

VOLUME 77
(Whole No. 730)

NUMBER 1
JANUARY, 1971

BULLETIN
of the
AMERICAN MATHEMATICAL SOCIETY

Edited by

GIAN-CARLO ROTA M. H. PROTTER
MURRAY GERSTENHABER

CODEN: BAMOAD

Published by the American Mathematical Society

PROVIDENCE, RHODE ISLAND

AMERICAN MATHEMATICAL SOCIETY

Business Office: P. O. Box 6248, Providence, Rhode Island 02904
Gordon L. Walker, Executive Director

OFFICERS

- President:* Nathan Jacobson, Department of Mathematics, Yale University, New Haven, Connecticut 06520
Ex-President: Oscar Zariski, Department of Mathematics, Harvard University, Cambridge, Massachusetts 02138
Vice-Presidents: Peter D. Lax, Courant Institute of Mathematical Sciences, New York University, New York, New York 10012; Isadore M. Singer, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02138
Secretary: Everett Pitcher, Department of Mathematics, Lehigh University, Bethlehem, Pennsylvania 18015.
Treasurer: W. T. Martin, Department of Mathematics, Massachusetts Institute of Technology, Cambridge, Massachusetts 02138
Assistant Treasurer: Murray H. Protter, Department of Mathematics, University of California, Berkeley, California 94720
Board of Trustees: Paul T. Bateman, Department of Mathematics, University of Illinois, Urbana, Illinois 61803; John W. Green, Department of Mathematics, University of California 90024; Nathan Jacobson (ex officio); Irving Kaplansky, Department of Mathematics, University of Chicago, Chicago, Illinois 60637; W. T. Martin (ex officio); Murray H. Protter, Department of Mathematics, University of California, Berkeley, California 94720

CHAIRMEN OF EDITORIAL AND COMMUNICATIONS COMMITTEES

- Bulletin Editorial Committee:* Murray Gerstenhaber, Department of Mathematics, University of Pennsylvania, Philadelphia, Pennsylvania 19104
Proceedings Editorial Committee: W. H. J. Fuchs, Department of Mathematics, White Hall, Cornell University, Ithaca, New York 14850
Transactions and Memoirs Editorial Committee: Dana S. Scott, Department of Philosophy, Princeton University, Princeton, New Jersey 19540
Mathematical Reviews Editorial Committee: Frederick W. Gehring, Department of Mathematics, University of Michigan, Ann Arbor, Michigan 48104
Colloquium Editorial Committee: George W. Mackey, Department of Mathematics, Harvard University, Cambridge, Massachusetts 02138
Mathematical Surveys Editorial Committee: Bertram Yood, Department of Mathematics, University of Oregon, Eugene, Oregon 97403
Mathematics of Computation Editorial Committee: Eugene Isaacson, University Computing Center, Courant Institute of Mathematical Sciences, New York University, New York, New York 10012
Committee to Monitor Problems in Communication: Alex Rosenberg, Department of Mathematics, White Hall, Cornell University, Ithaca, New York 14850
Representatives of the Society on the Board of Editors of the American Journal of Mathematics: Hyman Bass, Department of Mathematics, Columbia University, New York, New York 10027; Raoul H. Bott, Department of Mathematics, Harvard University, Cambridge, Massachusetts 02138

* * * *

- Executive Editor of Mathematical Reviews:* Richard J. Crittenden, 415 Fourth Street, Ann Arbor, Michigan 48103
Editor of Translations Projects: S. H. Gould, American Mathematical Society, P. O. Box 6248, Providence, Rhode Island 02904
Council Members: See inside back cover.

The annual dues of members of the Society are \$20, payable to the American Mathematical Society, P.O. Box 6248, Providence, Rhode Island 02904.

THE BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY is published bimonthly in January, March, May, July, September, and November. Price per annual volume is \$12. Subscriptions, order for back numbers, and inquiries in regard to nondelivery of current numbers should be addressed to the American Mathematical Society, 321 South Main Street, P.O. Box 6248, Providence, Rhode Island 02904.

Second-class postage paid at Providence, Rhode Island and additional mailing offices.

Copyright © American Mathematical Society 1971
Printed in the United States of America

BULLETIN
of the
AMERICAN MATHEMATICAL SOCIETY

Edited by
GIAN-CARLO ROTA M. H. PROTTER
MURRAY GERSTENHABER

VOLUME 77
JANUARY to DECEMBER, 1971
CODEN: B \bar{A} MOAD

Published by the American Mathematical Society
PROVIDENCE, RHODE ISLAND

The Collegiate Press
George Banta Company, Inc
Menasha, Wisconsin