

ADVANCED PROBLEMS INDEX

Part I

Problems by Number, Topic & Location, & by Solution Title & Location

Unsolved Problems are indicated by *****.

Edited by Verner E. Hoggatt, Jr.

- H-1 To: Non-Fibonacci numbers, 1.1(1963)46
So: A Tough Problem, 2.1(1964)50
- H-2 To: Perfect square Fibonacci numbers, 1.1(1963)46
So: A World-Famous Problem, 2.1(1964)50
- H-3 To: Fibonacci inequalities, 1.1(1963)46
So: Untitled 1.3(1963)47
- H-4 To: Fibonacci identity, 1.1(1963)47
So: Untitled 1.3(1963)47
- H-5 To: Fibonacci-Lucas recursion identity, 1.1(1963)47
So: Untitled 1.3(1963)49
- H-6 To: Millionth Fibonacci number in base seven, 1.1(1963)47
So: Untitled 1.3(1963)50
- H-7 To: Fibonacci limit and an inequality, 1.1(1963)47
So: Untitled 1.3(1963)50
- H-8 To: Fibonacci third-order determinant, 1.1(1963)48
So: Untitled 1.3(1963)51
- H-9 To: Sequence with two subscripts, 1.2(1963)53
So: Trinomial Coefficients, 1.4(1963)48
- H-10 To: Sum of reciprocals of Fibonacci numbers, 1.2(1963)53
So: Some Fibonacci Sums, 1.4(1963)49
- H-11 To: Fourier sine series with Fibonacci coefficients, 1.2(1963)53
So: Fibonacci and Fourier, 1.4(1963)49
- H-12 To: General term for a specific sequence, 1.2(1963)54
So: A Curious Sequence, 1.4(1963)50
- H-13 To: Fibonacci summation problem, 1.2(1963)54
So: A Matrix Derived Identity, 1.4(1963)50
- H-14 To: Five term Fibonacci identity, 1.2(1963)54
So: Identity for Fibonacci Cubes, 1.4(1963)51
- H-15 To: Fibonacci expressions generating non-Fibonacci numbers, 1.2(1963)54; 2.1(1964)51
So: [Note: The problem was reposed and a comment made that no discussion was received, but L. Carlitz is credited with a solution in 2.2(1964)122]
- H-16 To: Summations involving Hermite and Fibonacci or Lucas coefficients, 1.2(1963)54
So: Some Choice Identities, 1.4(1963)51; A Classical Solution, 2.1(1964)52
- H-17 To: Summation problem with Fibonacci coefficients, 1.2(1963)55
So: An Inspiring Problem, 2.1(1964)51
- H-18 To: Fibonacci and Lucas symbolic identities, 1.2(1963)55; Correction, 2.1(1964)65
So: Symbolic Relations, 2.2(1964)126
- H-19 To: Angle trisection and Fibonacci lengths, 1.3(1963)46
So: The Race, 2.2(1964)130

ADVANCED PROBLEMS INDEX

Edited by Verner E. Hoggatt, Jr.

- H-20 To: Q matrix, determinants and Lucas numbers as exponents 1.3(1963)46;
Correction, 1.4(1963)52
So: Fibonacci to Lucas, 2.2(1964)131
- H-21 To: Probability and Fibonacci divisibility, 1.3(1963)46
So: Fibonacci Probability, 2.2(1964)133
- H-22 To: Infinite products and sums of Fibonacci expressions, 1.3(1963)47;
Reposed, 3.1(1965)45
So: [Announcement after H-53], 4.3(1966)253
- H-23 To: Triangular numbers and Fibonacci numbers, 1.3(1963)47
So: *****
- H-24 To: Quotient of Fermat, rank of apparition, Fibonacci and congruence, 1.4(1963)47
So: Ward's Last Theorem, 2.3(1964)205
- H-25 To: Determinant with Fibonacci entries, 1.4(1963)47; Correction, 2.2(1964)118
So: Corrected Problem and Solution, 2.3(1964)207
- H-26 To: Fibonacci summation problem, 1.4(1963)47; Correction, 2.4(1964)313
So: At Last A Solution, 3.3(1965)205; Oops!, 3.4(1965)302
- H-27 To: Fibonacci summation identity, 1.4(1963)48
So: Generating Functions and Convolution, 2.3(1964)208
- H-28 To: Number of numbers to base r with at most n digits, 1.4(1963)48
So: A Fibonacci Beauty, 2.3(1964)209; Correction, 3.2(1965)114
- H-29 To: Limit in a numerical relation, 2.1(1964)49
So: Log of the Golden Mean, 2.4(1964)305
- H-30 To: System of Diophantine equations, 2.1(1964)49
So: More Diophantus and Fibonacci, 2.4(1964)305; All the Solutions, 3.2(1965)117
- H-31 To: Conditions for the coefficients in a bilinear transformation to be Fibonacci
numbers, 2.1(1964)49
So: Unimodular Bilinear Transformations, 2.4(1964)306
- H-32 To: Line segments and Fibonacci numbers, 2.1(1964)50
So: No Fibonacci Triangles, 2.4(1964)308
- H-33 To: Composite subscripts of prime Lucas numbers, 2.1(1964)50
So: Lucas Primality, 2.4(1964)309
- H-34 To: Bessel functions and Lucas numbers, 2.2(1964)123
So: Deferred Answer [Announcement], 3.1(1965)48
- H-35 To: Fibonacci magic square, 2.2(1964)123
So: Fibonacci and Magic Squares, 3.1(1965)49
- H-36 To: Ratios of L-shaped areas in a rectangle, 2.2(1964)124
So: Golden Section in Centroids, 3.1(1965)49
- H-37 To: Triangles having integral area, 2.2(1964)124
So: A Fascinating Recurrence, 3.1(1965)50; Addendum, 3.2(1965)114
- H-38 To: Chebyshev polynomials and Fibonacci numbers, 2.2(1964)124
So: Another Late One, 3.3(1965)207
- H-39 To: Difference equation with non-homogeneous term a Fibonacci nr, 2.2(1964)124
So: Convolutions and Optical 2-Stack, 3.1(1965)51

ADVANCED PROBLEMS INDEX

Edited by Verner E. Hoggatt, Jr.

- H-40 To: Certain non-square expressions involving $(u^2 - 1)/5$, 2.2(1964)124;
Corrected, 3.1(1965)51
So: *****
- H-41 To: Square solutions to $x^2 + m$ and $x^2 - m$, 2.3(1964)204
So: An Old Problem-Reference and Comments on the Historical Case, 3.2(1965)120
- H-42 To: Sum of 9 consecutive Fibonacci numbers, 2.3(1964)204
So: From Best Set of K to Best Set of $K + 1$? 3.2(1965)122; Addendum, 3.3(1965)204;
The Lost is Found, 4.1(1966)58; The Final Word, 4.2(1966)150
- H-43 To: Limit of series with Fibonacci powers, 2.3(1964)204; Corrected, 3.2(1965)123
So: [Reference to special case], 3.2(1965)123
- H-44 To: Generalized Fibonacci numbers, 2.3(1964)205
So: A Favorable Response, 3.2(1965)123
- H-45 To: Quadruple sums of Fibonacci squares, 2.3(1964)205
So: Iterated Sums of Squares, 3.2(1965)127
- H-46 To: Determinant with Fibonacci fourth power elements, 2.4(1964)303
So: Problems and Papers; [Announcement], 3.4(1965)302
- H-47 To: A Lucas transform and its inverse, 2.4(1964)303
So: Two Beauties [Follows H-51], 4.3(1966)254
- H-48 To: Non-homogeneous difference equation, 2.4(1964)303
So: Non-Homogeneous Fibonacci, 3.4(1965)303
- H-49 To: Fibonacci summation formula, 2.4(1964)304
So: An Alternate Form, 3.4(1965)301
- H-50 To: Fibonacci numbers as sums of products, 2.4(1964)304
So: [Announcement], 4.3(1966)252
- H-51 To: Generating functions, 2.4(1964)304
So: Two Beauties [Follows H-47], 4.3(1966)255
- H-52 To: Determinant with square entries, 3.1(1965)44
So: Untitled 4.3(1966)254
- H-53 To: Number of integers $< n$ that cannot be represented as the sum of distinct Lucas
numbers, 3.1(1965)44
So: [Announcement], 4.3(1966)253
- H-54 To: Euler's function of Fibonacci numbers(mod 4), 3.1(1965)44
So: Euler and Fibonacci, 4.4(1966)334
- H-55 To: Recurrence relations for composite functions of Fibonacci and Lucas numbers,
3.1(1965)45
So: [Announcement], 4.3(1966)253
- H-56 To: Fibonacci summation formula, 3.1(1965)45
So: Untitled 4.4(1966)335
- H-57 To: Limits of ratios of Fibonacci sums, 3.1(1965)45
So: One Moment, Please, 4.4(1966)336
- H-58 To: Sum of a product of Fibonacci numbers, 3.1(1965)45
So: Compositions Anyone? 4.4(1966)338
- H-59 To: Period of the Fibonacci sequence mod m , 3.2(1965)115; Restated, 5.1(1967)71
So: Eureka!, 5.5(1967)436

ADVANCED PROBLEMS INDEX

Edited by Verner E. Hoggatt, Jr.

- H-60 To: k^{th} digit in a Fibonacci congruence, 3.2(1965)115; Restated, 5.1(1967)71
So: *****
- H-61 To: Double limit of the ratio of a two parameter sequence, 3.2(1965)115;
Corrected, 3.3(1965)201
So: Limit of Limits, 5.1(1967)72
- H-62 To: Two polynomials satisfying a given equation, 3.2(1965)116;
Corrected, 3.3(1965)203; Restated, 5.1(1967)71; 12.1(1974)108
So: *****
- H-63 To: Fibonacci sum, Lucas product relation, 3.2(1965)116
So: Odd Row Sums of Fibonacci Coefficients, 5.1(1967)73
- H-64 To: Fibonacci numbers as a product of cosine terms, 3.2(1965)116
So: One of Many Forms, 5.1(1967)74
- H-65 To: Digit alteration problem, 3.3(1965)201
So: Fibonacci Related Number, 5.1(1967)75
- H-66 To: Amending a recurrence relation of Jeske, 3.3(1965)202
So: A Stirling Number Solution, 5.1(1967)76
- H-67 To: Angle between vectors with binomial and Fibonacci components, 3.3(1965)202
So: An Interesting Angle, 5.1(1967)78
- H-68 To: Fibonacci summation inequality, 3.3(1965)203
So: Many Roads to Morgantown, 5.1(1967)79
- H-69 To: Factorization of two polynomials defined by recurrence relations, 3.3(1965)203
So: A Many Splendored Thing, 5.2(1967)163
- H-70 To: k -combinations of natural numbers, 3.4(1965)299;
So: No Solution [Comments], 5.2(1967)165; 5.3(1967)253
- H-71 To: Special Lucas and Fibonacci sums, 3.4(1965)299
So: A Very Pretty Result, 5.2(1967)166
- H-72 To: Lucas-Fibonacci ratio identity, 3.4(1965)299;
So: Generalized Fibonacci Coefficients [Announcement], 5.2(1967)168
- H-73 To: Fibonacci and Morgan-Voyce polynomials, 3.4(1965)300
So: Untitled 5.3(1967)255
- H-74 To: Function for the number of Fibonacci numbers $< n$, 3.4(1965)300;
Updated, 4.1(1966)58
So: A Better Problem Solved [Comments], 4.1(1966)58
- H-75 To: Fibonacci numbers as number of elements of special sets, 3.4(1965)300
So: Restricted Unfriendly Subsets, 5.5(1967)437
- H-76 To: Diagonals of the Fibonomial triangle, 3.4(1965)300
So: *****
- H-77 To: Lucas numbers as sums of Fibonacci nrs and a result of S.G. Cuba, 3.4(1965)301
So: 5.3(1967)256
- H-78 To: Summations and generating functions related to the diagonals of Pascal's triangle,
4.1(1966)56
So: Fibonomial Coefficient Generators, 5.5(1967)438
- H-79 To: Sum of Fibonacci fourth powers, 4.1(1966)57
So: A Fourth-Power Formula, 5.5(1967)440

ADVANCED PROBLEMS INDEX

Edited by Verner E. Hoggatt, Jr.

- H-80 To: Sums of Fibonacci squares, 4.1(1966)57; Corrected, 4.2(1966)150
So: A Pleasant Surprise, 5.5(1967)441
- H-81 To: General term of a special sequence, 4.1(1966)57
So: Greatest Power of Two in N, 6.1(1968)52
- H-82 To: Arctangents of Fibonacci polynomials, 4.1(1966)57
So: Lehmer's Famous Problem Generalized, 6.1(1968)52
- H-83 To: Fibonacci numbers as powers of 3, 4.1(1966)57
So: Another Cutie, 6.1(1968)54
- H-84 To: Fibonacci divisibility properties, 4.2(1966)148
So: *****
- H-85 To: Limits of fractional parts of terms with Fibonacci coefficients, 4.2(1966)148
So: Alpha and Beta, Again!, 6.1(1968)55
- H-86 To: Some interrelated equations, 4.2(1966)149
So: Shades of the Past, 11.1(1973)76
- H-87 To: Special generating function, 4.2(1966)149
So: Untitled 12.1(1974)109
- H-88 To: Lucas-Fibonacci summation relationship, 4.2(1966)149
So: Original Compositions, 6.4(1968)253
- H-89 To: Rabbit problem variation, 4.3(1966)251
So: Recursive Breeding, 6.2(1968)144
- H-90 To: Rabbits and Fibonacci polynomials, 4.3(1966)251
So: *****
- H-91 To: Fibonacci ratio as a Lucas sum, 4.3(1966)251
So: An Old-Timer, 29.2(1991)186
- H-92 To: Fibonacci numbers as divisors of Lucas numbers, 4.3(1966)252
So: Divided We Fall!, 6.2(1968)145
- H-93 To: Fibonacci and Lucas cosine series, 4.3(1966)252; Corrected, 4.4(1966)332
So: Oops!!, 6.2(1968)145
- H-94 To: Golden ratio and disjoint intervals, 4.3(1966)258
So: *****
- H-95 To: Fibonacci-Lucas identity, 4.3(1966)258
So: Another Identity, 6.2(1968)148
- H-96 To: Rabbits and difference equations, 4.4(1966)332
So: Fine Breeding, 6.4(1968)254
- H-97 To: Fibonacci and Lucas summations, 4.4(1966)332
So: Binomial, Anyone?, 6.4(1968)256
- H-98 To: Quasi inverses of sequence of integers, 4.4(1966)333
So: At Last, 7.2(1969)171
- H-99 To: Fibonacci and Lucas products and sums, 4.4(1966)333
So: Productive Sums, 6.4(1968)257
- H-100 To: Representation of integers between successive Fibonacci numbers, 4.4(1966)333
So: *****
- H-101 To: Pythagorean properties of generalized Fibonacci numbers and Lucas products,
4.4(1966)333
So: Pythagoreans and All that Stuff, 6.4(1968)259

ADVANCED PROBLEMS INDEX

Edited by Verner E. Hoggatt, Jr.

