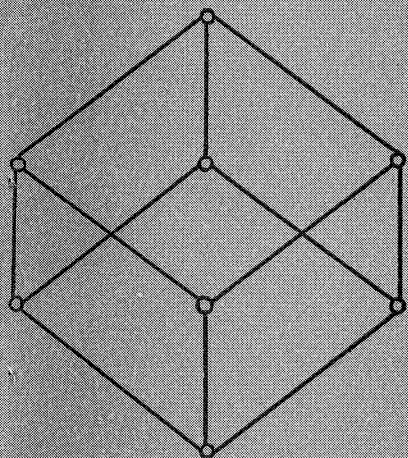


# Pacific Journal of Mathematics



## IN THIS ISSUE—

Blumenthal, L. M., <i>An extension of a theorem of Jordan and von Neumann</i> .....	161
Carlitz, L., <i>Note on the multiplication formulas for the Jacobi elliptic functions</i> .....	169
Carlitz, L., <i>The number of solutions of certain types of equations in a finite field</i> .....	177
Dantzig, George B., Orden, Alex, Wolfe, Philip, <i>The generalized simplex method for minimizing a linear form under linear inequality restraints</i> .....	183
Dempster, A. P., Schuster, S., <i>Construction for poles and polars in <math>n</math>-dimensions</i> .....	197
Haimo, Franklin, <i>Power-type endomorphisms of some class 2 groups</i> .....	201
Jackson, L. K., <i>On generalized subharmonic functions</i> .....	215
Karlin, Samuel, <i>On the renewal equation</i> .....	229
Olson, Frank R., <i>Some determinants involving Bernoulli and Euler numbers of higher order</i> .....	259
Phillips, R. S., <i>The adjoint semi-group</i> .....	269
Tarski, Alfred, <i>A lattice-theoretical fixpoint theorem and its applications</i> .....	285
Davis, Anne C., <i>A characterization of complete lattices</i> .....	311

# PACIFIC JOURNAL OF MATHEMATICS

## EDITORS

H.L. ROYDEN

Stanford University  
Stanford, California

E. HEWITT

University of Washington  
Seattle 5, Washington

R. P. DILWORTH

California Institute of Technology  
Pasadena 4, California

E.G. STRAUS

University of California  
Los Angeles 24, California

## ASSOCIATE EDITORS

H. BUSEMANN

HERBERT FEDERER

MARSHALL HALL

P.R. HALMOS

HEINZ HOPF

ALFRED HORN

R.D. JAMES

BØRGE JESSEN

PAUL LÉVY

GEORGE PÓLYA

J.J. STOKER

KOSAKU YOSIDA

## SPONSORS

UNIVERSITY OF BRITISH COLUMBIA

CALIFORNIA INSTITUTE OF TECHNOLOGY

UNIVERSITY OF CALIFORNIA, BERKELEY

UNIVERSITY OF CALIFORNIA, DAVIS

UNIVERSITY OF CALIFORNIA, LOS ANGELES

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

UNIVERSITY OF NEVADA

OREGON STATE COLLEGE

UNIVERSITY OF OREGON

UNIVERSITY OF SOUTHERN CALIFORNIA

STANFORD RESEARCH INSTITUTE

STANFORD UNIVERSITY

UNIVERSITY OF UTAH

WASHINGTON STATE COLLEGE

UNIVERSITY OF WASHINGTON

\* \* \*

AMERICAN MATHEMATICAL SOCIETY

HUGHES AIRCRAFT COMPANY

SHELL DEVELOPMENT COMPANY

---

Mathematical papers intended for publication in the *Pacific Journal of Mathematics* should be typewritten (double spaced), and the author should keep a complete copy. Manuscripts may be sent to any of the editors. Manuscripts intended for the outgoing editors should be sent to their successors. All other communications to the editors should be addressed to the managing editor, E.G. Straus, at the University of California Los Angeles 24, California.

50 reprints of each article are furnished free of charge; additional copies may be obtained at cost in multiples of 50.

---

The *Pacific Journal of Mathematics* is published quarterly, in March, June, September, and December. The price per volume (4 numbers) is \$12.00; single issues, \$3.50; back numbers (Volumes 1, 2, 3) are available at \$2.50 per copy. Special price to individual faculty members of supporting institutions and to individual members of the American Mathematical Society: \$4.00 per volume; single issues, \$1.25.

Subscriptions, orders for back numbers, and changes of address should be sent to the publishers, University of California Press, Berkeley 4, California.

Printed at Ann Arbor, Michigan. Entered as second class matter at the Post Office, Berkeley, California.

UNIVERSITY OF CALIFORNIA PRESS • BERKELEY AND LOS ANGELES

COPYRIGHT 1955 BY PACIFIC JOURNAL OF MATHEMATICS