

CONTENTS

| | | |
|---|--|-----|
| SECONDARY FIBONACCI SEQUENCES | Paul J. Campbell & Christopher Moeller | 1 |
| AN ESTIMATE FOR THE LENGTH OF A FINITE JACOBI ALGORITHM | F. Schweiger | 16 |
| SOLUTION OF THE RECURRENT EQUATION $u_{n+1} = 2u_n - u_{n-1} + u_{n-3}$ | Jacques Troué | 18 |
| PRIMENESS FOR THE GAUSSIAN INTEGERS | Richard C. Weimer | 19 |
| A NOTE ON ORDERING THE COMPLEX NUMBERS | Richard C. Weimer | 20 |
| THEORY OF EXTRA NUMERICAL INFORMATION APPLIED TO THE FIBONACCI SUM | Jerome Hines | 22 |
| THE PENTANACCI NUMBERS | Paul N. Mendelsohn | 31 |
| REMARKS ON THE DIOPHANTANIAN EQUATIONS $a^2 \pm ab + b^2 = c^2$ | George Berzsenyi | 34 |
| TRIANGULAR DISPLAYS OF INTEGERS | A. M. Russell | 38 |
| PYTHAGOREAN TRIANGLES AND MULTIPLE ANGLES | Louise S. Grinstein | 39 |
| PROOF THAT THE AREA OF A PYTHAGOREAN TRIANGLE IS NEVER A SQUARE | Curtis R. Vogel | 43 |
| RECONSIDERING A PROBLEM OF M. WARD | Jan Van Leeuwen | 45 |
| WHAT A DIFFERENCE A DIFFERENCE MAKES! | Jerry T. Sullivan | 46 |
| CIRCULANTS AND HORADAM'S SEQUENCES | Jerome Minkus | 48 |
| AN EXPANSION OF GOLUBEV'S 11×11 MAGIC SQUARE OF PRIMES TO ITS MAXIMUM, 21×21 | Loren L. Dickerson | 52 |
| SOME EXTENSIONS OF PROPERTIES OF THE SEQUENCE OF FIBONACCI POLYNOMIALS | John R. Howell | 54 |
| A DIVISIBILITY PROPERTY OF BINOMIAL COEFFICIENTS | Carl S. Weisman | 57 |
| FIBONACCI FEVER | Arthur F. Setteducati | 58 |
| EXPONENTIAL GENERATION OF BASIC LINEAR IDENTITIES | Rodney T. Hansen | 61 |
| IDENTITIES OF A GENERALIZED FIBONACCI SEQUENCE | H. V. Krishna | 65 |
| DIVISIBILITY PROPERTIES OF A GENERALIZED FIBONACCI SEQUENCE | H. V. Krishna | 66 |
| PYTHAGOREAN PENTIDS | H. V. Krishna | 67 |
| A TRIANGLE FOR THE BELL NUMBERS | Jeffrey Shallit | 69 |
| THE EQUATIONS $z^2 - 3y^2 = -2$ and $z^2 - 6x^2 = -5$ | Manoranjitham Veluppillai | 71 |
| GENERATION OF FIBONACCI NUMBERS BY DIGITAL FILTERS | Salah M. Yousif | 75 |
| THE FIBONACCI SERIES IN THE DECIMAL EQUIVALENTS OF FRACTIONS | Charles F. Winans | 78 |
| GENERALIZATION OF A PROBLEM OF GOULD AND ITS SOLUTION BY A CONTOUR INTEGRAL | Paul S. Bruckman | 82 |
| A MISCELLANY OF 1979 CURIOSA | Charles W. Trigg | 87 |
| 101 FACES OF 1979 | Charles W. Trigg | 88 |
| DETERMINANTS RELATED TO 1979 | Charles W. Trigg | 89 |
| REITERATIVE ROUTINES APPLIED TO 1979 | Charles W. Trigg | 90 |
| 1979 AND ASSOCIATED PRIMES | Charles W. Trigg & Avetta Trigg | 91 |
| THE POWERFUL 1979 | Charles W. Trigg | 93 |
| AN OBSERVATION CONCERNING WHITFORD'S "BINET'S FORMULA GENERALIZED" | M. G. Monzingo | 93 |
| ON THE DISTRIBUTION OF QUADRATIC RESIDUES | M. G. Monzingo | 94 |
| DIVISIBILITY OF BINOMIAL AND MULTINOMIAL COEFFICIENTS BY PRIMES AND PRIME POWERS | David Singmaster | 98 |
| A MATRIX GENERATION OF FIBONACCI IDENTITIES FOR F_{2nk} | Verner E. Hoggatt, Jr. & Marjorie Bicknell-Johnson | 114 |