- H-102 To: 13th order recurrence relation, 4.4(1966)333
So: Gone But Not Forgotten, 9.2(1971)135
- H-103 To: Fibonacci summation identity, 5.1(1967)69
So: Sum Day, 6.6(1968)352
- H-104 To: Fibonacci-Lucas series generating function, 5.1(1967)69
So: Generator Trouble, 6.6(1968)354
- H-105 To: Difference equation with prime powers, 5.1(1967)69
So: Of Prime Interest, 6.6(1968)356
- H-106 To: Lucas and Fibonacci summation identities, 5.1(1967)70
So: Buy My Nomial? 6.6(1968)357
- H-107 To: Fibonacci 3 by 3 determinant equation, 5.1(1967)70
So: Be Determinant!, 6.6(1968)358
- H-108 To: Tetrahedron with similar faces, 5.1(1967)70
So: Another Old Timer, 11.1(1973)76
- H-109 To: Two variable equation and a Fibonacci identity, 5.1(1967)70
So: Power Play, 7.1(1969)59
- H-110 To: Fibonacci double summation problem, 5.1(1967)70
So: *****
- H-111 To: Lucas cosine product representation, 5.1(1967)71
So: Trig or Treat, 7.1(1969)60
- H-112 To: Four Fibonacci-Lucas identities, 5.1(1967)71
So: Viva La Différence, 7.1(1969)61
- H-113 To: Infinite product with Fibonacci powers and Lucas number identities, 5.2(1967)161
So: *****
- H-114 To: Example of a complete sequence, 5.2(1967)161
So: *****
- H-115 To: Infinite product-series with Lucas powers and a Lucas identity, 5.2(1967)162
So: *****
- H-116 To: Infinite product-series with Lucas powers and Fibonacci identities, 5.2(1967)162
So: *****
- H-117 To: Fourth order Fibonacci determinant, 5.2(1967)162
So: Minor Expansion, 7.1(1969)62
- H-118 To: Difference equation with a Fibonacci coefficient, 5.2(1967)162
So: An Old Friend Revisited, 11.1(1973)74
- H-119 To: Triple summation problem, 5.3(1967)251
So: Good Combination, 7.1(1969)63
- H-120 To: Properties of products of Fibonacci polynomials, 5.3(1967)252
So: Sum Product!, 7.2(1969)172
- H-121 To: Fibonacci summation identity, 5.3(1967)252
So: In Summation, 7.2(1969)174
- H-122 To: Fibonacci numbers in base two, 5.3(1967)252
So: *****
- H-123 To: Fibonacci and Stirling numbers, 5.5(1967)435
So: Stirling Performance, 7.2(1969)177; Remarks, 16.2(1978)189

ADVANCED PROBLEMS INDEX

Edited by Verner E. Hoggatt, Jr.

- H-124 To: Fibonacci-Lucas identity, 5.5(1967)435; Corrected, 7.2(1969)179
So: Binet?, 7.2(1969)179
- H-125 To: Right and left-normal sequences, 5.5(1967)436
So: Partial Solution, 11.1(1973)77; Another Piece, 11.2(1973)186;
Ghost from the Past [Comment], 27.1(1989)95
- H-126 To: Sums of series with three Fibonacci coefficients, 6.1(1968)50
So: Multi-Variable Series, 7.3(1969)278
- H-127 To: Recurrence relations for a product of Fibonacci polynomials, 6.1(1968)51
So: *****
- H-128 To: Fibonacci and Lucas congruence relations, 6.1(1968)51
So: Mod Squad, 7.3(1969)282
- H-129 To: Fibonacci polynomial equation, 6.1(1968)51
So: Radical Tschebyshev, 7.3(1969)284
- H-130 To: [No problem H-130 appears, but there are 2 problems B-130, as well as 2
problems numbered B-131].
- H-131 To: Left-adjusted Pascal Triangle, 6.2(1968)142
So: Gauche Pascal, 7.3(1969)285
- H-132 To: Fibonacci sequence not a basis of order k, 6.2(1968)142
So: A Basis of Fact?, 7.5(1969)512
- H-133 To: Some summation sequences, 6.2(1968)142
So: Sum Shine, 7.5(1969)513
- H-134 To: Fibonacci and Lucas circulants, 6.2(1968)143
So: Circle to the Right, 7.5(1969)515
- H-135 To: Two summation problems, 6.2(1968)143
So: The Greatest Integer!, 7.5(1969)518
- H-136 To: Generalized Fibonacci number inequality, 6.4(1968)250
So: Squeeze Play, 7.5(1969)519
- H-137 To: Property of subsets of $\{1, \dots, N\}$, 6.4(1968)250
So: Generalize, 8.1(1970)75
- H-138 To: Polynomial divisibility property, 6.4(1968)250
So: Fibonomials, 8.1(1970)76
- H-139 To: Determinant of Fibonacci determinants, 6.4(1968)251
So: Sub Matrices, 8.3(1970)269
- H-140 To: Fibonomial coefficients and a divisibility property, 6.4(1968)251
So: Integrity, 8.1(1970)81
- H-141 To: Some Fibonacci and Lucas summations, 6.4(1968)252
So: Sum Difference, 8.3(1970)272
- H-142 To: Fibonacci product summation, 6.4(1968)252
So: Another Series, 8.3(1970)275

Edited by Raymond E. Whitney

- H-143 To: Generalized Fibonacci recurrence relations, 6.6(1968)350
So: Negative Attitude, 8.3(1970)277
- H-144 To: Some generating functions, 6.6(1968)351
So: Generating Functions, 8.4(1970)384

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-145 To: Fibonacci numbers in a number theoretic function, 6.6(1968)351
So: Factor Analysis, 8.4(1970)386
- H-146 To: Square Pell numbers, 6.6(1968)352
So: *****
- H-147 To: Some Fibonacci and Lucas limits, 6.6(1968)352
So: Converging Fractions, 8.4(1970)387
- H-148 To: Fibonacci numbers with Fibonacci subscripts with a chain of Fibonacci subscripts,
7.1(1969)56
So: *****
- H-149 To: Sums of reciprocals of primes with complex exponents, 7.1(1969)56
So: Shades of Euler, 8.4(1970)390
- H-150 To: Triple sums of Fibonacci squares, 7.1(1969)57
So: Triple Threat, 8.4(1970)391
- H-151 To: Some two variable generating functions, 7.1(1969)57
So: Sum Inversion, 8.5(1970)488
- H-152 To: Complete sequence of Fibonacci powers, 7.1(1969)58
So: Brush the Dust Off, 26.3(1988)283
- H-153 To: Even powers of Fibonacci nrs with subscripts divisible by three, 7.2(1969)169
So: Hidden Identity, 8.5(1970)492
- H-154 To: Triple summation problem, 7.2(1969)169
So: Triple Threat, 8.5(1970)493
- H-155 To: Two variable Fibonacci polynomial relation, 7.2(1969)170
So: Recurring Theme, 8.5(1970)497
- H-156 To: Sum-product summation relation, 7.2(1969)170
So: Summarily Productive, 9.1(1971)63
- H-157 To: Polynomials from network theory, 7.2(1969)170
So: Stay Tuned to this Network, 9.1(1971)65
- H-158 To: Relatively prime Fibonacci polynomials, 7.3(1969)277
So: In Their Prime, 9.1(1971)67
- H-159 To: Properties of two special sequences, 7.3(1969)277
So: Harmony, 9.1(1971)69
- H-160 To: Cubic equation with Lucas constant term, 7.3(1969)278
So: Discriminating, 9.1(1971)71
- H-161 To: Asymptotic estimate for a sum, 7.3(1969)278
So: A Large Order, 9.2(1972)137
- H-162 To: Determinant with variable entries on the main diagonal, 7.5(1969)511
So: Be Negative, 9.1(1971)72
- H-163 To: Some Fibonacci-Lucas identities, 7.5(1969)511
So: Luca-Nacci, 9.2(1971)143
- H-164 To: Simultaneous recurrence relations, 7.5(1969)512
So: H-127 Revisited, 9.4(1971)390
- H-165 To: Sum of Fibonacci ratios, 7.5(1969)512
So: Short-Term Induction, 9.4(1971)393

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-166 To: Fibonacci-Lucas identity 8.1(1970)74
So: Sum Even Index, 9.4(1971)396
- H-167 To: Series of reciprocals of a product of two Fibonacci numbers, 8.1(1970)74
So: Higher Bracket, 9.4(1971)397
- H-168 To: Determinant with combinatoric entries, 8.1(1970)75
So: A Normal Determinant, 9.5(1971)513
- H-169 To: Necessary and sufficient condition that n^2+1 is prime, 8.3(1970)268
So: Prime Target, 9.5(1971)514; Comments, 10.2(1972)217
- H-170 To: Properties of the power sequence of natural numbers, 8.3(1970)268
So: *****
- H-171 To: Fibonacci numbers from an integral, 8.3(1970)268
So: Non-Existent, 9.5(1971)515
- H-172 To: Fibonacci-Lucas summation identity, 8.4(1970)383
So: History Repeats, 9.5(1971)519
- H-173 To: Diophantine equation, 8.4(1970)383
So: Fibonacci Versus Diophantus, 9.5(1971)520
- H-174 To: Burns Function defined on $\{nk\}$, 8.4(1970)383
So: Comment, 11.2(1973)187
- H-175 To: Properties of the coefficients in a special generating function, 8.5(1970)487
So: Sum Project, 9.5(1971)521
- H-176 To: Summation problem of Ramanujan, 8.5(1970)488
So: Keeping the Q's on Cue, 10.2(1972)186
- H-177 To: Properties of a function defined on a sum of Fibonacci numbers, 8.5(1970)488
So: Partition, 10.2(1972)190
- H-178 To: Square sequence and no recurrence, 9.1(1971)61
So: What's the Difference?, 10.2(1972)193
- H-179 To: Limits of a special sequence, 9.1(1971)62; Correction, 14.1(1976)88
So: Probably? [Comments], 11.3(1973)314; ***** [No sol for the corrected version]
- H-180 To: Sums of Fibonacci and Lucas nrs with cubed binomial coefficients, 9.1(1971)62
So: Binet Gains Identity, 10.3(1972)284
- H-181 To: Two variable summation identity, 9.2(1971)134
So: Sum-Er-Time, 10.3(1972)286
- H-182 To: Some summation congruence problems, 9.2(1971)134
So: Another Remark [Comment], 11.2(1973)187
- H-182S To: Some sigma function limits, 9.2(1971)216
So: *****
- H-183 To: Properties of a given triangular array, 9.4(1971)389
So: Array of Hope, 10.3(1972)288
- H-184 To: Fibonacci numbers and a sequence of permutations, 9.4(1971)389
So: Fibo-Cycle, 10.3(1972)289
- H-185 To: Summation of hypergeometric ftns, 9.4(1971)390; Correction, 10.6(1972)633
So: Hyper-Tension, 10.4(1972)414
- H-186 To: Generalized Fibonacci congruence, 9.5(1971)512
So: A Congruence in its Prime, 10.4(1972)415

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-187 To: Necessary and sufficient conditions that n be a Fibonacci number, 9.5(1971)512
So: Fibonacci is a Square, 10.4(1972)417
- H-188 To: No even perfect Fibonacci numbers, 9.5(1971)513; Comment, 13.4(1975)370
So: Nobody is Even Perfect, 10.6(1972)631
- H-189 To: Double summation identity, 10.2(1972)185
So: Sum Series, 10.4(1972)419
- H-190 To: Mod 5 Fibonacci and Lucas congruences, 10.2(1972)185
So: It's a Mod World, 10.4(1972)420
- H-191 To: Fibonacci-Lucas summation formulas, 10.2(1972)185
So: Some Sums, 10.6(1972)631
- H-192 To: Special sums of powers of (-11) , 10.3(1972)283
So: Just So Many Two's, 10.4(1972)421
- H-193 To: Some special prime numbers, 10.3(1972)283; Comments, 10.6(1972)634
So: Not This Time, 11.2(1973)188
- H-194 To: Pair of Diophantine equations, 10.3(1972)283
So: Second Degree for Diophantus, 10.6(1972)633
- H-195 To: Generalized nrs of Harris and Styles, Fib nrs, and a special array, 10.4(1972)413
So: Array of Hope, 11.5(1973)502
- H-196 To: Bracket multiples of the golden number, 10.4(1972)413
So: Partition, 11.5(1973)506
- H-197 To: Limits of ratios of t -Fibonacci numbers, 10.4(1972)414
So: Fit to a "T", 12.1(1974)110
- H-198 To: Triangular and Pell numbers, 10.6(1972)629
So: Pell-Mell, 12.1(1974)111
- H-199 To: Infinite number of coins, 10.6(1972)629
So: To Coin a Theorem, 12.2(1974)214
- H-200 To: Number of primes dividing the binomial coefficient, 10.6(1972)629
So: Asymptotic Pi, 12.2(1974)216
- H-201 To: Fibonacci related properties of a special triangular array, 10.6(1972)630
So: Display Case, 12.2(1974)218
- H-202 To: Some Fibonomial product-sum formulas, 10.6(1972)630
So: Fibonacci Combination, 12.3(1974)309
- H-203 To: Configurations from edge-connected squares, 10.6(1972)631
So: *****
- H-204 To: Dividing by the prime 65537, 10.6(1972)631
So: *****
- H-205 To: Two n^{th} order determinants, 11.1(1973)72
So: On Q, 12.3(1974)311
- H-206 To: Exponential summation identity, 11.1(1973)72
So: Unity of Roots, 12.3(1974)312
- H-207 To: Generating function related to Fibonacci and Lucas numbers, 11.1(1973)72
So: Gee!, 12.4(1974)398
- H-208 To: Maximum summation inequality, 11.1(1973)73
So: Bounds for a Sum, 12.4(1974)399

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-209 To: Summation identity, 11.1(1973)73; Corrected, 12.4(1974)400
So: Search!, 12.4(1974)400
- H-210 To: Necessary and Sufficient condition for n to be a Lucas number, 11.1(1973)73
So: Lucas Condition, 12.4(1974)401
- H-211 To: Binomial coefficient representations, 11.1(1973)73
So: Form to the Right, 16.2((1978)154; Return from the Dead, 26.1(1988)90
- H-212 To: Edge connected squares, 11.1(1973)73
So: *****
- H-213 To: Left adjusted Pascal triangle, 11.1(1973)74
So: An Adjusted Pascal, 16.2(1978)165; Another Ancient One, 26.1(1988)91
- H-214 To: Primes in arithmetic progression, 11.1(1973)74
So: *****
- H-215 To: Mod 5 Pell congruence, 11.2(1973)184
So: At Last, 26.3(1988)285
- H-216 To: Sums of logs of sums of Fibonacci reciprocals, 11.2(1973)184
So: Sum Sequence, 13.1(1975)90
- H-217 To: Binomial coefficient congruences, 11.2(1973)184; Corrected, 13.1(1975)91
So: Prime Assumption, 13.1(1975)91
- H-218 To: Matrices of Pascal and Fibonacci, 11.2(1973)185; Errata, 11.5(1973)507
So: Staggering Pascal, 13.1(1975)92
- H-219 To: Summation identity, 11.2(1973)185
So: Some Sum, 13.2(1975)185
- H-220 To: Summation identity, 11.2(1973)185
So: On Q , 13.2(1975)187
- H-221 To: Fibonacci and Lucas congruences and the Legendre symbol, 11.3(1973)312
So: Congruence for F_n and L_n , 13.2(1975)188
- H-222 To: Weird Fibonacci and Lucas numbers, 11.3(1973)312
So: *****
- H-223 To: Sequences of sets, 11.3(1973)312
So: A Nest of Subsets, 13.4(1975)370
- H-224 To: Fibonacci convolution determinant, 11.3(1973)313
So: *****
- H-225 To: Inequality for the exponent in a Fermat-like equation, 11.3(1973)313;
Corrected, 16.6(1978)569; A Corrected Oldie, 17.1(1979)95
So: *****
- H-226 To: Number of special bounded sequences, 11.3(1973)313
So: Enumeration, 13.3(1975)281
- H-227 To: Legendre Polynomial representation, 11.5(1973)501
So: Sum Legendre, 13.4(1975)370
- H-228 To: Sequence of Fibonacci numbers to Fibonacci powers, 11.5(1973)501
So: *****
- H-229 To: Triangular array recursion formulas, 11.5(1973)502
So: A Triangular Array, 13.4(1975)371
- H-230 To: Prime divisors of Fibonacci numbers, 12.1(1974)107
So: Some Square, 14.1(1976)89

