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, and has a department of research announcements. The subscription price is $12 per annual volume of six numbers.

Invited addresses offered for publication should be sent to MURRAY GERSTENHABER, Department of Mathematics, University of Pennsylvania, Philadelphia, Pennsylvania 19104. Book reviews should be sent to GIAN-CARLO ROTA, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139. Research announcements should be sent to MURRAY H. PROTTER, Department of Mathematics, University of California, Berkeley, California 94720. All other communications to the editors should be sent to the Managing Editor, MURRAY GERSTENHABER, at the above address.

The first page of each article, including research announcements, that is submitted for publication should bear a descriptive title which should be short, but informative, useless or vague phrases such as "some remarks about" or "concerning" should be avoided. Before the first footnote, there should be the AMS (MOS) subject classification numbers representing the primary and secondary subjects of the article, followed by a list of key words and phrases describing the subject matter of the article and taken from it. The AMS (MOS) Subject Classification Scheme (1970) with instructions for its use can be found as an appendix to Mathematical Reviews, Index to volume 39 (1970). See the June 1970 Notices for more details, as well as illustrative examples.

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, number theory, and algebraic geometry should be sent to GEORGE B. SELIGMAN, Department of Mathematics, Yale University, New Haven, Connecticut 06520 or JOSEPH J. ROTMAN, Department of Mathematics, University of Illinois, Urbana, Illinois 61801; in modern or classical analysis to IRVING GLICKSBERG, Department of Mathematics, University of Washington, Seattle, Washington 98105, W. H. J. FUCHS, White Hall, Cornell University, Ithaca, New York 14850 or to ALLEN SHIELDS, Department of Mathematics, University of Michigan, Ann Arbor, Michigan 48104; in set-theoretic and general topology to ERNEST A. MICHAEL, Department of Mathematics, University of Washington, Seattle, Washington 98105; in algebraic topology and all other geometry to EMERY THOMAS, Department of Mathematics, University of California, Berkeley, California 94720; in applied mathematics, differential equations, and related areas of analysis to WOLFGANG WASOW, Mathematics Department, University of Wisconsin, Madison, Wisconsin 53706; in probability, statistics, and related fields to JOSHUA CHOVER, Mathematics Department, University of Wisconsin, Madison, Wisconsin 53706; in logic, set theory, and related areas to W. W. BOONE, Mathematics Department, University of Illinois, Urbana, Illinois 61801. All other communications should be addressed to the Managing Editor, W. H. J. FUCHS.
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 1970, Volume 38, and Volume 39. 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.

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, 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.

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 J. J. KOHN, Department of Mathematics, Princeton University, Princeton, New Jersey 08540; in topology to STEVE ARMENROUT, Department of Mathematics, Pennsylvania State University, University Park, Pennsylvania 16802; in algebra, number theory, and logic to D. A. BUCHSBAUM, Department of Mathematics, Brandeis University, Waltham, Massachusetts 02154; in geometry and abstract analysis to SHLOMO STERNBERG, Department of Mathematics, Harvard University, Cambridge, Massachusetts 02138; in statistics and probability to H. P. McKEAN, Department of Mathematics, Rockefeller University, New York, New York 10021; in mathematical logic and foundations to DANA SCOTT, Department of Philosophy, Princeton University, Princeton, New Jersey 08540. All other communications to the editors should be addressed to the Managing Editor, DANA SCOTT.

Memoirs of the American Mathematical Society

The MEMOIRS of the American Mathematical Society constitute a series of paperbound research tracts which are of the same general character as the papers published in the TRANSACTIONS. An issue of the MEMOIRS contains either a single monograph or a group of cognate papers. The MEMOIRS are printed by the photo-offset process. Information on preparation of camera copy and charges for publication may be obtained by writing to the Editorial Department of the American Mathematical Society.

Soviet Mathematics—Doklady

This bimonthly 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.

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.
Contents—continued from back cover

Myron Goldstein. The K-span of a Riemann surface.................. 1286
R. E. Harrell and L. A. Karlovitz. Girths and flat Banach spaces... 1288
Elias M. Stein. Boundary values of holomorphic functions............ 1292
R. B. Darst. The Vitali-Hahn-Saks and Nikodym theorems for additive set functions........................................... 1297
Melvyn S. Berger and Martin Schechter. $L_p$ Embedding and nonlinear eigenvalue problems for unbounded domains............. 1299
Gilbert Strang. Toeplitz operators in a quarter-plane................. 1303
Joseph Miles. Representing a meromorphic function as the quotient of two entire functions of small characteristic.................. 1308
Mark Mahowald. The order of the image of the J-homomorphism........ 1310
Mike Field. Equivariant dynamical systems................................ 1314
John T. Kemper. Kernel functions and parabolic limits for the heat equation......................................................... 1319
Martin E. Walter. Group duality and isomorphisms of Fourier and Fourier-Stieltjes algebras from a $W^*$-algebra point of view..... 1321
T. A. Chapman. Hilbert cube manifolds.................................. 1326
Index to Volume 76.............................................................. 1331
Richard Sacksteder. Addendum to: The variational theory of geodesics........................................................... 1339
Paul Ponomarev. Addendum to: Class numbers of positive definite quaternary forms.................................................. 1339
Statement of Ownership......................................................... 1340

CONTENTS

November, 1970

Branko Grünbaum. Polytopes, graphs, and complexes ............. 1131
Paul F. Baum. Vector fields and Gauss-Bonnet .................. 1202
Nickolas Heerema. Higher derivations and automorphisms of complete local rings ............................................. 1212
Serge Lang. Review of "Mordell, Diophantine equations," by L. J. Mordell .................................................. 1230
The June Meeting in Tacoma ........................................ 1235
Richard P. Stanley. Structure of incidence algebras and their automorphism groups .............................................. 1236
Johannes C. C. Nitsche. Surfaces of least area with partially free boundary on a manifold satisfying the chord-arc condition ........ 1240
P. L. Antonelli, D. Burghelea, and P. J. Kahn. The nonfinite type of some Diff_0 M^e ............................................. 1246
Z. A. Melzak. Self-intersections in continuous random walk ...... 1251
Chuan-Chih Hsiung and Louis W. Stern. Conformality and isometry of Riemannian manifolds to spheres ......................... 1253
Alan Tucker. Characterizing circular-arc graphs ................... 1257
Dan Burghelea and David Henderson. Smoothings and homeomorphisms for Hilbert manifolds .................................. 1261
B. Weiss. Intrinsically ergodic systems ............................... 1266
Bruce C. Berndt. On the average order of ideal functions and other arithmetical functions ..................................... 1270
Y.-C. Wu. A short proof of a theorem of Barr-Beck ................ 1275
William Haver. A characterization theorem for cellular maps ..... 1277
Kenneth I. Gross. Restriction to a parabolic subgroup and irreducibility of degenerate principal series of Sp(2, C) ................ 1281

Continued on inside back cover