

BULLETIN
OF THE
AMERICAN MATHEMATICAL SOCIETY

EDITED BY

NATHAN JACOBSON
GUSTAV A. HEDLUND

RUDOLPH ERNEST LANGER
ELLIS B. STOUFFER

WITH THE ASSISTANCE OF

R. H. BING
M. M. DAY
E. R. LORCH

HERBERT BUSEMANN
F. G. DRESSEL
I. M. SHEFFER
G. W. WHITEHEAD

A. H. CLIFFORD
MAURICE HEINS
R. M. THRALL

VOLUME 55, NUMBER 11
NOVEMBER, 1949

PUBLISHED BY THE SOCIETY
MENASHA, WIS., AND NEW YORK

AMERICAN MATHEMATICAL SOCIETY

General Office: Room 305, Low Memorial Library, 531 West 116th Street, New York 27, N. Y.

This address should be used for all mail which concerns membership, subscriptions, changes of address, etc. Mail for Librarian and Treasurer should be sent to General Office.

Executive Director: Dr. H. M. Mac Neille, Low Memorial Library, 531 West 116th Street, New York 27, N. Y.

Editorial Office, Mathematical Reviews: Brown University, Providence 12, R. I.
Dr. R. P. Boas, Executive Editor.

This address should *not* be used for subscriptions and payments, etc. Correspondence about these matters should go to the Society's General Office.

Officers and Editors:

President: Professor J. L. Walsh, Harvard University, Cambridge 38, Mass.

Secretary: Professor J. R. Kline, American Mathematical Society, University of Pennsylvania, Philadelphia 4, Pa.

Associate Secretaries:

Professor J. W. Green, University of California at Los Angeles, Los Angeles 24, Calif.

Professor T. R. Hollcroft, Wells College, Aurora, N. Y.

Professor G. B. Price, University of Kansas, Lawrence, Kan.

Professor J. W. T. Youngs, Indiana University, Bloomington, Ind.

Treasurer: Dean A. E. Meder, Rutgers University, New Brunswick, N. J.

Librarian: Professor Arnold Dresden, Swarthmore College, Swarthmore, Pa.

Managing Editor of the Bulletin: Professor R. E. Langer, University of Wisconsin, Madison 6, Wis.

Managing Editor of the Transactions: Professor G. T. Whyburn, University of Virginia, Charlottesville, Va.

Editors of Mathematical Reviews:

Professor William Feller, Cornell University, Ithaca, N. Y.

Professor M. H. Stone, University of Chicago, Chicago 37, Ill.

Professor Hassler Whitney, Harvard University, Cambridge 38, Mass.

Chairman, Colloquium Editorial Committee: Professor C. C. MacDuffee, University of Wisconsin, Madison 6, Wis.

Chairman, Mathematical Surveys Editorial Committee: Professor Nelson Dunford, Yale University, New Haven 11, Conn.

Chairman, Proceedings of Symposia in Applied Mathematics Editorial Committee: Professor R. V. Churchill, University of Michigan, Ann Arbor, Mich.

Editors of American Journal of Mathematics:

Professor Richard Brauer, University of Michigan, Ann Arbor, Mich.

Professor L. M. Graves, University of Chicago, Chicago 37, Ill.

Professor D. C. Lewis, Johns Hopkins University, Baltimore 18, Md.

Professor Hassler Whitney, Harvard University, Cambridge 38, Mass.

Professor Aurel Wintner, Johns Hopkins University, Baltimore 18, Md.

THE BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY is published monthly. Price per annual volume, \$11.00. Subscriptions, orders for back numbers, and inquiries in regard to nondelivery of current numbers should be addressed to the American Mathematical Society, 450 Ahnaip Street, Menasha, Wis., or Low Memorial Library, 531 West 116th Street, New York 27, N. Y.

Entered as second class matter April 24, 1926, at the post office at Menasha, Wis., under the act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in the act of February 28, 1925, embodied in paragraph 4, section 538, P. L. and E., authorized May 9, 1935.

Copyright, American Mathematical Society, 1949