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-231 To: Two recursion sequences, 12.1(1974)107
So: Recurrent Theme, 14.1(1976)89
- H-232 To: Polynomial sequence defined by a generating function, 12.1(1974)107
So: Using Your Generator, 14.1(1976)90
- H-233 To: Carlitz-Fibonacci generalized numbers, 12.1(1974)108
So: General-Ize, 14.1(1976)90
- H-234 To: Well formed formulas, 12.2(1974)213
So: WFFLE!, 14.2(1976)182
- H-235 To: ODE for power series solution with Fibonacci or Lucas coefficients, 12.2(1974)214
So: Sum Differential Equation!, 14.2(1976)184
- H-236 To: Series of products, 12.2(1974)214
So: Sum Product!, 14.2(1976)184
- H-237 To: Sum of Fibonacci reciprocals, 12.3(1974)309
So: Sum Reciprocal!, 14.2(1976)186
- H-238 To: Sum of the product of three variables, 12.3(1974)309
So: Triple Play, 14.3(1976)282
- H-239 To: Fermat numbers and a 14 digit prime, 12.4(1974)398; Correction, 13.4(1975)370
So: Fermat' Inequality, 14.3(1976)283
- H-240 To: Symmetric 3 variable sum function, 12.4(1974)398
So: E-Gad, 14.3(1976)284
- H-241 To: Complex variable summation problem, 12.4(1974)398; Comment, 13.4(1975)370
So: Harmonic, 14.3(1976)285
- H-242 To: No Problem H-242 given
- H-243 To: Triangular numbers in a Pell equation [Problem only stated with solution]
14.3(1976)285
So: Pell-Mell, 14.3(1976)285
- H-244 To: System of equations involving products of sums,
[Problem only stated with solution] 14.5(1976)466
So: Systematic Work, 14.5(1976)466
- H-245 To: Sum-Product identity, 13.1(1975)89
So: Productive Identity, 14.5(1976)468
- H-246 To: Fibonacci-Lucas product-sum relation, 13.1(1975)89
So: Fib, Luc, Et Al, 14.5(1976)469
- H-247 To: Differences of Fibonacci squares, 13.1(1975)89
So: Unity with Fibonacci, 15.1(1977)89
- H-248 To: Formulas related to Simson's identity, 13.1(1975)89
So: The Very Existence, 15.1(1977)90
- H-249 To: Find a Maclaurin series for a rational function of polynomials, 13.2(1975)185
So: Folk-Laurin, 15.1(1977)91
- H-250 To: Fibonacci recursion relation with polynomial coefficients, 13.2(1975)185
So: Growth Rate, 15.1(1977)92
- H-251 To: Identity involving two series, 13.2(1975)185
So: Look-Series, 15.2(1977)185

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-252 To: Some matrix products, 13.3(1975)281
So: Sub Product, 15.2(1977)187
- H-253 To: Identity involving the product of four sums found in combinatorics, 13.3(1975)281
So: Triple Play, 15.2(1977)188
- H-254 To: Sums in a Fibonacci-Pascal triangle, 13.3(1975)281; Restated, 17.3(1979)288
So: *****
- H-255 To: Double summation identity, 13.4(1975)369
So: Double Your Fun, 15.3(1977)281
- H-256 To: Simultaneous equations and powers of 2, 13.4(1975)369
So: An Oldie!, 15.4(1977)374
- H-257 To: Staggered array with Fibonacci entries, 13.4(1975)369
So: Staggering Sum, 15.3(1977)283
- H-258 To: Four variable summation problem, 14.1(1976)88
So: The Sigma Strain, 15.3(1977)284
- H-259 To: Fibonacci inequality, 14.1(1976)88
So: Positively!, 15.3(1977)284
- H-260 To: Fibonacci and Lucas primes, 14.1(1976)88; Restated, 17.3(1979)288
So: *****
- H-261 To: k-binomial representation inequality, 14.2(1976)182
So: A Player Rep, 15.4(1977)371
- H-262 To: Lucas congruence mod p^2 , 14.2(1976)182
So: Modern Mod, 15.4(1977)372
- H-263 To: Quadratic Lucas congruence, 14.2(1976)182
So: Lucas the Square is Now Mod!, 15.4(1977)373
- H-264 To: Binomial coefficient summations, 14.3(1976)282
So: Sum-Ary Conclusion, 16.1(1978)92
- H-265 To: Fibonacci congruence mod powers of 3, 14.3(1976)282
So: Another Congruence, 16.1(1978)94
- H-266 To: Fibonacci summation identities, 14.3(1976)282
So: Identify!, 16.1(1978)94
- H-267 To: Series expansion of an exponential function having a power series exponent,
14.5(1976)466; Corrected, 15.2(1977)192
So: Sum Solution, 16.2(1978)190
- H-268 To: Some Identities for Sterling numbers of the 2nd kind, 14.5(1976)466
So: Use Your Umbral-Ah, 16.2(1978)191
- H-269 To: Sequences from triangular arrays, 15.1(1977)89
So: A Pair of Sum Sequences, 16.5(1978)478
- H-270 To: 2 variable, 3 index summation, 15.1(1977)89
So: It's a Sinh, 16.5(1978)479
- H-271 To: Sequences from the binary dual, 15.1(1977)89; Corrected 16.5(1978)480;
Restated 17.3(1979)288
So: *****
- H-272 To: Sums of binomial coefficient products, 15.2(1977)185; Corrected 16.6(1978)567
So: Symmetric Sum, 16.6(1978)567

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-273 To: Properties of a staggered array, 15.2(1977)185
So: A Ray of Lucas, 16.6(1978)568
- H-274 To: Difference equation for 3rd order Q, 15.3(1977)281
So: A Soft Matrix, 17.1(1979)95
- H-275 To: Triangular array of Pell numbers, 15.3(1977)281
So: Pell Mell, 17.2(1979)191
- H-276 To: Bell numbers and differencing, 15.4(1977)371
So: Indifferent, 17.3(1979)287
- H-277 To: Quadratic nonresidues of prime $p \equiv \pm 1 \pmod{10}$, 15.4(1977)371
So: Old timer, 22.1(1984)91
- H-278 To: Fibonacci ratio and continued fractions, 16.1(1978)92
So: Continue, 17.4(1979)375
- H-279 To: Fibonacci-Lucas identities, 16.1(1978)92
So: A Rare Mixture, 17.4(1979)376
- H-280 To: Fibonacci-Lucas congruences, 16.1(1978)92
So: Mod Ern, 17.4(1979)377
- H-281 To: Matrix equations, 16.2(1978)188
So: Who's Who? 18.1(1980)91
- H-282 To: Infinite series of golden ratios, 16.2(1978)188
So: Speedy Series, 18.1(1980)93
- H-283 To: Closed form for a given summation, 16.2(1978)188
So: Close Ranks! 18.1(1980)94
- H-284 To: Fibonacci-Lucas summation formula, 16.2(1978)188
So: Umbral-a, 18.2(1980)191
- H-285 To: Two interrelated sequences, 16.5(1978)477
So: One or Five, 18.3(1980)281
- H-286 To: Fibonacci-Lucas congruences, 16.5(1978)477
So: Power Mod, 18.3(1980)281
- H-287 To: Arithmetic function asymptotic to (n) , 16.5(1978)477
So: *****
- H-288 To: Fibonacci-Lucas identities, 16.5(1978)477
So: More Identities, 18.3(1980)282
- H-289 To: Multinomial coefficient summation, 16.5(1978)477
So: Series Consideration, 18.3(1980)283
- H-290 To: Fibonacci identities, 16.6(1978)566
So: Identical, 18.3(1980)285
- H-291 To: Square differences of consecutive cubes, 16.6(1978)566
So: Square Your Cubes, 18.3(1980)286
- H-292 To: Sequences and pointwise convergence, 16.6(1978)566
So: Get the Point, 18.3(1980)286
- H-293 To: Hermite polynomial generating function, 16.6(1978)566
So: The Old Hermite, 18.3(1980)287
- H-294 To: Fibonacci 5×5 determinant, 16.6(1978)567; Corrected, 18.3(1980)280
So: Dawn, 18.4(1980)375

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-295 To: Fibonacci-Lucas identities, 17.1(1979)94; Corrected, 18.3(1980)281
So: More Identities, 18.4(1980)376
- H-296 To: Greatest integer equation, 17.1(1979)94
So: Bracket Your Answer, 18.4(1980)377
- H-297 To: Catalan numbers and limits, 17.1(1979)94
So: The Limit, 18.4(1980)378
- H-298 To: Fibonacci identities and congruences, 17.1(1979)94
So: The Big Six, 18.4(1980)379
- H-299 To: Fibonacci and Lucas determinants, 17.2(1979)189
So: Vandermonde, 19.1(1981)94
- H-300 To: Primes in a Fibonacci sequence, 17.2(1979)189
So: *****
- H-301 To: Generating ftn for a sequence with terminal diagonal sequence, 17.2(1979)190
So: Sum Difference, 19.1(1981)95
- H-302 To: Binomial expansion yielding a given sequence, 17.3(1979)286
So: Determined, 19.2(1981)190
- H-303 To: Limits and the finite zeta function, 17.3(1979)286
So: Zeta, 19.2(1981)191
- H-304 To: Partitions and non-Lucas numbers, 17.3(1979)286
So: *****
- H-305 To: Fibonacci-like sequence and properties, 17.3(1979)286
So: Like Fibonacci-like Sum, 19.2(1981)191
- H-306 To: Systems involving Fibonacci numbers, 17.3(1979)287
So: Middle Aged, 26.3(1988)285
- H-307 To: Quadratic character of sequences, 17.4(1979)374
So: A Wind from the Past, 25.3(1987)285
- H-308 To: Convergents of a continued fraction, 17.4(1979)374
So: Con-Vergent, 19.4(1991)382
- H-309 To: General pattern of a permutation, 17.4(1979)374
So: *****
- H-310 To: Fibonacci, Lucas and the golden number, 17.4(1979)375
So: Fibonacci and Lucas Are the Greatest Integers, 19.4(1981)383
- H-311 To: Sequences and continued fractions, 18.1(1980)90
So: Convergents, 19.5(1981)471
- H-312 To: Special summation problem, 18.1(1980)90
So: Sum Series, 19.5(1981)472
- H-313 To: Fibonacci and Lucas partitions, 18.2(1980)190
So: Form Partitions!, 19.5(1981)473
- H-314 To: Limit points of a recurrence sequence, 18.2(1980)190
So: It's the Limit, 19.5(1981)474
- H-315 To: Invariance of sum related to Kerner factorization of a polynomial, 18.2(1980)190;
Corrected, 19.4(1981)384
So: Factor, 19.5(1981)476
- H-316 To: Fibonacci numbers and weighted compositions of n , 18.2(1980)190
So: Sum Enumerator, 20.1(1982)94

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-317 To: Primes and a generalized Fibonacci sequence, 18.3(1980)280
So: Prime Time, 20.1(1982)95
- H-318 To: Möbinacci sequence, 18.3(1980)280
So: Canonical Möbius [Remarks], 20.1(1982)96
- H-319 To: Inequalities and non-Fibonacci numbers, 18.3(1980)280
So: Fibonacci Never More, 20.1(1982)96
- H-320 To: Riemann zeta and harmonic functions, 18.4(1980)375
So: Once Again, 20.2(1982)185
- H-321 To: Fibonacci-Lucas product identity, 18.4(1980)375
So: Big Deal, 20.2(1982)187
- H-322 To: Properties of k-Fibonacci sequences, 19.1(1981)93
So: Two Much, 20.2(1982)189
- H-323 To: Right-shift operator and two sequences, 19.1(1981)93
So: A Common Recurrence, 20.2(1982)190
- H-324 To: Intricate Fibonacci identity, 19.1(1981)93; Corrected, 20.3(1982)285
So: Say A, 20.3(1982)285
- H-325 To: Special summation formulas, 19.1(1981)93
So: Sum Fun, 20.3(1982)286
- H-326 To: Primes and primitive roots, 19.1(1981)94
So: A Primitive Solution, 20.3(1982)286
- H-327 To: Identities of Thoro's sequence. 19.2(1981)189
So: Are You Curious?, 20.4(1982)373
- H-328 To: Properties of sequences from an irrational number, 19.2(1981)189
So: Irrationality, 20.4(1982)375
- H-329 To: Product of a series and an exponential, 19.2(1981)190
So: E Gads, 20.4(1982)377
- H-330 To: Identity relating sequences from an irrational number, 19.4(1981)381
So: O Rats, 20.4(1982)378
- H-331 To: Properties of k-Fibonacci sequences, 19.4(1981)381
So: Barely There, 20.4(1982)379
- H-332 To: Bracket function and the golden number, 19.4(1981)381
So: Eventually, 21.1(1983)75
- H-333 To: Dudney problem on Leonardo's pig, 19.5(1981)470
So: Nab that Pig, 21.1(1983)77
- H-334 To: Fibonacci-like sequences and quadratic nonresidues, 19.5(1981)470
So: Little Residue, 21.1(1983)79
- H-335 To: Fifth degree polynomial equation, 20.1(1982)93
So: Al Gebra, 21.2(1983)154; Corrected, 22.1(1984)91; Comments, 22.4(1984)375
- H-336 To: Several Fibonacci congruences, 20.1(1982)93; Corrected, 21.2(1983)155
So: Mod Ern, 21.2(1983)155
- H-337 To: 5 x 5 Lucas-Fibonacci determinant, 20.1(1982)93
So: Pivot, 21.2(1983)157
- H-338 To: Probability and abundant numbers, 20.1(1982)94
So: Some Abundance, 21.2(1983)159

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-339 To: Dyadic rationals in the Cantor set, 20.2(1982)185
So: Rational Thirds, 21.3(1983)239
- H-340 To: Recurrence sequence and Fibonacci numbers, 20.2(1982)185
So: Making a Difference, 21.3(1983)239
- H-341 To: Sixth degree polynomial equation, 20.2(1982)185
So: The Root of the Problem, 21.4(1983)313
- H-342 To: Special sequence summation identity, 20.3(1982)284
So: Say A, 21.4(1983)314
- H-343 To: Representation of integers, 20.3(1982)284
So: Continue, 21.4(1983)316
- H-344 To: Some Lucas-Fibonacci identities, 20.3(1982)284
So: Don't Lose Your Identity, 21.4(1983)317
- H-345 To: Four consecutive Fibonacci numbers, 20.4(1982)372
So: Not in Prime Condition, 22.1(1984)92
- H-346 To: Pell numbers of the form $2s^2$, 20.4(1982)372
So: Pell-Mell, 22.1(1984)93
- H-347 To: Lucas summation identity, 20.4(1982)372
So: It All Adds Up, 22.1(1984)94
- H-348 To: Sum of a polynomial sequence, 20.4(1982)373
So: Give Poly Sum!, 22.2(1984)189
- H-349 To: Cosecant summation, 21.1(1983)74
So: Triggy, 22.2(1984)190
- H-350 To: Recurrence formula for given sequences, 21.1(1983)74
So: Lotta Sequences, 22.3(1984)280; Note, 23.2(1985)188
- H-351 To: System with Fibonacci terms, 21.1(1983)75
So: We Have the System, 22.2(1984)192
- H-352 To: Hats at a math convention, 21.2(1983)153
So: Hats Off, 22.3(1984)282
- H-353 To: Polynomials and two-element sets, 21.2(1983)153
So: Dual Solution, 22.3(1984)284
- H-354 To: Solutions to a Diophantine equation, 21.2(1983)153
So: Not for Squares, 22.3(1984)285; Note, 23.2(1985)188; Reply, 24.1(1986)88
- H-355 To: Second-order difference equation, 21.2(1983)154
So: Sum Difference!, 22.4(1984)375
- H-356 To: Moser combinatorial word formulation, 21.3(1983)236
So: Lotsa Words, 22.4(1984)377
- H-357 To: Fractional parts of multiples of the golden ratio, 21.3(1983)237
So: *****
- H-358 To: Infinite summation problems, 21.3(1983)238
So: Waiting Again, 23.1(1985)90
- H-359 To: Zetanacci numbers, 21.3(1983)238
So: Zetanacci, 23.1(1985)91
- H-360 To: Fibonacci products and congruences, 21.4(1983)312
So: Say A, 23.1(1985)93

