Journals Published by the
American Mathematical Society

Soviet Mathematics—Doklady

SOVIET MATHEMATICS—DOKLADY is a translation journal containing the entire pure mathematics section of the DOKLADY AKADEMI NAUK SSSR, the Reports of the Academy of Sciences of the USSR. The DOKLADY for a year contains about 500 articles, each about 4 pages long. Issued bimonthly.

Mathematical Reviews

This journal is devoted to abstracts and reviews of the current mathematical literature of the world. Two volumes of MATHEMATICAL REVIEWS will be published in 1966, Volume 31, and Volume 32. Each volume will consist of 6 regular issues plus an index issue. In each regular issue the abstracts and reviews are grouped under subject headings. Publication began in 1940.

Notices of the American Mathematical Society

This journal announces the programs of the meetings of the Society. It carries the abstracts of all contributed papers presented at the meetings of the Society and publishes news items of interest to mathematical scientists.

All communications should be addressed to the Editor, P.O. Box 6248, Providence, Rhode Island 02904. News items and insertions for each issue must be in the hands of the editor on or before the deadline for the abstracts for the papers to be presented in the meetings announced in that issue. These deadlines are published regularly on the back of the title page.

Mathematics of Computation

A journal devoted to original papers in numerical analysis, the application of numerical methods and high-speed calculator devices, the computation of mathematical tables, the theory of high-speed calculating devices and other aids to computation. In addition it publishes reviews and notes in these and related fields.

Prospective publications should be addressed to the Editor, Professor Eugene Isaacson, University Computing Center, Courant Institute of Mathematical Sciences, New York University, 251 Mercer Street, New York, New York 10012. The author may suggest the name of an editor for review of his paper.

Chinese Mathematics—Acta

This is a cover-to-cover translation into English of Acta Mathematica Sinica, a bimonthly, published by Academia Sinica Peking, People's Republic of China. Acta Mathematica Sinica contains current research in all fields of pure mathematics.
Journals Published by the American Mathematical Society

Bulletin of the American Mathematical Society

This journal is the official organ of the Society. It reports official acts of the Society and the details of its meetings. It contains some of the officially invited addresses presented before the Society, reviews of advanced mathematical books, research problems and a department of research announcements.

The subscription price is $12.00 per annual volume of six numbers.

Research Problems and Invited Addresses offered for publication should be sent to MURRAY GERSTENHABER, School of Mathematics, Institute for Advanced Study, Princeton, New Jersey 08540; Book Reviews to FELIX BROWDER, Department of Mathematics, University of Chicago, Chicago, Illinois 60637. Research Announcements offered for publication should be sent to some member of the Council of the Society, and communicated by him to E. H. SPANIER, Department of Mathematics, University of California, Berkeley, California 94720. All other communications to the editors should be sent to the Managing Editor, FELIX BROWDER.


Proceedings of the American Mathematical Society

This journal is devoted entirely to research in pure and applied mathematics and is devoted principally to the publication of original papers of moderate length. A department called Shorter Notes was established for the purpose of publishing very short papers of an unusually elegant and polished character, for which there is normally no other outlet.

Papers in algebra and number theory should be sent to ARTHUR P. MATTUCK, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts or IRVING REINER, Department of Mathematics, University of Illinois, Urbana, Illinois; in probability, real variables, logic, and foundations to R. C. BUCK, Department of Mathematics, University of Wisconsin, Madison, Wisconsin 53705; in abstract analysis to either R. C. BUCK, or FRITZ JOHN, Courant Institute of Mathematical Sciences, 4 Washington Place, New York, New York 10002; in geometry and topology to ELDON DYER, The City University of New York, Graduate Studies Division, 33 West 42nd Street, New York, New York 10036; in other branches of analysis, applied mathematics, and all other fields to MAURICE HEINS, Department of Mathematics, University of Illinois, Urbana, Illinois or FRITZ JOHN. All other communications to the editors should be addressed to the Managing Editor, R. C. BUCK.

Transactions of the American Mathematical Society

This journal is devoted entirely to research in pure and applied mathematics, and includes in general longer papers than the PROCEEDINGS.

