventh School Year) in Belgium, 589-93.
- NCTM**
Affiliated Groups
Golden Jubilee Year Activities of the Affiliated Groups, 687-93.
NCTM Affiliated Group Officers, 339-48.
Your Professional Dates, 77-78; 157-59; 251-53; 350-51; 433-34; 528-29; 609-10; 693-94.
Committee Reports
Golden Jubilee Year Activities, 601-3.
1969 Elections. Report of the Committee on Nominations, 67-77.
Nominations for the 1970 Elections, 603-4.
Corporate Structure
Bylaws, 521-23
Proposed Bylaw Changes, 246-49.
Finances
Annual Financial Report, 604.
The 1969/70 Budget, 605-6.
Meetings
Registrations at NCTM Conventions, 607-8.
Membership
Memberships and Subscriptions, 606-7.
Minutes
Minutes of the Annual Business Meeting, 520-21.
Proceedings of the Nineteenth Annual Delegate Assembly, 153, 155.
Miscellaneous
Announcing a New Department, 335.
Officers
Committees and Representatives, 1968/69, Supplemental List, 155, 157.
NCTM Representatives, 428-32.
Officers, Directors, Committees, Projects, and Representatives (1969/70), 523-28.
President's Messages
President's Messages, 151; 245-46; 517-19.
- NOTATION AND TERMINOLOGY**
Anomalous Mathematical Nomenclature, 121-25.
Mathematical Definitions and Teaching, 295-304.
Program of Mathematics for the First Year of Study in the Junior High School (Seventh School Year) in Belgium, 589-93.
- NUMBERS AND NUMBER SYSTEMS, THEORY**
The Area of a Pythagorean Triangle and the Number Six, 547-48.
Digital Sums of Perfect Numbers and Triangular Numbers, 179-82.
Generating "Random" Numbers Using Modular Arithmetic, 385-91.
A Heuristic Approach to Pythagorean Triples, 357-60.
Notes on an Extension of Pythagorean Triplets in Arithmetic Progression, 633-35.
On the Positive Square Root of Two, 261-67.
Pencils of Rays and the Sieve of Eratosthenes, 279-81.
Pi-Three versus Pi-Four, 223-25.
Prime Triples, 467-71.

Signed Numbers: A "Product" of Misconception, 183-95.

A Simple "7" Divisibility Rule, 461-64.

The Uniqueness of the Field of Complex Numbers, 369-72.

OPINIONS AND PHILOSOPHIES

Miscellaneous

Buddha's Advice to Students and Teachers of Mathematics, 373-83.

Intuition and Logic in Mathematics, 205-12.

Mathematical Definitions and Teaching, 295-304.

A Philosophy for the Mathematics Teacher, 19-23.

PROBABILITY

A Classroom Illustration of a Nonintuitive Probability, 361-62.

A New Way to Teach Probability Statistics, 283-88.

PROBLEM SOLVING

What Points are Equidistant from Two Skew Lines? 97-101.

PSYCHOLOGY

Attitudes of College Freshmen Towards Mathematics, 25-27.

Psychological Set in Relation to the Construction of Mathematics Tests, 636-38

RECREATIONAL MATHEMATICS

Art by Carmelita C. Cadle, 217.

The Crossnumber Puzzle Solves a Teaching Problem, 200-204.

Letter to the Editor re Mathemadics, 138.

Little Old Mega, 56, 90, 204, 348, 545.

Teaching the Low Achiever in Mathematics, 443-46.

RESEARCH

The Readability of Junior High School Mathematics Textbooks, 289-91.

Education

Academic Stimulation of Mathematics Pupils from Their Classroom Association with Brighter Pupils, 473-75.

Achievement in Senior Advanced Mathematics and First-Year College Mathematics, 311-15.

Research in Programmed Instruction in Mathematics, 103-110.

Student Mathematics Achievement as Related to Teacher In-Service Work, 321-27.

A Study of Placement Methods for Entering College Freshmen in the Proper Mathematics Sequence at Michigan Technological University, 651-59.

Using Programmed Learning in the College Classroom: A Case History, 27-32.

A New Way to Teach Probability Statistics, 283-88.

TEACHER

Education

The Chambery Plan—Stages and Perspectives in the Reform of Mathematics Education, 129-38.

The Education of Mathematics Teachers in Other Countries, 48-56.

Patterns for Professional Progress, 497-503.

A Proposal for the Mathematics Methods Course, 623-27.

Student Mathematics Achievement as Related to Teacher In-Service Work, 321-27.

Summer Employment of Mathematics Teachers in Industry, 549-51.

Miscellaneous

Patterns for Professional Progress, 497-503.

A Philosophy for the Mathematics Teacher, 19-23.

TEACHING METHODS

Miscellaneous

An Action Program in Mathematics for High School Dropouts, 213-17.

The Chambery Plan—Stages and Perspectives in the Reform of Mathematics Education, 129-38.

The Crossnumber Puzzle Solves a Teaching Problem, 200-204.

Elitism and Excellence, 505-9.

Let's Play *Wff'n Proof*, 113-17

The "New Mathematics" in Historical Perspective, 579-85.

Providing for Individual Rates of Learning in Mathematics, 543-45.

Teaching the Low Achiever in Mathematics, 443-46.

Programmed Instruction

Research in Programmed Instruction in Mathematics, 103-10.

Using Programmed Instruction to Investigate the Effects of Group Interaction on Learning Mathematics, 393-98.

Using Programmed Learning in the College Classroom: A Case History, 27-32.

TESTS

Elitism and Excellence, 505-9.

Mathematics in British Secondary Schools: Curriculum Projects, 329-33.

Pretesting for the College Boards, 537-41.

Providing for Individual Rates of Learning in Mathematics, 543-45.

Psychological Set in Relation to the Construction of Mathematics Tests, 636-38.

TEXTBOOKS

The Readability of Junior High School Mathematics Textbooks, 289-91.

TRIGONOMETRY

Exploring Geometric Maxima and Minima, 85-90.