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-361 To: Pell number combinations, 21.4(1983)312
So: Pell-Mell, 23.1(1985)94
- H-362 To: Lucas numbers in a ring, 21.4(1983)312
So: Ring around the Lucas!, 23.2(1985)190
- H-363 To: Reciprocal series for Fibonacci numbers of order k , 21.4(1983)313
So: Any More? [Comment], 23.3(1985)283
- H-364 To: Divisors of Lucas numbers, 21.4(1983)313
So: Only Two!, 23.3(1985)283
- H-365 To: Fibonacci-Lucas identities divisible by 5, 22.1(1984)89
So: Old Timer, 27.2(1989)188; A Fifth, 28.2(1990)187
- H-366 To: Fibonacci polynomials, 22.1(1984)90
So: Poly Nomial, 23.3(1985)284
- H-367 To: Lucas-Fibonacci root identities, 22.1(1984)90
So: AB Surd, 23.4(1985)378
- H-368 To: Fibonacci numbers of order k , 22.2(1984)188
So: Sum Formula, 23.4(1985)380
- H-369 To: Primitive gcd sequences, 22.2(1984)188
So: Primitive Sequences, 24.1(1986)89
- H-370 To: Product of consecutive integers, 22.2(1984)189
So: Lotsa Fives in the Product, 24.1(1986)90
- H-371 To: Purely periodic continued fractions, 22.2(1984)189
So: Continuing..., 24.1(1986)91
- H-372 To: Sequences and recurrence formulas, 22.3(1984)279
So: Recurring Thoughts, 24.1(1986)93
- H-373 To: Fibonacci numbers of order k , 22.3(1984)279
So: Sum Formula!, 24.2(1986)187
- H-374 To: Sum of unitary divisors of n , 22.3(1984)280
So: Bounds of Joy, 24.2(1986)188
- H-375 To: Some Fibonacci congruences, 22.3(1984)280
So: Conjectures No More, 24.2(1986)188
- H-376 To: Sum of four cubes is zero, 22.4(1984)374
So: New construction, 24.2(1986)191
- H-377 To: k th-order recurrence relation, 22.4(1984)374
So: Somewhat Dependable, 24.3(1986)284
- H-378 To: Quadratic congruences, 22.4(1984)374
So: A Prime Result, 24.3(1986)286
- H-379 To: Fibonacci sequences of order $k(1)$, 22.4(1984)375
So: Sum Formula!, 24.3(1986)286
- H-380 To: Sequence with zero Schnirelmann density, 22.4(1984)375
So: A Sparse Sequence, 23.4(1986)287
- H-381 To: Riemann zeta number formulas, 23.1(1985)89; Correction, 23.2(1985)190
So: Sum Zeta!, 24.4(1986)377
- H-382 To: Inequalities for Fibonacci nrs of order k , 23.1(1985)89; Correction, 23.2(1985)190
So: Untitled 24.4(1986)380

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-383 To: Limit for a given sequence, 23.1(1985)90
So: Here's the Limit!, 25.1(1987)90
- H-384 To: Fibonacci sum-product series, 23.1(1985)90
So: Sum Product!, 25.1(1987)95
- H-385 To: Subscripted variables in a system of quadratic equations, 23.2(1985)186
So: Gotta Have a System, 25.1(1987)96
- H-386 To: Properties of a multiple-valued Fibonacci function, 23.2(1985)186
So: A Complex Problem, 25.2(1987)187
- H-387 To: Second-order linear integral recurrence and quadratic nonresidues, 23.2(1985)186
So: Non Residual, 25.2(1987)188
- H-388 To: Sequences from digraphs, 23.2(1985)187
So: Across the Digraph! [Comments], 25.2(1987)189
- H-389 To: Fibonacci numbers of higher order, 23.3(1985)282
So: Waiting for success, 25.2(1987)190
- H-390 To: Fibonacci formulas with constant value, 23.3(1985)282
So: Somethings Are Constant, 25.3(1987)286
- H-391 To: Divisors of Lucas numbers, 23.3(1985)282
So: The Law of Exclusion, 25.3(1987)287
- H-392 To: Number of F-addends in a sum, 23.4(1985)376
So: Bracket Some Sums, 25.4(1987)376
- H-393 To: Triangular number array and properties, 23.4(1985)376
So: *****
- H-394 To: Value of a continued fraction, 24.1(1986)88
So: E Gads, 25.4(1987)378
- H-395 To: Fibonacci-Lucas summation identity, 24.1(1986)88
So: Easy Induction, 25.4(1987)381
- H-396 To: Fibonacci-Lucas summation identity, 24.1(1986)88
So: Another Easy One, 25.4(1987)382
- H-397 To: Zeros of a function of an operator, 24.2(1986)185
So: Some Operator, 26.1(1988)92
- H-398 To: Maximum value of a series, 24.2(1986)185
So: A Piece of Pie, 26.1(1988)93
- H-399 To: Twin Lucas sequences, 24.2(1986)185
So: Rules, Rules, Rules, 26.1(1988)95
- H-400 To: Coefficients in a Lucasian sequence, 24.3(1986)283
So: A Simple Sequence, 26.2(1988)187
- H-401 To: Prime factors of Fibonacci numbers, 24.3(1986)283
So: Fibonacci in His Prime, 26.2(1988)188
- H-402 To: Limits and a TV matrix game, 24.3(1986)283
So: Just a Game, 26.2(1988)190
- H-403 To: Closed form for a continued fraction, 24.4(1986)376
So: Close Ranks, 26.3(1988)286
- H-404 To: Fibonacci polynomials of order k, 24.4(1986)376
So: Some Triple Sum, 26.4(1988)377

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-405 To: Fibonacci-bracket function summation, 24.4(1986)377
So: General Ize, 26.4(1988)379
- H-406 To: Point sets on the real line, 25.1(1987)90
So: What's the Point?, 27.1(1989)92
- H-407 To: Closed form of an infinite product, 25.1(1987)90
So: Nice End Product, 27.1(1989)94
- H-408 To: Congruence of two sequences, 25.1(1987)90
So: A Prime Example, 27.2(1989)191
- H-409 To: Triangular array and properties, 25.2(1987)185
So: A Prize Problem, 27.4(1989)379
- H-410 To: Integrals of Fibonacci polynomials, 25.2(1987)186
So: Integrate Your Results, 27.5(1989)474
- H-411 To: Closed form of a continued fraction, 25.2(1987)186
So: Close Ranks, 27.5(1989)475
- H-412 To: Binomial coefficients and a double sum, 25.3(1987)284
So: It Adds Up!, 27.5(1989)476
- H-413 To: Fibonacci congruences, 25.3(1987)284
So: Generally True!, 27.5(1989)477
- H-414 To: Fibonacci identity, 25.3(1987)
So: Some Difference, 28.1(1990)91
- H-415 To: Fibonacci-Lucas identity, 25.4(1987)376
So: *****
- H-416 To: Fibonacci-Lucas congruences, 25.4(1987)376
So: A Little Reciprocity, 28.1(1990)92
- H-417 To: Geometric mean of Fibonacci numbers, 25.4(1987)376
So: A Mean Problem, 28.1(1990)94
- H-418 To: Divisor of the period of the Fibonacci sequence mod m , 26.1(1988)89
So: Divide and Conquer, 28.2(1990)188
- H-419 To: Pell-Fibonacci identities, 26.1(1988)89
So: Pell-Mell, 28.2(1990)189
- H-420 To: Sum of a given infinite series, 26.1(1988)89
So: Two Two Much, 28.2(1990)191
- H-421 To: Recurrence relation and Fibonacci convolution sequence, 26.2(1988)186
So: Rather Compact, 28.3(1990)284
- H-422 To: Arithmetic progressions with Fibonacci differences, 26.2(1988)186
So: Lotsa Sequences, 28.3(1990)285
- H-423 To: Polynomial equation with roots near ϕ , 26.3(1988)283
So: A Golden Result, 28.3(1990)287
- H-424 To: Pell-Fibonacci divisors of Fibonacci-Pell numbers, 26.3(1988)283
So: Pell-Mell, 29.1(1991)89
- H-425 To: Integrals of Fibonacci polynomials, 26.4(1988)377
So: Sum Integrals, 28.4(1990)376
- H-426 To: Fibonacci identity, 26.4(1988)377
So: Another Identity, 28.4(1990)378

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-427 To: Binomial coefficient inequality, 26.4(1988)377
So: A Recurrent Composition, 28.4(1990)379
- H-428 To: Arithmetic progression from a combination of Fibonacci and Lucas numbers,
27.1(1989)92
So: Same Difference, 28.4(1990)381
- H-429 To: Fibonacci number multi sets, 27.1(1989)92
So: Two and Two make ϕ , 29.1(1991)91
- H-430 To: Several Fibonacci-Lucas identities, 27.2(1989)187; Corrected, 27.4(1989)378
So: And More Identities, 29.1(1991)92
- H-431 To: Probability, town dwellers and money, 27.2(1989)187
So: *****
- H-432 To: Mean of set of powers of Lucas numbers, 27.2(1989)188
So: Count to Five, 29.1(1991)94
- H-433 To: Pell-Fibonacci congruence mod 27, 27.4(1989)378
So: Pell-Mell, 29.2(1991)187
- H-434 To: Ancestors of creatures with 3 parents, 27.4(1989)378
So: Strange Sex, 29.2(1991)189
- H-435 To: Fibonacci summation identities, 27.5(1989)473
So: Sum Problem, 30.4(1992)377
- H-436 To: Primes, probability and congruence, 27.5(1989)473
So: Probably, 29.2(1991)190
- H-437 To: Lucas ratio inequalities, 28.1(1990)91
So: No doubt, 29.3(1991)285
- H-438 To: Integrals of Fibonacci polynomials, 28.1(1990)91
So: A Fibonacc-ious Integral, 29.3(1991)285
- H-439 To: Primes and a Lucas congruence, 28.1(1990)91
So: Another Lucas Congruence, 29.3(1991)287
- H-440 To: Product congruence, 28.2(1990)187
So: A Square Product, 29.3(1991)287
- H-441 To: Factorable validromic squares, 28.2(1990)187
So: Either Way, 29.4(1991)378
- H-442 To: Product congruence, 28.2(1990)187
So: An Odd Problem, 30.1(1992)91
- H-443 To: Recursion sequences and congruence, 28.3(1990)283
So: Another Odd One, 30.1(1992)92
- H-444 To: Fibonacci summation representation, 28.3(1990)283
So: Summing it Up, 30.1(1992)93
- H-445 To: Möbius-Fibonacci and Lucas identities, 28.3(1990)283
So: Mu-ve Over, 30.1(1992)96
- H-446 To: Fibonacci numbers and cosine products, 28.4(1990)376
So: A Triggy Problem, 30.2(1992)188
- H-447 To: Unit resistors in 2-terminal circuits, 28.4(1990)376
So: *****
- H-448 To: Primes and quadratic congruence, 28.4(1990)376
So: Rings True, 30.2(1992)189

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-449 To: Polynomial, derivatives and recurrence, 29.1(1991)89
So: A Recurrent Theme, 30.2(1992)190
- H-450 To: Sums of Fibonacci reciprocals, 29.1(1991)89
So: Comparable, 30.2(1992)191
- H-451 To: Primes and congruences, 29.1(1991)89
So: Woops, 30.3(1992)283 [see B-643]
- H-452 To: Divisibility and m^{th} r-gonal numbers, 29.2(1991)186
So: Divide and Conquer, 30.3(1992)284
- H-453 To: Lucas and Fibonacci ratios as sums, 29.2(1991)186
So: Sum Formulae!, 30.3(1992)285
- H-454 To: Fibonacci-Lucas identity construction, 29.2(1991)186
So: Mix and Match, 30.4(1992)379, 31.2(1993)188
- H-455 To: Four by four magic squares, 29.3(1991)283
So: Squared Magic, 30.4(1992)381
- H-456 To: Polynomials and Fibonacci numbers, 29.3(1991)284
So: How Many?, 31.1(1993)90
- H-457 To: Zeckendorf decomposition and Fibonacci and Lucas numbers, 29.3(1991)284
So: True or Not? 31.1(1993)93
- H-458 To: Symmetric periodic continued fractions, 29.3(1991)284
So: Simply Wonderful, 31.2(1993)188
- H-459 To: Almost square Lucas expression, 29.4(1991)377
So: Ghost from the Past, 33.2(1995)192
- H-460 To: Fibonacci polynomial identities, 29.4(1991)377
So: Kind of Triggy, 31.2(1993)190
- H-461 To: Lucas sequence of the 1st kind, 29.1(1991)377
So: Bunches of Recurrences, 31.3(1993)284
- H-462 To: Polynomial, derivatives and recurrence, 30.1(1992)90
So: See H-449, Roots of the Problem, 31.3(1993)285
- H-463 To: Fibonacci-Lucas summation identities, 30.1(1992)90
So: Fee Fi Fo Fum, 31.3(1993)286
- H-464 To: Fibonacci-bracket function summation, 30.1(1992)91
So: A...Periodic, 31.4(1993)377
- H-465 To: Sum representation of a prime and an integral reciprocal relation, 30.1(1992)91
So: B Good, 31.4(1993)378
- H-466 To: Primes as a quadratic combination, 30.2(1992)187
So: A Unique Answer, 31.4(1993)379
- H-467 To: Simultaneous congruences and Pythagorean triples, 30.2(1992)187
So: Many Congruences, 31.4(1993)380
- H-468 To: Lucas sequence of the second kind and prime divisors, 30.2(1992)187
So: A Very Odd Problem, 31.4(1993)382
- H-469 To: Fibonacci polynomial identities, 30.3(1992)282
So: Sum Problem, 32.1(1994)92
- H-470 To: Matrix representation for sequences from given polynomial set, 30.3(1992)282
So: Characteristically Common, 32.1(1994)95; 32.2(1994)187

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-471 To: Sequence of finite differences, 30.4(1992)376
So: X It, 32.2(1994)189
- H-472 To: Fibonacci entry point of n , 30.4(1992)377
So: An Entry Level Job, 32.2(1994)190
- H-473 To: Equivalent form of Fermat's last theorem, 30.4(1992)377
So: Another Equivalence, 32.2(1994)191
- H-474 To: Matrix Powers with sequential entries, 31.1(1993)90
So: A Soft Matrix, 32.4(1994)380
- H-475 To: Arithmetic numbering on the chess board, 31.2(1993)187
So: Get It off Your Chess, 32.4(1994)381
- H-476 To: Summation representation of the Pell numbers, 31.2(1993)187
So: Pell-Mell, 32.4(1994)382
- H-477 To: Congruence of sums of zeroes of a summation function, 31.2(1993)188
So: Sum Problem, 32.5(1994)474
- H-478 To: Hashing using a given sequence, 31.3(1993)283
So: String Along, 32.5(1994)476
- H-479 To: Closed form sum related to a given sequence, 31.3(1993)283
So: Close Ranks, 32.5(1994)477
- H-480 To: Primes congruent to 1 mod 10 and divisibility, 31.3(1993)283
So: *****
- H-481 To: Power series with reciprocal Fibonacci coefficients, 31.4(1993)377
So: Irrational Behavior, 33.1(1995)92
- H-482 To: Arithmetic progressions of sequences involving Fibonacci and Lucas numbers,
31.4(1993)377
So: Generalize, 33.1(1995)93
- H-483 To: Lucas congruences and Fibonacci pseudoprimes, 32.1(1994)91
So: Quite Prime, 33.2(1995)188
- H-484 To: Smarandache function and an increasing sequence, 32.1(1994)91
So: Strictly Monotone, 33.2(1995)189
- H-485 To: Asymptotic evaluation of a series involving Fibonacci entry points, 32.1(1994)92
So: Eventually, 33.4(1995)380
- H-486 To: Convergence and integrals in a rational series, 32.2(1994)187
So: Long Range Pi, 33.4(1995)381
- H-487 To: Second order recurrence and a vanishing polynomial, 32.2(1994)187
So: Nice Couples, 33.4(1995)382
- H-488 To: Fibonacci and Lucas Pseudoprimes, 32.4(1994)379
So: Pseudo Sum, 33.4(1995)382
- H-489 To: Pell and Pell-Lucas summations, 32.4(1994)379
So: Sum Problem, 33.5(1995)473
- H-490 To: Smarandache function and primes, 32.5(1994)473;Corrected, 33.2(1995)187
So: Just So Many, 33.5(1995)476
- H-491 To: Fibonacci summation identities, 32.5(1994)473
So: Get Hyper, 34.1(1996)90
- H-492 To: Summations involving Fibonacci polynomials and Fibonacci nrs, 32.5(1994)473
So: More Sums, 34.1(1996)91