Papers in analysis and applied mathematics should be sent to LOUIS NIRENBERG, Courant Institute of Mathematical Sciences, New York University, New York, New York 10012; in topology to FRANK PETERSON, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139; in algebra, number theory, and logic to DANIEL ZELINSKY, Department of Mathematics, Northwestern University, Evanston, Illinois; in geometry and abstract analysis to R. S. PALAIS, Department of Mathematics, Brandeis University, Waltham, Massachusetts; in statistics and probability to MICHEL LOÈVE, Department of Statistics, University of California, Berkeley, California 94720; in mathematical logic and foundations to DANA SCOTT, Department of Mathematics, Stanford University, Stanford, California 94305. All other communications to the editors should be addressed to the Managing Editor, LOUIS NIRENBERG.
CONTENTS—Continued from back cover

Thomas Ralley. Decomposition of products of modular representations ........................................ 1012
Bernard Pinchuk. Extremal problems in the class of close-to-convex functions ........................................ 1014
S. Bachmuth and H. Y. Mochizuki. Cyclotomic ideals in group rings ........................................ 1018
J. G. Stampfli. Normality and the numerical range of an operator ........................................ 1021
James A. Reneke. Linear functionals on the space of quasi-continuous functions ........................................ 1023
G. E. Denzel. The hitting characteristics of a strong Markov process, with applications to continuous Martingales in $\mathbb{R}^n$ ........................................ 1026
E. E. Granirer. Extremely amenable semigroups ........................................ 1028
Harvey B. Keynes. Topological dynamics in coset transformation groups ........................................ 1033
C. P. Rourke and B. J. Sanderson. Block bundles ........................................ 1036
R. Lashof and M. Rothenberg. On the Hauptvermutung, triangulation of manifolds, and $h$-cobordism ........................................ 1040
Paul Dedecker and A. S.-T. Lue. A nonabelian two-dimensional cohomology for associative algebras ........................................ 1044
E. A. M. MacAlpine. Duality in a twisted homology theory ........................................ 1051
Casper Goffman. Linearly continuous functions of finite area ........................................ 1055
Richard V. Kadison and John R. Ringrose. Automorphisms of operator algebras ........................................ 1059
Walter Rudin. Zeros and factorizations of holomorphic functions ........................................ 1064
Robert Carroll. On the nature of weak solutions and some abstract Cauchy problems ........................................ 1068
J. L. Ullman. A class of weight functions for which Tchebycheff quadrature is possible ........................................ 1073
Jack E. Graver and James Yackel. An upper bound for Ramsey numbers ........................................ 1076
L. J. Lander and T. R. Parkin. Counterexample to Euler's conjecture on sums of like powers ........................................ 1079
By-laws of the American Mathematical Society ........................................ 1080
Endowment Fund ........................................ 1088
Officers and Lecturers of the Society ........................................ 1092
Index to Volume 72 ........................................ 1094
Statement of Ownership, Management and Circulation ........................................ 1100
CONTENTS
November, 1966

Invited Address

G. G. Lorentz. Metric entropy and approximation ............ 903
Acknowledgement .................................................. 937
The Summer Meeting in New Brunswick ......................... 938

Research Announcements

Mitsuru Nakai and Leo Sario. Normal operators, linear
liftings and the Wiener compactification ..................... 947
Martin H. Schultz. On the stability of discretizations ...... 950
Melvyn S. Berger and Norman G. Meyers. On a system of
nonlinear partial differential equations arising in mathem­
tical economics ................................................. 954
William Browder and Morris W. Hirsch. Surgery on piece­
wise manifolds and applications ................................ 959
Frank W. Owens. Extensions of commuting isotone func­
tions ................................................................. 965
Joram Lindenstrauss. On nonseparable reflexive Banach
spaces ............................................................... 967
D. J. Newman and H. S. Shapiro. Certain Hilbert spaces of
entire functions .................................................... 971
Allan Brender. Stable complex manifolds ....................... 978
W. W. Tait. A nonconstructive proof of Gentzen’s Hauptsatz
for second order predicate logic ................................ 980
Weishu Shih. Fiber cobordism and the index of a family of
elliptic differential operators .................................... 984
J. M. Boardman and B. Steer. Axioms for Hopf invariants
Bezalel Peleg. The independence of game theory of utility
theory ................................................................. 992
Central idempotents in group algebras ......................... 995
Mitsuru Nakai. Royden’s map between Riemann surfaces 1000
Melvyn S. Berger and Paul C. Fife. Von Karman’s equa­
tions and the buckling of a thin elastic plate ............... 1006

Continued on inside back cover