Pacific Journal of Mathematics

VICTOR P. CAMILLO and JULIUS M. ZELMANOWITZ249
YONINA S. COOPER
CHANDRAKANT M. DEO and H. SHIP-FAH WONG
H. P. DIKSHIT and S. N. DUBEY
MICHAEL EDELSTEIN
GILLES GODEFROY
JAMES GUYKER
T. E. HALL and P. R. JONES
TAQDIR HUSAIN and SALEEM WATSON
V. K. JAIN
J. W. JENKINS
MICHAEL E. MAYS
MICHAEL McASEY
PETER A. McCOY
TERRENCE MILLAR
STEPHEN C. MILNE419
ROBERT F. OLIN and JAMES E. THOMSON431
R. J. PIACENZA
L. J. RATLIFF, JR
R. B. WARFIELD, JR
ERRATA

Subject listing on inside back cover

PACIFIC JOURNAL OF MATHEMATICS

EDITORS

DONALD BABBITT (Managing Editor) University of California Los Angeles, CA 90024 HUGO ROSSI University of Utah

Salt Lake City, UT 84112

University of California Berkeley, CA 94720

C. C. MOORE and ANDREW OGG

J. DUGUNDJI Department of Mathematics University of Southern California Los Angeles, CA 90007

R. FINN and J. MILGRAM Stanford University Stanford, CA 94305

ASSOCIATE EDITORS

E. F. BECKENBACH B. H. NEUMANN F. WOLF

K. Yoshida

SUPPORTING INSTITUTIONS

UNIVERSITY OF BRITISH COLUMBIA CALIFORNIA INSTITUTE OF TECHNOLOGY UNIVERSITY OF CALIFORNIA MONTANA STATE UNIVERSITY UNIVERSITY OF NEVADA, RENO NEW MEXICO STATE UNIVERSITY OREGON STATE UNIVERSITY UNIVERSITY OF OREGON UNIVERSITY OF SOUTHERN CALIFORNIA STANFORD UNIVERSITY UNIVERSITY OF HAWAII UNIVERSITY OF TOKYO UNIVERSITY OF UTAH WASHINGTON STATE UNIVERSITY UNIVERSITY OF WASHINGTON

The Supporting Institutions listed above contribute to the cost of publication of this Journal, but they are not owners or publishers and have no responsibility for its content or policies.

Mathematical papers intended for publication in the *Pacific Journal of Mathematics* should be in typed form or offset-reproduced, (not dittoed), double spaced with large margins. Please do not use built up fractions in the text of the manuscript. However, you may use them in the displayed equations. Underline Greek letters in red, German in green, and script in blue. The first paragraph or two must be capable of being used separately as a synopsis of the entire paper. Please propose a heading for the odd numbered pages of less than 35 characters. Manuscripts, in triplicate, may be sent to any one of the editors. Please classify according to the scheme of Math. Reviews, Index to Vol. **39**. Supply name and address of author to whom proofs should be sent. All other communications should be addressed to the managing editor, or Elaine Barth, University of California, Los Angeles, California, 90024.

50 reprints to each author are provided free for each article, only if page charges have been substantially paid. Additional copies may be obtained at cost in multiples of 50.

The *Pacific Journal of Mathematics* is issued monthly as of January 1966. Regular subscription rate: \$84.00 a year (6 Vols., 12 issues). Special rate: \$42.00 a year to individual members of supporting institutions.

Subscriptions, orders for numbers issued in the last three calendar years, and changes of address shoud be sent to Pacific Journal of Mathematics, P.O. Box 969, Carmel Valley, CA 93924, U.S.A Old back numbers obtainable from Kraus Periodicals Co., Route 100, Millwood, NY 10546.

PUBLISHED BY PACIFIC JOURNAL OF MATHEMATICS, A NON-PROFIT CORPORATION

Printed at Kokusai Bunken Insatsusha (International Academic Printing Co., Ltd.). 8-8, 3-chome, Takadanobaba, Shinjuku-ku, Tokyo 160, Japan.

> Copyright © 1980 by Pacific Jounal of Mathematics Manufactured and first issued in Japan