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-493 To: Probability that the k th digit of a Fibonacci numbers is a given value, 33.1(1995)91
So: Probably, 34.2(1996)188
- H-494 To: Fibonacci entry points and parity, 33.1(1995)91
So: Apparently, 34.2(1996)190
- H-495 To: Fibonacci entry points and parity, 33.1(1995)91
So: Achieve Parity, 34.2(1996)191
- H-496 To: Equivalence of FLUPPS and ELUPPS, 33.2(1995)187
So: FLUPPS and ELUPPS, 34.2(1996)192
- H-497 To: Sum-product recurrence relation, 33.2(1995)187
So: Recurring Theme, 34.4(1996)380
- H-498 To: Fibonacci and Lucas pseudoprimes, 33.2(1995)187
So: Pseudo Primes, 34.4(1996)381
- H-499 To: Fibonacci and Lucas pseudoprimes, 33.4(1995)378
So: FPP's and LPP's, 34.4(1996)382
- H-500 To: Fibonacci polynomial summation identity, 33.4(1995)378
So: A Forgotten Problem 57.1(2019)90
- H-501 To: Fibonacci and Lucas pseudoprimes, 33.4(1995)379
So: *****
- H-502 To: Identity relating two polynomial sequences, 33.4(1995)379
So: Complex Situation, 34.5(1996)474
- H-503 To: Possible identity between a three dimensional infinite sum and finite product
functions, 33.5(1995)472
So: A Complex Product, 34.5(1996)475
- H-504 To: Polynomial recurrence relation and Fibonacci numbers, 33.5(1995)472
So: Another Complex Problem, 35.1(1997)92
- H-505 To: Sums of cubes of binomial coefficients, 33.5(1995)473
So: Sum Formulae!, 35.1(1997)93
- H-506 To: Miscellaneous sums, 34.1(1996)89
So: Sum Figuring, 35.1(1997)95
- H-507 To: Fibonacci triple summation, 34.1(1996)89
So: Triple Threat, 35.1(1997)96
- H-508 To: Fibonacci polynomial summation identities, 34.1(1996)89;
Corrected, 34.2(1996)188; Corrected again, 34.4(1996)380
So: Poly Forms, 35.2(1997)188
- H-509 To: Continued fraction congruence, 34.2(1996)187
So: Continued, 35.3(1997)283
- H-510 To: Pell number summation, 34.2(1996)187; Correction, 35.3(1997)283
So: Pell Mell, 35.2(1997)191
- H-511 To: Quadratic Diophantine equation in two variables, 34.2(1996)188
So: Searching for Pairs, 35.3(1997)287
- H-512 To: Fibonacci pseudoprimes, 34.2(1996)188
So: FFP's, 35.3(1997)287
- H-513 To: Identity for sums of factorial ratios, 34.4(1996)379
So: Sum Product, 35.3(1997)288

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-514 To: Limit of a ration of Lucas numbers, 34.4(1996)379
So: Limits, 35.4(1997)379
- H-515 To: Fibonacci congruence and entry points, 34.4(1996)379
So: Some Entry, 35.4(1997)379
- H-516 To: Congruences and th Lucas period(mod p), 34.4(1996)379
So: Mod Squad, 35.4(1997)380
- H-517 To: Möbius and Euler function sums, 34.5(1996)473
So: Divide and Conquer, 35.4(1997)381
- H-518 To: Fibonacci polynomial summation identities, 34.5(1996)473
So: Find Your Identity, 36.1(1998)92
- H-519 To: Primes and divisors, 34.5(1996)474
So: *****
- H-520 To: Infinite set of non-square free integers, 34.5(1996)474
So: Squares among US, 36.1(1998)94
- H-521 To: Zeroes of the Riemann Zeta function, 35.1(1977)91
So: Zeroing In, 36.1(1998)95
- H-522 To: Fibonacci matrix identities, 35.1(1977)91
So: A Fibo Matrix, 36.2(1998)188
- H-523 To: Fibonacci entry points, 35.1(1977)91
So: Enter!, 36.2(1998)190
- H-524 To: Congruences and Fibonacci entry points, 35.1(1977)92
So: Z(p)ed di do da, 36.2(1998)191
- H-525 To: Congruences and Fibonacci entry points, 35.1(1977)92
So: Re-enter, 36.4(1998)380
- H-526 To: Generating function with summation coefficients, 35.2(1977)187
So: Generator Trouble, 36.4(1998)381
- H-527 To: Lucas/Fibonacci double sum identities, 35.2(1977)187
So: Sum Formula, 36.4(1998)383
- H-528 To: Fibonacci numbers and prime number decompositions, 35.2(1977)187
So: A Prime Problem, 36.5(1998)473
- H-529 To: Fibonacci products as Pythagorean triples, 35.3(1997)283
So: Triple Play, 36.5(1998)475
- H-530 To: Inequality for the period of a Fibonacci sequence, 35.3(1997)283
So: Some Period, 36.5(1998)475
- H-531 To: Sums of products, 35.3(1997)283
So: A Rational Decision, 36.5(1998)475
- H-532 To: Lucas polynomial equations, 35.4(1997)377
So: Exactly Right, 37.1(1999)91
- H-533 To: Inequality for entry points of integers, 35.4(1997)377
So: Enter at Your Own Risk, 37.1(1999)92
- H-534 To: Two Evelyn Hart Fibonacci sums problems, 35.4(1997)377
So: Representation, 37.1(1999)93
- H-535 To: Fibonacci sums and identities, 35.4(1997)378
So: Sum Problem, 37.2(1999)186

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-536 To: Fibonacci sums and identities, 36.1(1998)91
So: An Odd Problem, 37.3(1999)283
- H-537 To: Horadam sums, 36.1(1998)91
So: A Recurrent Theme, 37.3(1999)284
- H-538 To: Sums relating to a given sequence, 36.1(1998)91
So: An Elementary Result, 37.3(1999)286
- H-539 To: Identites and betafunction sums, 36.2(1998)187
So: Beta Version, 37.3(1999)286
- H-540 To: Bracket function sequences and a Fibonacci identity, 36.2(1998)187
So: Count on It! 37.4(1999)378
- H-541 To: Continued fractions and Fibonacci ratios, 36.2(1998)187
So: Just Continue 37.4(1999)379
- H-542 To: Mod sequence and Fibonacci-Lucas sums, 36.4(1998)379
So: Sum Problem! 37.4(1999)381
- H-543 To: Some periodic continued fractions, 36.4(1998)379
So: Continuing..., 38.1(2000)92
- H-544 To: Fibonacci enentry points and FPP's, 36.4(1998)379
So: Primes and FPP's, 38.1(2000)93
- H-545 To: Fibonacci-Lucas Sums mod an odd prime, 36.5(1998)473
So: An Odd Problem, 38.2(2000)187
- H-546 To: Tiangular Mersenne numbers, 36.5(1998)473
So: A Strange Triangle, 38.2(2000)188
- H-547 To: Quadratic sum congruence mod a prime, 37.1(1999)91
So: A Prime Problem, 38.2(2000)188
- H-548 To: Pell numbers and divisibility, 37.1(1999)91
So: Pell-Mell, 38.2(2000)189
- H-549 To: Sum of inverse tangents, 37.1(1999)91
So: Resurrection, 38.2(2000)191
- H-550 To: Lucas congruence, 37.2(1999)185
So: A Very Odd Problem, 38.4(2000)377
- H-551 To: Double sums, 37.2(1999)185
So: Some Restriction!, 38.4(2000)377
- H-552 To: Summation sequence and its determinant, 37.2(1999)185
So: Be Determinant, 38.4(2000)377
- H-553 To: Non-linear Diophantine equation, 37.3(1999)282
So: An Interesting Equation, 38.1(2000)94
- H-554 To: Fibonacci-Lucas double sums, 37.3(1999)282
So: Lotsa Terms, 38.4(2000)377
- H-555 To: Combinatorial summation identity, 37.3(1999)283
So: BiNormal 38.5(2000)474
- H-556 To: limits of derivative sequences, 37.4(1999)377
So: Some Operator 38.5(2000)475
- H-557 To: Sums of sequences satisfying a give recurrence, 37.4(1999)377
So: Generalize 38.5(2000)477

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-558 To: π as the infinite sum of a sequential combination, 37.4(1999)
So: A Piece of Pi 39.1(2001)92
- H-559 To: Fibonacci & Lucas trigonometric sums 38.1(2000)91
So: SUM Formulae 39.1(2001)93
- H-560 To: Fibonacci & Lucas combinatorial sums 38.1(2000)91
So: A Complex Problem 39.1(2001)94
- H-561 To: Sums of a sequence of sums 38.2(2000)186
So: Geometric? 39.2(2001)187
- H-562 To: Lucas combinatorial sum 38.2(2000)186
So: Greatest Problem 39.2(2001)190; 39.4(2001)379
- H-563 To: Fibonacci-Stirling number identity 38.2(2000)186
So: A Stirling Problem 39.2(2001)191
- H-564 To: Equality of Fibonacci and Lucas sums 38.4(2000)377
So: Symmetry 39.4(2001)380
- H-565 To: Residues of primes are powers 38.4(2000)377
So: A Prime Example 39.4(2001)383
- H-566 To: Lucas sums as a reciprocal series 38.4(2000)377
So: Sum Problems 39.5(2001)474
- H-567 To: Fibonacci inequalities 38.5(2000)473
So: An Unequal Problem 39.5(2001)476
- H-568 To: Ratio of polynomials summation formula 38.5(2000)473; Corrected 39.1(2001)91
So: Inspiring 40.1(2002)91
- H-569 To: Highest exponent of 2 dividing n 38.5(2000)474
So: A High Exponent 40.1(2002)95
- H-570 To: Fibonacci and Lucas summation formulas 39.1(2001)91
So: Binomial Sums Yielding Fibonacci and Lucas Numbers 43.3(2005)284
- H-571 To: Integral transform of the Cesaro and Volterra type 39.1(2001)91
So: Some Operator
- H-572 To: Reciprocal of golden number summation formula 39.2(2001)187
So: Some Problem
- H-573 To: Magic matrices 39.2(2001)187
So: Fee Fi Fo Fum
- H-574 To: Fibonacci, Lucas, Pell identity 39.4(2001)378
So: A Factorial Problem 40.4(2002)380
- H-575 To: Fibonacci Lucas polynomial identities 39.4(2001)378
So: A Remarkable Problem 40.4(2002)381
- H-576 To: Möbius, Euler and Riemann zeta ftns and the twin-primes constant 39.4(2001)379
So: General IZE 40.4(2002)383
- H-577 To: Möbius, Euler, Riemann zeta ftns and the density of primes constant 39.5(2001)473
So: A Fine Product 40.5(2002)473
- H-578 To: Solving a matrix equation generalizing an equation of Rabinowitz 39.5(2001)473
So: Firm Matrices 40.5(2002)474
- H-579 To: Congruence summation identity 39.5(2001)474
So: *****

ADVANCED PROBLEMS INDEX

Edited by Raymond E. Whitney

- H-580 To: Lucas numbers and zeroes of a complex polynomial 39.5(2001)474
So: *****
- H-581 To: Fibonacci inequalities 40.1(2002)91
So: A Lesser Problem 40.5(2002)476
- H-582 To: Representation of real numbers as reciprocal sums of Fibonacci nrs 40.1(2002)91
So: Representing Reals in Fibonacci Series 41.2(2003)188
- H-583 To: Generalizing Fibonacci convolutions 40.2(2002)187
So: A Convolved Problem 41.1(2003)92
- H-584 To: Fibonacci Lucas Identity 40.2(2002)
So: Find Your Identity 41.1(2003)93
- H-585 To: First order sequences and reciprocal Fibonacci sums 40.4(2002)379
So: A D-Sequence 41.1(2003)94
- H-586 To: Fibonacci Lucas polynomials summation identities 40.4(2002)379
So: Identities with Fibonacci Polynomials 41.2(2003)189
- H-587 To: Generalized Fibonacci and Lucas polynomials and matrices 40.4(2002)380
So: Matrices with Fibonacci Polynomials 41.2(2003)191
- H-588 To: Fibonacci Lucas summation product inequality 40.4(2002)380
So: Sums of Consecutive Fibonacci Numbers 41.4(2003)381
- H-589 To: Composite Fibonacci number identity 40.5(2002)472
So: Iterated Fibonacci Numbers 41.4(2003)382
- H-590 To: Divisibility of number theoretic functions of Fibonacci numbers 40.5(2002)472
So: Arithmetic Functions of Fibonacci Numbers 41.4(2003)382
- H-591 To: Representation of Fibonacci numbers as combinatorial sums 40.5(2002)472
So: Some Properties of the Number 5, 41.5(2003)473; Errata 42.2(2004)192
- H-592 To: Matrices and Fibonacci and Lucas polynomials 40.5(2002)473
So: Matrices Satisfying Quadratic Equations 41.5(2003)475

Edited by Florian Luca

- H-593 To: Summation congruence 41.1(2003)91
So: A Lucas Prime Congruence 41.5(2003)477
- H-594 To: Fibonacci Lucas summation identities 41.1(2003)91
So: Fibonacci Polynomials and Binomial Coefficients 42.1(2004)93
- H-595 To: Pell number double summation identity 41.1(2003)91
So: Binomial Coefficients and Pell Numbers 42.1(2004)94
- H-596 To: Asymptotic density and prime divisors of F_n 41.2(2003)187
So: Prime Factors of Fibonacci Numbers 42.1(2004)95
- H-597 To: Sums of products of Tribonacci characteristic roots 41.2(2003)187
So: Roots of the Cubic Defining Tribonacci Sequences 42.2(2004)188
- H-598 To: Roots of equations with Fibonacci product coefficients 41.2(2003)187
So: Find the Eigenvalue 42.2(2004)191
- H-599 To: Catalan Fibonacci numbers 41.4(2003)380
So: Fibonacci Meets Catalan 42.3(2004)284
- H-600 To: Pseudo-Fibonacci one-third square numbers 41.4(2003)380
So: The One-Third Squares in the Pseudo Fibonacci Sequence 42.3(2004)285
- H-601 To: Sequence of Lucas products and golden numbers 41.4(2003)380
So: A Decreasing Sequence 42.3(2004)286