| | | |
|--|-------------------------------------|-----|
| ANTIMAGIC PENTAGRAMS WITH LINE SUMS IN ARITHMETIC PROGRESSION, $\Delta = 3$ | Charles W. Trigg | 124 |
| TWO FAMILIES OF TWELFTH-ORDER MAGIC SQUARES | Charles W. Trigg | 127 |
| COIN TOSSING AND THE r -BONACCI NUMBERS | Carl P. McCarty | 130 |
| COMBINATORIAL IDENTITIES DERIVED FROM UNITS | Susan C. Seeder | 132 |
| A STOLARSKY ARRAY OF WYTHOFF PAIRS | David R. Morrison | 134 |
| AN APPLICATION OF THE FIBONACCI SEARCH TECHNIQUE TO DETERMINE OPTIMAL SAMPLE SIZE IN A BAYESIAN DECISION PROBLEM | Jerome D. Braverman & David J. Toof | 137 |
| SIMULTANEOUS TRIBONACCI REPRESENTATIONS | Ralph Gellar | 145 |
| POLYNOMIAL FIBONACCI-LUCAS IDENTITIES OF THE FORM $\sum_{r=1}^n P(r)F_r$ | Gregory Wulczyn | 157 |
| A GENERALIZATION OF SOME L. CARLITZ IDENTITIES | Gregory Wulczyn | 159 |
| A CHARACTERIZATION OF THE PYTHAGOREAN TRIPLES | John Konvalina | 160 |
| ON PRIMITIVE WEIRD NUMBERS | Seppo Pajunen | 162 |
| FIBONACCI CONCEPT: EXTENSION TO REAL ROOTS OF POLYNOMIAL EQUATIONS | Kesar Singh | 166 |
| TRIANGULAR ARRAYS ASSOCIATED WITH SOME PARTITIONS | D. G. Rogers | 169 |
| BREAK-UP INTEGERS AND BRACKET FUNCTIONS IN TERMS OF BRACKET FUNCTIONS | H. N. Malik & A. Qadir | 172 |
| PSEUDO-PERIODIC DIFFERENCE EQUATIONS | H. N. Malik & A. Qadir | 176 |
| SOLUTION OF PSEUDO-PERIODIC DIFFERENCE EQUATIONS | H. N. Malik & A. Qadir | 179 |
| A CLASS OF DIOPHANTINE EQUATIONS | S. P. Mohanty | 186 |
| A DIVISIBILITY PROPERTY CONCERNING BINOMIAL COEFFICIENTS | János Surányi | 189 |
| FORMATION OF GENERALIZED F - I IDENTITIES OF THE FORM $\sum_{r=1}^n r^s F_{kr+a}$ | Gregory Wulczyn | 192 |
| GENERALIZED FIBONACCI-LUCAS DIFFERENCE EQUATIONS | Gregory Wulczyn | 202 |
| CONDITIONS FOR $\phi(N)$ TO PROPERLY DIVIDE $N - 1$ | David W. Wall | 205 |
| ON FIBONACCI NUMBERS OF THE FORM $x^2 + 1$ | Ray Steiner | 208 |
| FIBONACCI SEQUENCE CAN SERVE PHYSICIANS AND BIOLOGISTS | Robert J. Kinney | 210 |
| VALUES OF CIRCULANTS WITH INTEGER ENTRIES | H. Turner Laquer | 212 |
| POWERS OF MATRICES AND RECURRENCE RELATIONS | William H. Cornish | 217 |
| CONVERGENCE PROPERTIES OF LINEAR RECURSION SEQUENCES | Ralph Fecke | 223 |
