

PURPOSE

The primary function of **THE FIBONACCI QUARTERLY** is to serve as a focal point for widespread interest in the Fibonacci and related numbers, especially with respect to new results, research proposals, challenging problems, and innovative proofs of old ideas.

EDITORIAL POLICY

THE FIBONACCI QUARTERLY seeks articles that are intelligible yet stimulating to its readers, most of whom are university teachers and students. These articles should be lively and well motivated, with new ideas that develop enthusiasm for number sequences or the exploration of number facts. Illustrations and tables should be wisely used to clarify the ideas of the manuscript. Unanswered questions are encouraged, and a complete list of references is absolutely necessary.

SUBMITTING AN ARTICLE

Articles should be submitted in the format of the current issues of the **THE FIBONACCI QUARTERLY**. They should be typewritten or reproduced typewritten copies, that are clearly readable, double spaced with wide margins and on only one side of the paper. The full name and address of the author must appear at the beginning of the paper directly under the title. Illustrations should be carefully drawn in India ink on separate sheets of bond paper or vellum, approximately twice the size they are to appear in print.

Two copies of the manuscript should be submitted to: **GERALD E. BERGUM, EDITOR, THE FIBONACCI QUARTERLY, DEPARTMENT OF MATHEMATICS, SOUTH DAKOTA STATE UNIVERSITY, BOX 2220, BROOKINGS, SD 57007-1297.**

Authors are encouraged to keep a copy of their manuscripts for their own files as protection against loss. The editor will give immediate acknowledgment of all manuscripts received.

SUBSCRIPTIONS, ADDRESS CHANGE, AND REPRINT INFORMATION

Address all subscription correspondence, including notification of address change, to: **RICHARD VINE, SUBSCRIPTION MANAGER, THE FIBONACCI ASSOCIATION, UNIVERSITY OF SANTA CLARA, SANTA CLARA, CA 95053.**

Requests for reprint permission should be directed to the editor. However, general permission is granted to members of The Fibonacci Association for noncommercial reproduction of a limited quantity of individual articles (in whole or in part) provided complete references is made to the source.

Annual domestic Fibonacci Association membership dues, which include a subscription to **THE FIBONACCI QUARTERLY**, are \$25 for Regular Membership, \$35 for Sustaining Membership, and \$65 for Institutional Membership; foreign rates, which are based on international mailing rates, are somewhat higher than domestic rates; please write for details. **THE FIBONACCI QUARTERLY** is published each February, May, August and November.

All back issues of **THE FIBONACCI QUARTERLY** are available in microfilm or hard copy format from **UNIVERSITY MICROFILMS INTERNATIONAL, 300 NORTH ZEEB ROAD, DEPT. P.R., ANN ARBOR, MI 48106.** Reprints can also be purchased from **UMI CLEARING HOUSE** at the same address.

1984 by

© The Fibonacci Association

All rights reserved, including rights to this journal issue as a whole and, except where otherwise noted, rights to each individual contribution.

The Fibonacci Quarterly

Founded in 1963 by Verner E. Hoggatt, Jr. (1921-1980)
Br. Alfred Brousseau, and I.D. Ruggles

*THE OFFICIAL JOURNAL OF THE FIBONACCI ASSOCIATION
DEVOTED TO THE STUDY
OF INTEGERS WITH SPECIAL PROPERTIES*

EDITOR

GERALD E. BERGUM, South Dakota State University, Brookings, SD 57007

ASSISTANT EDITORS

MAXEY BROOKE, Sweeny, TX 77480
PAUL F. BYRD, San Jose State University, San Jose, CA 95192
LEONARD CARLITZ, Duke University, Durham, NC 27706
HENRY W. GOULD, West Virginia University, Morgantown, WV 26506
A.P. HILLMAN, University of New Mexico, Albuquerque, NM 87131
A.F. HORADAM, University of New England, Armidale, N.S.W. 2351, Australia
DAVID A. KLARNER, University of Nebraska, Lincoln, NE 68588
JOHN RABUNG, Randolph-Macon College, Ashland, VA 23005
DONALD W. ROBINSON, Brigham Young University, Provo, UT 84602
M.N.S. SWAMY, Concordia University, Montreal H3C 1M8, Quebec, Canada
D.E. THORO, San Jose State University, San Jose, CA 95192
THERESA VAUGHAN, University of North Carolina, Greensboro, NC 27412
CHARLES R. WALL, Trident Technical College, Charleston, SC 29411
WILLIAM WEBB, Washington State University, Pullman, WA 99163

BOARD OF DIRECTORS OF THE FIBONACCI ASSOCIATION

CALVIN LONG (President)
Washington State University, Pullman, WA 99163
G.L. ALEXANDERSON
University of Santa Clara, Santa Clara, CA 95053
HUGH EDGAR (Vice-President)
San Jose State University, San Jose, CA 95192
MARJORIE JOHNSON (Secretary-Treasurer)
Santa Clara Unified School District, Santa Clara, CA 95051
LEONARD KLOSINSKI
University of Santa Clara, Santa Clara, CA 95053
JEFF LAGARIAS
Bell Laboratories, Murray Hill, NJ 07974