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-602 To: Gamma functions of Fibonacci and Lucas numbers 41.4(2003)380
So: A ratio of Gammas 42.4(2004)378
- H-603 To: Reciprocal Fibonacci inequalities 41.5(2003)472
So: Sum of Reciprocals of Fibonacci Numbers 42.4(2004)379
- H-604 To: Sums of eigenvalues of a nondiagonal matrix 41.5(2003)472
So: An Already Encountered Matrix 42.4(2004)380
- H-605 To: Linear combination of a sequence of a product of two sums 41.5(2003)472
So: A Product of Pell and Fibonacci 43.1(2005)92
- H-606 To: Closed forms and recurrences for a finite combinatorial sum 42.1(2004)92
So: Another Binomial Identity 43.1(2005)93; Errata 43.3(2005)288
- H-607 To: Finite Fibonacci sums of finite Fibonacci products 42.1(2004)92
So: Dividing Differences 43.1(2005)94
- H-608 To: Limit of a finite product of Pell numbers 42.1(2004)92
So: Pell Does it Again 43.1(2005)95
- H-609 To: Traces and determinants involving Pascal-triangle matrices 42.2(2004)187
So: Traces of powers of the Pascal triangle matrix 57.4(2019)374
- H-610 To: Fibonacci vectors 42.2(2004)187
So: Fibonacci Vectors 43.2(2005)188
- H-611 To: Fibonacci numbers and golden number double sum 42.2(2004)187
So: A Fibonacci Series 43.2(2005)189
- H-612 To: Sequence from a matrix with sequential elements 42.3(2004)283
So: A Mysterious Determinant 43.2(2005)190
- H-613 To: Fibonacci determinant identity 42.3(2004)283
So: Another Fibonacci Determinant 43.2(2005)192
- H-614 To: Fibonacci identity 42.3(2004)283
So: A Wicked Identity 44.4(2006)377
- H-615 To: Properties of a cyclical matrix 42.4(2004)377
So: A Cyclic Determinant 43.3(2005)286
- H-616 To: Necessary and sufficient conditions for Catalan numbers to be odd 42.4(2004)377
So: On the Parity of the Catalan Numbers 43.3(2005)287
- H-617 To: Fibonacci summation identities with trigonometric sums 42.4(2004)377
So: Fibonacci Polynomials and Trigonometric Functions 43.4(2005)378
- H-618 To: Finding a constant in an exponential inequality 43.1(2005)91
So: The Exponential Function Revisited 43.4(2005)379
- H-619 To: Fibonacci-Lucas 5x5 determinant 43.1(2005)91
So: A 5x5 Determinant 43.4(2005)380
- H-620 To: Fibonacci number, cosine inequality 43.1(2005)91
So: A Trigonometric Inequality 43.4(2005)382
- H-621 To: Bivariate Lucas polynomial identity 43.1(2005)91
So: An Identity for Lucas Polynomials 44.1(2006)92
- H-622 To: Lucas sequences and Sophie Germain Primes 43.2(2005)187
So: Lucas Sequences and Sophie Germain Primes 44.1(2006)93
- H-623 To: Fibonacci product inequality 43.2(2005)187
So: A Large Product 44.1(2006)94

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-624 To: Integral of a rational function with Fibonacci and Lucas powers 43.21(2005)187
So: Limits of Integrals 44.1(2006)95
- H-625 To: Smallest integer in a Fibonacci inequality 43.2(2005)188
So: Bounding Ratios of Fibonacci Numbers 44.2(2006)188
- H-626 To: Fibonacci polynomial and Pell number identities 43.2(2005)188
So: Pell Numbers and Fibonacci Polynomials 44.2(2006)189
- H-627 To: Dual sequence inequality 43.3(2005)283
So: Revisiting the Cauchy-Schwartz inequality 44.2(2006)191
- H-628 To: Sequences whose general terms are sums of three cubes 43.3(2005)283
So: Sums of Three Cubes 44.2(2006)192
- H-629 To: Alternate definition of a third order recurrence sequence 43.3(2005)283
So: Pisot from Padova 44.3(2006)284
- H-630 To: Bivariate Fibonacci polynomial identity and a recurrence relation 43.3(2005)284
So: Fibonacci Polynomials and Periodic Binary Recurrences 44.3(2006)285
- H-631 To: Fibonacci -Lucas determinant identity 43.4(2005)377
So: A Large Determinant 44.3(2006)287
- H-632 To: Fibonacci sum to product identities 43.4(2005)377
So: Fibonacci Numbers and the Rogers-Ramanujan Identities 45.1(2007)92
- H-633 To: Alternating series sums 43.4(2005)377; Errata 44.1(2006)96
So: Series Identities and the Regular Heptagon 45.1(2007)923
- H-634 To: Golden number sum identity 43.4(2005)378
So: Integrals of Fibonacci Polynomials 45.1(2007)95
- H-635 To: Fibonacci determinant 44.1(2006)91
So: A Circulant Determinant 45.1(2007)96
- H-636 To: Fibonacci-Lucas-Pell-Pell Lucas determinant 44.1(2006)91
So: A Determinant with Fibonacci, Lucas and Pell Numbers 45.2(2007)188
- H-637 To: Triangle whose sides are Fibonacci expressions 44.1(2006)91
So: A Fibonacci Triangle 45.2(2007)189
- H-638 To: Fibonacci summation inequality 44.1(2006)92
So: An Inequality with Fibonacci Logarithms 45.2(2007)191
- H-639 To: Fibonacci-Lucas summation identities 44.2(2006)187
So: Identities with Fibonacci and Lucas Polynomials 45.2(2007)191
- H-640 To: Fibonacci-Lucas determinant 44.2(2006)188
So: A Determinant with Fibonacci and Lucas Numbers 45.3(2007)285
- H-641 To: Number of compositions in an ordered sequence 44.2(2006)188
So: Fibonacci Numbers Count Compositions 45.3(2007)286
- H-642 To: Limit of a difference of Fibonacci-Lucas ratios 44.2(2006)188
So: An Irrational Limit 45.3(2007)287
- H-643 To: Twin primes and maximal rank of apparition 44.3(2006)283
So: Ranks of Apparition of Twin Primes 45.3(2007)288
- H-644 To: System of equations with Fibonacci coefficients 44.3(2006)283
So: A Fibonacci System 45.4(2007)377
- H-645 To: Lucas numbers with Mersenne and /or Fermat prime factors 44.3(2006)283
So: Mersenne and Fermat Factors of Lucas Numbers 45.4(2007)378

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-646 To: There exist infinitely many solutions to $a^{p-1} \equiv 1 \pmod{p}$ 44.3(2006)283
So: Variants of Wieferich Numbers 45.4(2007)379
- H-647 To: Generalized Fibonacci number summation identities 44.4(2006)376
So: Summing Members of a Binary Recurrence 45.4(2007)379
- H-648 To: Lucas-binomial coefficient summation identity 44.4(2006)376
So: An Identity for the Lucas Numbers 46/47.1(2008/2009)92
- H-649 To: Fibonacci-secant identity 44.4(2006)376
So: Fibonacci Secants 46/47.1(2008/2009)93
- H-650 To: Products of cosecants identities 45.1(2007)91
So: Secants, Cosecants and Differentials 46/47.1(2008/2009)93
- H-651 To: Fibonacci-Lucas binomial sum identities 45.1(2007)91
So: Binomial Coefficients, Powers of 2 and Fibonacci Nrs 46/47.2(2008/2009)187
- H-652 To: Limit of a sum of logarithms of a Fibonacci ratio 45.1(2007)92
So: Fibonacci Logarithms 46/47.2(2008/2009)189
- H-653 To: Sum of harmonic number expression and the Apéry constant 45.1(2007)92
So: Harmonic Numbers, $\zeta(2)$ and $\zeta(3)$ 46/47.2(2008/2009)191
- H-654 To: Inequalities relating to sums of a finite sequence of real numbers 45.2(2007)187
So: Inequalities with Weighted Power Sums 46/47.3(2008/2009)284
- H-655 To: Ratios of sums of a finite sequence of positive integers 45.2(2007)187
So: More Inequalities with Weighted power Sums 46/47.3(2008/2009)284
- H-656 To: Limit of a difference of ratios of sums of integer raised to their own power
45.2(2007)187
So: A Sequence Tending To e 46/47.3(2008/2009)285
- H-657 To: Equation of fourth powers sums of golden numbers with no integral solutions
45.2(2007)187
So: Fermat's Last Theorem and the Golden Mean 46/47.3(2008/2009)287
- H-658 To: Fibonacci Inequality 45.3(2007)283
So: The Cauchy-Schwarz Inequality and Fibonacci Numbers 46/47.3(2008/2009)288
- H-659 To: Identities for generalized Fibonacci and Lucas polynomials 45.3(2007)283
So: Combinatorial Numbers and Powers of an Arithmetic Progression
46/47.4(2008/2009)375
- H-660 To: Identities for ratios of sums of products of Fibonacci numbers 45.3(2007)284
So: *****
- H-661 To: Inequality for and a N&S condition for odd perfect numbers 45.4(2007)376
So: On Odd Perfect Numbers 46/47.4(2008/2009)377
- H-662 To: Properties of products of triangular numbers 45.4(2007)376
So: Factorials and Products of Differences of Triangular Nrs 46/47.4(2008/2009)379
- H-663 To: Product of sines of reciprocals of Fibonacci numbers 45.4(2007)376
So: Fibonacci Numbers and Trigonometric Functions 46/47.4(2008/2009)379
- H-664 To: Identities for sums and ratios of roots of Fibonacci numbers 45.4(2007)376
So: Some Fibonacci Limits 48.1(2010)90
- H-665 To: Identities for bilateral series 46/47.1(2008/2009)91
So: The Bilateral binomial Theorem and Fibonacci Numbers 48.1(2010)91

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-666 To: Summation identities for Pell and Pell-Lucas numbers 46/47.1(2008/2009)91
So: Some Identities Involving Pell Numbers and Binomial Coefficients 48.1(2010)93
- H-667 To: Infinite sum for terms of a generalized Fibonacci sequence 46/47.1(2008/2009)91
So: π and Lucas Sequences 48.1(2010)95
- H-668 To: Limits of sums of terms of a k^{th} order linear recurrence 46/47.1(2008/2009)92
So: Some k^{th} order Fibonacci limits 48.2(2010)185
- H-669 To: Sums of fractions yielding logs and arctangents of α and β 46/47.2(2008/2009)186
So: The bilateral binomial theorem and Fibonacci numbers 48.2(2010)185
- H-670 To: Identities for sequences of Fibonomial coefficients 46/47.2(2008/2009)186
So: Sums of Fibonomial coefficients 48.2(2010)187
- H-671 To: Expansions of sums of Fibonacci and Lucas polynomials 46/47.2(2008/2009)186
So: Sums of Fibonacci and Lucas polynomials 48.2(2010)188
- H-672 To: Inequalities of sums of squares of Fib and Lucas ratios 46/47.2(2008/2009)187
So: Cauchy-Schwartz to the Rescue 48.3(2010)284
- H-673 To: Binomial sum representations for Pell and Pell-Lucas nrs 46/47.3(2008/2009)283
So: Pell Numbers via Binomial Coefficients 48.3(2010)284
- H-674 To: Inequality for the product of 2 consecutive Fibonacci nrs 46/47.3(2008/2009)283
So: An Inequality Involving π and Fibonacci Numbers 48.3(2010)286
- H-675 To: Least prime divisor of an odd perfect number 46/47.3(2008/2009)283
So: Perfect Primes 48.3(2010)286
- H-676 To: Find the coefficient of $(F_n)^f$ in a Fibonacci fn expansion 46/47.3(2008/2009)284
So: A Wicked Composition 48.3(2010)287
- H-677 To: Summation of a ratio of sine functions 46/47.4(2008/2009)374
So: *****
- H-678 To: Number of solutions of Diophantine inequalities 46/47.4(2008/2009)374
So: *****
- H-679 To: Nested radicals of generalized Fibonacci numbers 46/47.4(2008/2009)374
So: *****
- H-680 To: Closed form solutions of sums of ratios of Fibonacci/Lucas polynomials
46/47.4(2008/2009)375
So: Some Telescoping Series 49.1(2011)90
- H-681 To: Identities for generalized Fibonacci and Lucas polynomials 48.1(2010)89
So: Integral Power Binomial Weighted Sums of Gen Fibonacci Polynms 49.1(2011)93
- H-682 To: Laguerre, Fibonacci, hypergeometric polynomial identity 48.1(2010)89
So: Laguerre Meets Fibonacci 49.2(2011)188
- H-683 To: Identity for generalized binomial coefficient of the 1st and 2nd kind 48.1(2010)89
So: Identities With Symmetric Polynomials 49.2(2011)190
- H-684 To: Closed form for the determinant and eigenvalues of a given matrix 48.1(2010)90
So: Fugue on a Generalized Fibonacci Sequence Theme 49.2(2011)191
- H-685 To: Fibonacci summation identities 48.2(2010)184
So: Binomial Sums with Fibonacci Numbers 49.3(2011)282
- H-686 To: Fibonacci summation identity 48.2(2010)184
So: Summing Products of Fibonacci Numbers 49.3(2011)287

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-687 To: Sums involving alpha, beta and π 48.2(2010)184
So: Series with Powers of the Golden Section 49.4(2011)375
- H-688 To: Inequality involving integral solutions of a given recursive set 48.2(2010)185
So: Negative Result: 54.1(2016)93; Comment: 55.1(2017)95
- H-689 To: Fibonacci congruence identity 48.3(2010)283
So: Congruence with Fibonacci Numbers 49.4(2011)378
- H-690 To: Fibonacci-Lucas summation identity 48.3(2010)283
So: Recurrence for Alternating Sums with Even Powers of the Fib Nrs 49.4(2011)379
- H-691 To: Finding the value of an Harmonic sequence sum 48.3(2010)283
So: Catalan's Constant, π and $\ln 2$ 50.1(2012)90 Errata 50.4(2012)313
- H-692 To: Finding closed forms for sums of ratios of trig functions 48.3(2010)283
So: Closed Forms for Trigonometric Sums 50.1(2012)92
- H-693 To: Proving convergence of sums of roots of Fibonacci numbers 48.4(2010)373
So: A Convergent Sequence 50.2(2012)188
- H-694 To: Fibonacci inequalities 48.4(2010)373
So: An Inequality with Products of Fibonacci Numbers 50.2(2012)189
- H-695 To: Finding the number of symmetric ordered trees of height at most 3 48.4(2010)373
So: Ordered Trees and Fibonacci Numbers 50.2(2012)191
- H-696 To: Proving a Fibonacci sum using combinatorial arguments 48.4(2010)373
So: A k-Fibonacci Identity 50.3(2012)281
- H-697 To: Identities for ratios of sums of cubes of natural numbers 49.1(2011)89
So: Cubonomials 50.3(2012)283
- H-698 To: Asymptotic identities for inverses of sums of Fibonacci reciprocals 49.1(2011)89
So: Sums of Reciprocals of Squares of Fibonacci Numbers 50.3(2012)284
- H-699 To: Limit of a sequence of roots of products of gamma functions 49.1(2011)90
So: A Sequence Involving nth Roots of the Γ Function 50.3(2012)286
- H-700 To: Congruence identities involving Möbius and Mertens functions 49.2(2011)187
So: On the Parity of the Mertens Function 50.4(2012)375
- H-701 To: Identity for a double subscripted 2nd order recurrence sequence 49.2(2011)187
So: A Catalan Type Identity for k Fibonacci Numbers 50.4(2012)376
- H-702 To: Summing a ratio of powers of 4 and squares of Lucas numbers 49.2(2011)187
So: Sums of Reciprocals of Squares of Lucas Number 50.4(2012)378
- H-703 To: Expressing binomial sums in terms of Fibonacci and Lucas nrs 49.2(2011)187
So: Binomial Coefficients and Fibonacci and Lucas Numbers 50.4(2012)379
- H-704 To: Binominal sum yielding a Pell number expression 49.3(2011)281
So: A Sum Yielding Pell Numbers 51.1(2013)92
- H-705 To: Binomial sum identity 49.3(2011)281
So: A Recurrence for Sums of Binomial Coefficients 51.1(2013)93
- H-706 To: Reciprocal sum approximating the number of primes function 49.3(2011)282
So: Harmonic Sums and the Prime Counting Function 51.1(2013)94
- H-707 To: Identity involving a palindromic simple continued fraction 49.3(2011)282
So: An Identity with Continued Fractions 51.1(2013)95
- H-708 To: Inequality involving powers, products and sums of Fibonacci nrs 49.4(2011)374
So: An Inequality with Fibonacci Numbers 51.1(2013)95

