

✓
M...

0 8
255
78

THE FIBONACCI QUARTERLY

THE OFFICIAL JOURNAL OF
THE FIBONACCI ASSOCIATION



VOLUME 10

NUMBER 5

CONTENTS

SPECIAL PAGE-CHARGE ISSUE

Pellian Representations	<i>L. Carlitz, Richard Scoville and V. E. Hoggatt, Jr.</i>	449
Enumeration of 3×3 Arrays	<i>L. Carlitz</i>	489
Representations for a Special Sequence	<i>L. Carlitz, Richard Scoville and V. E. Hoggatt, Jr.</i>	499
Special Cases of Fibonacci Periodicity	<i>Judy Kramer and V. E. Hoggatt, Jr.</i>	519
Concavity Properties of Certain Sequences of Numbers	<i>L. Carlitz</i>	523
A Conjecture Concerning Lucas Numbers	<i>L. Carlitz</i>	526
Addendum to the Paper "Fibonacci Representations"	<i>L. Carlitz, Richard Scoville and V. E. Hoggatt, Jr.</i>	527
Sequences, Paths, Ballot Numbers	<i>L. Carlitz</i>	531
Some Theorems on Completeness	<i>V. E. Hoggatt, Jr., and Bob Chow</i>	551
Fibonacci and Lucas Triangles	<i>V. E. Hoggatt, Jr., Marjorie Bicknell, and Ellen L. King</i>	555

NOVEMBER

1972

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
D. A. Lind
C. T. Long
M. N. S. Swamy
D. E. Thoro

WITH THE COOPERATION OF

Terry Brennan
Maxey Brooke
Paul F. Byrd
Calvin D. Crabill
T. A. Davis
John H. Halton
A. F. Horadam
Dov Jarden
Stephen Jerbic

L. H. Lange
James Maxwell
Sister M. DeSales McNabb
Gerald Preston
D. W. Robinson
Azriel Rosenfeld
Lloyd Walker
Charles H. Wall

The California Mathematics Council

All subscription correspondence should be addressed to Brother Alfred Brousseau, St. Mary's College, California. All checks (\$6.00 per year) should be made out to the Fibonacci Association or the Fibonacci Quarterly. Two copies of manuscripts intended for publication in the Quarterly should be sent to Verner E. Hoggatt, Jr., Mathematics Department, San Jose State University, San Jose, California. 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, Calif., as an official publication of the Fibonacci Association.

All articles in this issue are supported by page charges. — Editor