

Maths

THE FIBONACCI QUARTERLY

THE OFFICIAL JOURNAL OF
THE FIBONACCI ASSOCIATION

VOLUME 8

NUMBER 2



SPECIAL ISSUE

CONTENTS

Fibonacci Representations — II *L. Carlitz* 113

A Limited Arithmetic
on Simple Continued Fractions — II . . . *C. T. Long and J. H. Jordan* 135

Convolution Triangles for
Generalized Fibonacci Numbers *Verner E. Hoggatt, Jr.* 158

Some Properties of Stirling Numbers
of the Second Kind *Rosedith Sitgreaves* 172

A Generalized Fibonacci Sequence
Over an Arbitrary Ring *D. J. DeCarli* 182

A Remarkable Lattice
Generated by Fibonacci Numbers *S. K. Zaremba* 185

An Extension of Fibonacci Numbers — II *Joseph Arkin and* 199
Verner E. Hoggatt, Jr.

Fibonacci Sequence Modulo a Prime
 $p \equiv 3 \pmod{4}$ *Gottfried Bruckner* 217

Summation of Powers of Roots
of Special Equations *N. A. Draim and Marjorie Bicknell* 221

MARCH

1970

THE FIBONACCI QUARTERLY

THE OFFICIAL JOURNAL OF THE FIBONACCI ASSOCIATION

*DEVOTED TO THE STUDY
OF INTEGERS WITH SPECIAL PROPERTIES*

EDITORIAL BOARD

H. L. Alder
Marjorie Bicknell
John L. Brown, Jr.
Brother A. Brousseau
L. Carlitz
H. W. Eves
H. W. Gould
A. P. Hillman
V. E. Hoggatt, Jr.

Donald E. Knuth
George Ledin, Jr.
D. A. Lind
C. T. Long
Leo Moser
I. D. Ruggles
M. N. S. Swamy
D. E. Thoro

WITH THE COOPERATION OF

P. M. Anselone
Terry Brennan
Maxey Brooke
Paul F. Byrd
Calvin D. Crabill
John H. Halton
Richard A. Hayes
A. F. Horadam
Dov Jarden
Stephen Jerbic
R. P. Kelisky

Charles H. King
L. H. Lange
James Maxwell
Sister M. DeSales McNabb
C. D. Olds
D. W. Robinson
Azriel Rosenfeld
John E. Vinson
Lloyd Walker
Charles H. Wall

The California Mathematics Council

All subscription correspondence should be addressed to Bro. A. Brousseau, St. Mary's College, Calif. All checks (\$6.00 per year) should be made out to the Fibonacci Association or the Fibonacci Quarterly. Manuscripts intended for publication in the Quarterly should be sent to Verner E. Hoggatt, Jr., Mathematics Department, San Jose State College, San Jose, Calif. All manuscripts should be typed, double-spaced. Drawings should be made the same size as they will appear in the Quarterly, and should be done in India ink on either vellum or bond paper. Authors should keep a copy of the manuscript sent to the editors.

The Quarterly is entered as third-class mail at the St. Mary's College Post Office, California, as an official publication of the Fibonacci Association.