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-709 To: Sums and limits involving the Riemann zeta and digamma fns 49.4(2011)374
So: Summatory Function of the Riemann Zeta Function 51.2(2013)187
- H-710 To: Generating function for the number of ternary words of length n 49.4(2011)374
So: A Double Generating Function for Ternary Words 51.2(2013)188
- TH-711 To: Inequality involving square roots of consecutive Fibonacci numbers 49.4(2011)374
So: Inequalities with Square roots of Fibonacci Numbers 51.2(2013)188
- H-712 To: Recurrence for the convolution of central binomial coefficients 50.1(2012)89
So: Convolutions With Middle binomial coefficients 51.2(2013)188
- H-713 To: Evaluating Fibonacci-Lucas sums 50.1(2012)89
So: Convergent Series Involving Fib and Lucas Nrs with Rational Sums 1.3(2013)283
- H-714 To: Find a closed form for a sum of squares and binomial coefficients 50.1(2012)89
So: Evaluating a Sum Involving Binomial Coefficients 51.3(2013)284
- H-715 To: Sums involving squares of Tribonacci numbers 50.1(2012)90
So: Sums of Squares of Tribonacci Numbers 51.3(2013)285
- H-716 To: Listed as 717 corrected in 50.3(2012)288
To: Catalan number summation identity 50.2(2012)187
So: Convolution with Catalan Numbers 51.3(2013)287
- H-717 To: Summation inequality involving Fibonacci nrs and a polynomial 50.2(2012)187
So: Fibonacci Numbers and Derivatives of Polynomials 51.4(2013)375
- H-718 To: Fibonacci product inequalities 50.2(2012)187
So: Inequalities with Fibonacci Numbers and Radicals 51.4(2013)376
- H-719 To: Identities for sums of powers of Fibonacci Numbers 50.2(2012)188
So: Alternating Sums of High Powers of Fibonacci Numbers 51.4(2013)378
- H-720 To: Identities for Fibonacci, Lucas and Pell nrs and the floor function 50.3(2012)280
So: Pell-Mell of Identities from Fibonacci -Lucas Polynomials 52.1(2014)88
- H-721 To: Summation identity involving Fibonacci and harmonic numbers 50.3(2012)280
So: A Problem for Fibonacci and Harmonic Numbers 52.1(2014)91
- H-722 To: Summation identity involving natural nrs, logs and trig functions 50.3(2012)281
So: A Trigonometric Series 52.1(2014)92
- H-723 To: Multiple sums involving non-negative numbers and logs 50.3(2012)281
So: The Limit of a Multiple Sum 52.1(2014)94
- H-724 To: Evaluate a ratio of sums of Fibonacci and Lucas numbers 50.3(2012)281
So: Infinite Sums with Reciprocals of Squares of Fib and Lucas Nrs 52.2(2014)186
- H-725 To: Sums involving Binomial coefficients and trigonometric functions 50.4(2012)374
So: Sums with Powers of -3, 4 and Binomial Coefficients 52.2(2014)187
- H-726 To: Sums of reciprocals of even subscripted Fibonacci numbers 50.4(2012)374
So: Sums of Sums of Reciprocals of Fibonacci Numbers 52.2(2014)191
- H-727 To: Sums of products of binomial coefficients 50.4(2012)375
So: An Identity Involving Middle Binomial Coefficients 52.3(2014)282
- H-728 To: Inequalities with reciprocals of roots and powers of Fibonacci nrs 50.4(2012)375
So: Inequalities with Consecutive Fib Nrs, Square-Roots and Powers 52.3(2014)283

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-729 To: Sums for a Rational Sequence, Kronecker's Delta Function and Euler's Constant 50.4(2012)374
So: On the Sequence of Rotational Numbers 52.3(2014)284
- H-730 To: Fibonacci, Lucas and Pell combinatorial sum identities 51.1(2013)91
So: Identities Involving Fibonacci, Lucas and Pell Numbers 52.3(2014)286
- H-731 To: Big O estimate identity for the sum of hyperbolic function ratios 51.1(2013)91
Errata announced 52.1(2014)96
So: Asymptotic Approximation of a Function defined by a Sum
- H-732 To: Closed forms for binomial sums of some binomial and Catalan nrs 51.1(2013)92
So: Some properties of Catalan numbers 52.4(2014)377
- H-733 To: Finding a sum of fourth powers of a complex recurrence sequence 51.1(2013)92
So: On a complex sequence 52.4(2014)379
- H-734 To: Closed forms for expressions of reciprocals of Fibonacci numbers 51.1(2013)92
So: Integer parts of reciprocals of tails of infinite products with fib nrs 53.1(2015)89
- H-735 To: Identities for a power series with special binomial coefficient 51.2(2013)186
So: On a power series with binomial coefficients 53.1(2015)91
- H-736 To: Finding the sum of the cubes of Tribonacci numbers 51.2(2013)186
So: On the sum of the cubes of the tribonacci numbers 53.1(2015)92
- H-737 To: Congruence identity for a special Fibonomial coefficient 51.2(2013)186
So: A Lucas type congruence with fibonomials 53.1(2015)94
- H-738 To: Identities for sums of products of Lucas numbers and Fibonomial coefficients 51.2(2013)186
So: On Sums of Squares of Fibonomial Coefficients 53.2(2015)187
- H-739 To: Identity for sums of products of generalized Fibonacci coefficients 51.3(2013)282
So: More Sums of Squares of Fibonomial Coefficients 53.2(2015)189
- H-740 To: Finding the number of dominating sets in simple graph 51.3(2013)282
So: Counting dominating Sets in Paths 53.2(2015)190
- H-741 To: Fibonacci-Lucas inequality 51.3(2013)282
So: An application of the AM-GM Inequality 53.2(2015)191
- H-742 To: Closed form for a sum of Fibonacci numbers with even subscripts 51.3(2013)282
So: Sums of Fibonacci Numbers with Indices Given by Quadratic Forms 53.3(2015)280
- H-743 To: Congruence summation leading to the Fermat quotient 51.4(2013)374
So: On the Fermat Quotient Modulo p 53.3(2015)281
- H-744 To: Inequalities for powers of inverse sums of Fibonacci & Lucas nrs 51.4(2013)374
So: Inequalities Involving Sums of Reciprocals of Fibonacci & Lucas Nrs 53.3(2015)282
- H-745 To: Equation with cosine coefficients for a number satisfying a 3rd order recurrence 51.4(2013)374
So: On a Trigonometric Equation; Problem withdrawn: appeared in *Pi Mu Epsilon* Journal
- H-746 To: Summation identity for generalized Fibonomial coefficients 51.4(2013)374
So: An Identity with Fibonomial Coefficients 53.3(2015)283
- H-747 To: Finding closed forms for sums of fibonomials and Fib and Lucas nrs 52.1(2014)87
So: Sums of Products of Fibonomials. Fibonacci and Lucas Numbers 53.4(2015)373
- H-748 To: Fibonacci and Lucas inequalities 52.1(2014)87
So: Some Nesbitt Type Inequalities with Fibonacci and Lucas Numbers 53.4(2015)374

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-749 To: Identity for sums of Fibonacci ratios 52.1(2014)87
So: Identities With Sums of Ratios of Fib Numbers and Products of Them 53.4(2015)375
- H-750 To: Identity involving tribonacci sequences 52.1(2014)87
So: Identities With Generalized Tribonacci Recurrences 53.4(2015)376
- H-751 To: Inequality involving powers of Fibonacci ratios 52.2(2014)187
So: Inequality With Sums of Binomial Coefficients and Fib Numbers, An 53.4(2015)377
- H-752 To: Fibonacci and Lucas combinatorial identities 52.2(2014)187
So: Sums of Products of Fibonacci Numbers and Binomial Coefficients 54.1(2016)88
- H-753 To: Identity for a sum of powers of Fibonacci numbers 52.2(2014)187
So: Sums of Fourth powers of Fib Nrs with Indices in Arithmetic Progression 54.1(2016)89
- H-754 To: Identity for a pair of tribonacci-like sequences 52.2(2014)188
So: Identities with Tribonacci-like Sequences 54.1(2016)890
- H-755 To: Inequalities involving sines, cosines and Lucas numbers 52.3(2014)281
So: Cauchy-Schwartz to the Rescue 54.1(2016)92
- H-756 To: Generalization of a number of Boolean variable sequences is a Fib nr 52.3(2014)281
So: The Number of Solutions of a Family of Boolean Equations 54.2(2016)186
- H-757 To: Congruence for a product of Lucas numbers 52.3(2014)282
So: The Lucas Factorial of a Prime 54.2(2016)190
- H-758 To: Limit of a product involving factorials and tangents to Fib powers 52.3(2014)282
So: Limits of Factorials and Tangents at Exponents Involving Fib Nrs 54.2(2016)191
- H-759 To: Identity for the sum of squares of an nth order recurrence relation 52.3(2014)282
So: Sums of Squares of Members of r -Generated Fib-Like Sequences 54.3(2016)281
- H-760 To: Inequality involving powers of sums of binomial-Fibonacci products 52.4(2014)374
So: An Inequality Involving Powers, Binomial coefficients and Fib Nrs 54.3(2016)283
- H-761 To: Alternating sum of reciprocals of consecutive integers 52.4(2014)374
So: Series Whose Sum Involves π , $\ln 2$ and $\zeta(3)$ 54.3(2016)283
- H-762 To: Fibonacci and Fibonacci-Lucas summation identities 52.4(2014)374; Errata
54.3(2016)286
So: Identities with Sums of Powers of Fib Nrs and Binomial coefficients 54.3(2016)285
- H-763 To: Inequalities for sums of powers of integers and Fibonacci numbers 52.4(2014)375
So: Hölder's Inequality in Disguise 54.4(2016)374 Corredtion: 55.1(2017)95
- H-764 To: Sums of fibonomials and Fibonacci numbers 52.4(2014)375
So: Summation Formulas for Fibonomials and Their Squares with Fibonacci Coefficients
54.4(2016)375
- H-765 To: Establishing several Fibonacci and Lucas inequalities 53.1(2015)88
So: Cauchy-Schwarz to the Rescue 54.4(2016)377
- H-766 To: Quadruple sum of the fourth power of Fibonacci numbers 53.1(2015)88
So: A Quadruple Iterated Sum of Fourth Powers of Fibonacci Numbers 54.4(2016)378
- H-767 To: Nested square roots of even subscripted squares of Fibonacci numbers 53.1(2015)88
So: Nested Radicals and Fibonacci Numbers 55.1(2017)90
- H-768 To: Sums of Fibonacci numbers and reciprocals of Fibonomial coefficients 53.1(2015)89
So: Summation Formulas for Reciprocals of Fibonomials with Fibonacci Coefficients
55.1(2017)91

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-769 To: Inequality involving 6th powers of Fibonacci numbers 53.2(2015)186
So: A Cycle Sum Inequality 55.1(2017)93
- H-770 To: Finding the sum of reciprocal products of Lucas numbers 53.2(2015)186
So: A Sum of Products of Shifted Lucas Numbers 55.1(2017)94
- H-771 To: Integral of the gamma function of roots of Fibonacci numbers 53.2(2015)186
So: An Integral with the Gamma Function and Fibonacci Numbers 55.2(2017)185
- H-772 To: Inequality involving Fibonacci numbers, and a nonisosceles triangle 53.2(2015)187
So: A Geometric Inequality 55.2(2017)186
- H-773 To: Binomial sum of a product of Fibonacci and Bernoulli numbers 53.3(2015)279
So: A Sum with Binomial Coefficients, Fibonacci and Bernoulli Numbers 55.2(2017)187
- H-774 To: Questions about a sum of a product of Fibonacci and Lucas numbers 53.3(2015)279
So: Bessel Functions with Fibonacci and Lucas Numbers 55.2(2017)188
- H-775 To: Infinite sum of a reciprocal of a product of Lucas numbers 53.3(2015)279
So: A Series Related to the Sums of the Reciprocals of the Fibonacci Nrs 55.3(2017)283
- H-776 To: Sums of arctangents of reciprocals of Fibonacci and Lucas numbers 53.3(2015)280
So: A Series of Inverse Tangents of Reciprocals of Lucas Numbers 55.3(2017)284
- H-777 To: Double sum involving binomial coefficients 53.4(2015)372
So: Sums of Products of Binomial Coefficients 55.3(2017)285
- H-778 To: Finding the sum of a reciprocal of products of Fibonacci numbers 53.4(2015)372
So: A Series of Reciprocals of Products of Fibonacci Numbers 55.3(2017)287
- H-779 To: Proving that a sum of Fibonacci numbers and fibonomials vanishes 53.4(2015)372
So: An Identity with Fibonacci coefficients 55.4(2017)375
- H-780 To: Find the sum of a reciprocal of products of Fibonacci and Lucas nrs 53.4(2015)372
So: A closed form for a certain sum 55.4(2017)376
- H-781 To: Finding closed forms for sums of products of Lucas numbers 53.4(2015)372
So: More closed form expressions 55.4(2017)376
- H-782 To: Evaluating sums involving reciprocals of Fibonacci and Lucas Nrs 54.1(2016)87
So: And yet more closed form formulas 55.4(2017)378
- H-783 To: Evaluating three sums involving reciprocals of powers of Fib Nrs 54.1(2016)87;
Erata for the third sum 54.2(2016)192
So: Closed forms for sums of series involving reciprocals of shifted Fibonacci squares
56.1(2018)90
- H-784 To: Evaluating sums of fractions involving 24 times an integer 54.1(2016)87
So: A pair of identities for π 56.1(2018)91
- H-785 To: Finding closed forms for sums involving fibonomials 54.1(2016)88
So: Sums of Fibonacci coefficients 56.1(2018)93
- H-786 To: Finding areas of polygons having Fibonacci nrs as vertex coordinates 54.1(2016)88
So: The area of a Fibonacci polygon 56.1(2018)94
- H-787 To: Verify a sum involving the reciprocal of Fib nrs with Fib nr subscripts 54.2(2016)185
So: Closed form for the sum of a series 56.2(2018)186
- H-788 To: Finding the limit of nested square roots involving squares of Fib Nrs 54.2(2016)185
So: The limit of a parametric nested radical 56.2(2018)187
- H-789 To: Inequalities for Fib nrs, Lucas nrs and the square root of a polynomial 54.2(2016)185
So: Some cyclic inequalities 56.2(2018)189

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-790 To: Calculating a sum involving harmonic and Rieman zeta numbers 54.2(2016)186
So: A series involving harmonic numbers and the zeta function at positive integers 56.2(2018)190
- H-791 To: Find a closed form for a sum of reciprocals of Lucas nr products 54.2(2016)186
So: Closed form for the sum of series 56.3(2018)284
- H-792 To: Identities for Tribonacci numbers 54.3(2016)280
So: Some Tribonacci identities 56.3(2018)285
- H-793 To: Limit problem involving e , roots of Fib nrs and also for Lucas nrs 54.3(2016)280
So: The limit of an expression involving double factorials and Fibonacci nrs 56.3(2018)286
- H-794 To: Inequality for sums of cube roots of ratios of Fibonacci numbers 54.3(2016)280
So: An upper bound for a sumof cubic roots 56.3(2018)286
- H-795 To: Summation identity involving reciprocals of Fib and Lucas numbers 54.3(2016)280
So: Sums of arc-tangents 56.3(2018)287
- H-796 To: Solve an equation with inverse tangents of powers of the golden ratio 54.3(2016)281
So: Diophantine equations with powers of the golden section 56.4(2018)374
- H-797 To: Identity involving a product of fibonomial coefficients 54.4(2016)373
So: An identity with Fibonomial coefficients 56.4(2018)375
- H-798 To: An inequality involving trig functions and Fibonacci numbers and one for trig functions and Lucas numbers 54.4(2016)373
So: An inequality with Fibonacci numbers and trigonometric functions 56.4(2018)376
- H-799 To: An inequality involving Fibonacci numbers and one for Lucas numbers 54.4(2016)373
So: An inequality with Fibonacci numbers 56.4(2018)377
- H-800 To: Computing sums of a multinomial coefficient and products of integer powers 54.4(2016)374
So: A sum involving multinomial coefficients 56.4(2018)378
- H-801 To: Showing two properties of a special second order recurrence relation 55.1(2017)89
So: Some divisibility relations with members of Lucas sequences 57.1(2019)91
- H-802 To: Inequality involving sums of Fibonacci numbers with Fibonacci and Lucas subscripts 55.1(2017)89
So: An inequality with Fibonacci numbers 57.1(2019)93
- H-803 To: Finding areas of polygons with Lucas number coordinates 55.1(2017)89
So: The area of a polygon with Lucas number coordinates 57.1(2019)93
- H-804 To: Proving three sums of reciprocals of products of Lucas numbers 55.1(2017)90
So: Sums of reciprocals of products of Lucas numbers 57.1(2019)94
- H-805 To: Inequality for sums of ratios of products and sums of Fibonacci numbers 55.2(2017)184
So: An application of Jensen's inequality 57.2(2019)185
- H-806 To: Proving the sum of products of two third order sequence members 55.2(2017)184
So: An identity involving Tribonacci numbers 57.2(2019)186
- H-807 To: Summation identities for möibus functions of gcds of two integers 55.2(2017)184
So: Identities with sums of Euler and number of squarefree divisors functions 57.2(2019)186
- H-808 To: Identity for sums of combinatorial quantities 55.2(2017)185
So: An identity with binomial coefficients 57.2(2019)188

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-809 To: Establish the sum of a product of factors involving α , β , and Lucas nrs 55.3(2017)282
Errata: 57.3(2019)287
So: Evaluating an infinite product 57.2(2019)189
- H-810 To: Establish the sum of reciprocals of fourth powers of Lucas numbers 55.3(2017)282
So: Evaluating the sum of a series of reciprocals 57.3(2019)284
- H-811 To: Establish the sum of reciprocals of member of a second order recurrence 55.3(2017)282
So: Evaluating the sum of another series of reciprocals 57.3(2019)285
- H-812 To: Summation identity involving combinatorics of Fibonacci and Lucas nrs 55.3(2017)282
So: An identity with sums of products of binomial coefficients 57.3(2019)285
- H-813 To: Inequality for a sum of Lucas number reciprocals; similarly for Fibonacci 55.4(2017)374
So: A cyclic inequality 57.3(2019)286
- H-814 To: Tribonacci number identity 55.4(2017)374
So: A Tribonacci identity 57.4(2019)376
- H-815 To: Congruence for a sum of a product of powers of 2 and a combinatoric 55.4(2017)374
Errata 56.1(2018)95
So: A congruence with powers of 2 and binomial coefficients 57.4(2019)377
- H-816 To: Inequality involving a sum of reciprocal Fibonacci expressions 55.4(2017)375
So: Withdrawn - Special case of B-1173; 57.4(2019)379
- H-817 To: Finding closed forms for 4 sums of Fibonacci and Lucas products 56.1(2018)89
So: Closed for expressions for some sums of products 58.1(2020)90
- H-818 To: Determining the sum of reciprocals of products of Fibonacci numbers 56.1(2018)89
So: Some telescopic series 58.1(2020)92
- H-819 To: Evaluating an integral from α to β involving continuous function 56.1(2018)90
So: Evaluating a definite integral 58.1(2020)93
- H-820 To: Find the limit of a ratio involving roots of Fibonacci and Lucas numbers 56.1(2018)90
So: Evaluating a Fibonacci limit 58.1(2020)94
- H-821 To: Verifying the sum of an infinite number of arctangent functions 56.2(2018)185
So: A formula for π^2 involving Fibonacci numbers 58.2(2020)186
- H-822 To: Inequalities involving powers of Fibonacci or Lucas numbers 56.2(2018)185
So: Some inequalities with Fibonacci numbers 58.2(2020)187
- H-823 To: Sums involving products of terms of a generalized recurrence relation 56.2(2018)185
So: Some summation formulas with general recurrences 58.2(2020)188
- H-824 To: Sums of products of generalized Fibonomial coefficients 56.2(2018)186
So: Identities with generalized Fibonacci coefficients 58.2(2020)189
- H-825 To: Inequality involving Fibonacci numbers and three positive numbers 56.3(2018)283
So: A circular inequality 58.3(2020)282
- H-826 To: Summation identity involving a product of Fibonacci and Lucas numbers 56.3(2018)283
So: Powers of 2 and powers of 3 58.3(2020)283
- H-827 To: Finding limits of radicals with ratios of Fibonacci numbers as exponents 56.3(2018)283
Errata 56.4(2018)379
So: A double limit 58.3(2020)284
- H-828 To: Finding the sum of involving the square of a Tribonacci number 56.3(2018)284
So: Closed formula for the weighted sum of squares of Tribonacci numbers 58.3(2020)284

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-829 To: Find the limit of a sum of arctangents of Fibonacci expressions 56.4(2018)373
Correction: 57.2(2019)191
So: A sum of arctangents 58.4(2020)376
- H-830 To: Fibonacci congruence of a sum of products of Fibonacci numbers 56.4(2018)373
So: A sum divisible by four consecutive Fibonacci numbers 58.4(2020)377
- H-831 To: Congruence for a function of Fibonacci numbers and a prime modulus 56.4(2018)373
So: Proth primality test using Fibonacci numbers 58.4(2020)378 *******NO SOLVERS**
- H-832 To: Finding two sums of products of Fibonacci and Lucas numbers 56.4(2018)373
So: Closed form expressions for sums with Fibonacci and Lucas numbers 58.4(2020)378
- H-833 To: Identity for sums of products of Tribonacci-Lucas numbers 57.1(2019)89
So: Closed form for a sum of Tribonacci -Lucas numbers 58.4(2020)379
- H-834 To: Two identities for balancing and Lucas-balancing numbers 57.1(2019)89
So: Closed formulas for some sums of products of balancing numbers 59.1(2021)90
- H-835 To: Summation identity involving Bernoulli and Stirling numbers 57.1(2019)89
So: Identities between higher order Bernoulli numbers and Stirling numbers 59.1(2021)91
- H-836 To: Finding closed forms for two sums involving products of members of a non-linear,
non-homogeneous first order recurrence relation 57.1(2019)90
So: Closed forms for sums of products of members from a certain sequence 59.1(2021)93
- H-837 To: Tribonacci summation identity 57.2(2019)184
So: Relations among sums of Tribonacci numbers 59.1(2021)94
- H-838 To: Sum involving combinatorics and Lucas numbers 57.2(2019)184; Errata 57.3(2019)287
So: Sums with Lucas numbers and binomial coefficients 59.1(2021)95
- H-839 To: Closed form for a sum involving k -Fibonacci hyperbolic functions 57.2(2019)184
So: A series with k -Fibonacci hyperbolic tangent terms 59.2(2021)186
- H-840 To: Divisibility of an expression involving Fibonacci numbers 57.2(2019)185
So: A multiple of 150 59.2(2021)187
- H-841 To: Summation inequality involving Lucas numbers 57.2(2019)185
So: A general inequality with Lucas numbers 59.2(2021)188
- H-842 To: Finding the sum of products of three Fibonacci numbers 57.3(2019)283
So: A closed form expression for a sum of products of Fibonacci numbers 59.2(2021)189
- H-843 To: A Fibonacci and a Lucas divisibility problem 57.3(2019)283
So: Some divisibilities with Fibonacci numbers 59.2(2021)190
- H-844 To: Two summation identities for balancing numbers 57.3(2019)283
So: Identities with generalized-balancing numbers 59.3(2021)281
- H-845 To: Limit involving a function with Fibonacci and Lucas numbers powers 57.3(2019)284
So: Some double limits with ratios of Lucas numbers 59.3(2021)282
- H-846 To: Two Tribonacci summation identities 57.4(2019)373
So: A formula for the convolution of Tribonacci and triangular numbers 59.3(2021)283
- H-847 To: Identities involving balancing, Fibonacci and Lucas-balancing numbers 57.4(2019)373
So: A closed form for the convolution of Balancing numbers and Fibonacci cubes
59.3(2021)285
- H-848 To: Finding the limit of nested radicals involving a second order recurrence 57.4(2019)373
So: A nested radical 59.3(2021)286

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-849 To: Closed form for a sum involving Lucas numbers and binomial and multinomial coefficients 57.4(2019)373
So: An identity with multinomial coefficients and Lucas numbers 59.4(2021)374
- H-850 To: Verifying the area of a triangle with Fibonacci Cartesian coordinates 58.1(2020)89
So: A formula for the area of a triangle with Fibonacci coordinates 59.4(2021)375
- H-851 To: Finding the limit of difference involving n th roots of Fibonacci and two given sequences 58.1(2020)89
So: A limit with n th roots of F_n 59.4(2021)376
- H-852 To: Verifying two sums involving Fibonacci, Lucas and Bernoulli numbers 58.1(2020)89
So: A sum involving binomial coefficients, Fibonacci, Lucas and Bernoulli numbers 59.4(2021)378
- H-853 To: Two inequalities involving sums of Lucas number expressions 58.1(2020)90
So: Lower bounds for some sums involving Lucas numbers 59.4(2021)379
- H-854 To: Limit problem involving a function with Fibonacci and Lucas exponents 58.2(2020)185
Correction 59.1(2021)96
So: A double limit with a function satisfying a functional equation 60.1(2022)91
- H-855 To: Identities with sums of products of Tribonacci, Fibonacci and Lucas numbers 58.2(2020)185
So: The generating function of the product of the Fibonacci and Tribonacci numbers 60.1(2022)92
- H-856 To: Verifying values of sums involving triangle, Fibonacci and Lucas numbers and powers of 2, 58.2(2020)185; Retraction 58.3(2020)287
So: The sum of a series with Fibonacci and Triangular numbers 60.1(2022)93
- H-857 To: Identity involving sums of Tribonacci numbers 58.2(2020)186
So: Fibonacci numbers and signed sums of products of Tribonacci numbers 60.1(2022)94
- H-858 To: Proving sums of 8th powers of Fibonacci numbers is a perfect square 58.3(2020)281
So: A perfect square 60.1(2022)95
- H-859 To: Fibonacci number/Riemann zeta function summation problem 58.3(2020)281
So: A series with Fibonacci numbers and values of the Riemann zeta function 60.1(2022)95
- H-860 To: Lucas number/Bernoulli number summation problem 58.3(2020)281
So: An identity with Bernoulli and Lucas numbers 60.2(2022)186
- H-861 To: Finding a closed form for a product of Fibonacci numbers 58.3(2020)281
So: The sum of products of two consecutive generalized Tribonacci numbers 60.2(2022)188
- H-862 To: Two summation problems for products of k -Fibonacci and k -Lucas numbers 58.3(2020)282
So: Sums of generalized Fibonacci and Lucas numbers 60.2(2022)189
- H-863 To: Prove 2 Riemann zeta function summation identities 58.4(2020)375
So: Sums of series involving values of the Riemann zeta function 60.2(2022)190
- H-864 To: Prove an identity involving Pell numbers and tangents 58.4(2020)375
So: A series involving inverse tangents of reciprocals of Pell numbers 60.2(2022)191
- H-865 To: Finding the limit of a sequence roots of products of Fibonacci, Lucas and a special 2nd order sequence 58.4(2020)375
So: A limit with n th roots of products of Fibonacci and Lucas numbers 60.2(2022)192
- H-866 To: Inequality involving sums and logarithm of a 2nd order sequence 58.4(2020)375
So: A logarithmic inequality 60.3(2022)282

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-867 To: Prove a summation identity involving Fibonacci and Lucas numbers 58.4(2020)376
So: An identity with sums of ratios of Fibonacci and Lucas numbers 60.3(2022)283
- H-868 To: Triple sum involving odd perfect numbers 59.1(2021)89; Errata 59.3(2021)281
So: Odd perfect numbers and values of Riemann- ζ -function 60.3(2022)284
- H-869 To: Prove the sum involving Fibonacci and Lucas numbers 59.1(2021)89
So: An identity with fifth powers of Fibonacci numbers 60.3(2022)285
- H-870 To: Two sums involving Fibonacci and Lucas numbers 59.1(2021)89
So: Formulas with Fibonacci numbers whose indices are Fibonacci numbers 60.3(2022)287
- H-871 To: Proving sums involving balancing or Lucas-balancing numbers 59.1(2021)89
So: The sum of a series involving balancing numbers 60.3(2022)288
- H-872 To: Proving two sums involving the dirichlet function and Fibonacci or Lucas numbers 59.1(2021)89
So: Fibonacci numbers and the alternating Riemann zeta function 60.4(2022)374
- H-873 To: Identities involving Fibonacci, Lucas and Tribonacci numbers 59.2(2021)185
So: Identities with Fibonacci and Tribonacci numbers 60.4(2022)3745
- H-874 To: Sums involving Fibonacci, Lucas and Catalan numbers 59.2(2021)185
So: catalan meets Fibonacci 60.4(2022)3747
- H-875 To: Inequality involving Fibonacci numbers and the sides of a triangle 59.2(2021)185
So: A geometric inequality involving Fibonacci numbers 60.4(2022)3748
- H-876 To: A Fibonacci number inequality and a Lucas number inequality 59.2(2021)185
So: Inequalities with Fibonacci and Lucas numbers 60.4(2022)379
- H-877 To: Summation identity involving products of Lucas numbers 59.2(2021)185
So: Some formulas involving powers of Lucas numbers 60.4(2022)380
- H-878 To: Sum of a product of cubes of Lucas numbers identity 59.3(2021)280
So: *****
- H-879 To: Summation identity for the difference of two Fibonacci numbers and for two Lucas numbers 59.3(2021)280
So: *****
- H-880 To: Summation identity involving k -Fibonacci numbers 59.3(2021)280
So: *****
- H-881 To: Identity for a sum of ratios of Fibonacci numbers and a sum of Lucas powers 59.3(2021)281
So: *****
- H-882 To: Summation identity involving the sum of a Fibonacci and Lucas number 59.3(2021)281
So: *****
- H-883 To: Three Fibonacci summation identities 59.4(2021)373
So: *****
- H-884 To: several sums involving inverse hyperbolic functions of α expressions 59.4(2021)373
So: *****
- H-885 To: Verifying a sum of products of reciprocals of α and squared integers 59.4(2021)374
So: *****
- H-886 To: Two inequalities involving ratios of tangents and Fibonacci sums 59.4(2021)374
So: *****

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-887 To: Computing a limit involving roots of factorial expressions raised to $\sin^2 F_m$ powers
59.4(2021)374
So: *****
- H-888 To: Inequality involving square roots of sums of 4th powers of Fibonacci and Lucas numbers
59.4(2021)37
So: *****
- H-889 To: Verifying an equation and an inequality involving Fibonacci numbers 60.1(2022)90
So: *****
- H-890 To: Verify a Lucas summation identity 60.1(2022)90
So: *****
- H-891 To: Establishing a Fibonacci ratio congruence 60.1(2022)90
So: *****
- H-892 To: Limit involving Fibonacci and Lucas numbers and a logarithmic integral 60.1(2022)90
So: *****
- H-893 To: Identity for a sum of a product of Fibonacci and skew harmonic numbers 60.1(2022)91
So: *****
- H-894 To: Two identities for sums of products of Fibonacci numbers 60.1(2022)91
So: *****
- H-895 To: Three problems involving Genocchi numbers 60.2(2022)185
So: *****
- H-896 To: A Fibonacci and a Lucas inequality 60.2(2022)185
So: *****
- H-897 To: Two summation Identities of inverse products of Lucas numbers with Fibonacci
subscripts 60.2(2022)185
So: *****
- H-898 To: Limit involving roots of expressions with Fibonacci, Lucas and factorials 60.2(2022)186
So: *****
- H-899 To: Estab;ishing a sum involving the arcsinh of a Fibonacci/Lucas expression 60.2(2022)186
So: *****
- H-900 To: Infinite sum involving a reciprocal sum of Lucas numbers 60.2(2022)186
So: *****
- H-901 To: Two sums involving reciprocals of Lucas sums with Fibonacci and Lucas subscripts
60.3(2022)281
So: *****
- H-902 To: Inequality involving Lucas number roots of integers 60.3(2022)281
So: *****
- H-903 To: Two Lucas number Diophantine equations with positive integer solutions 60.3(2022)281
So: *****
- H-904 To: Two summation identities involving ratios of Lucas number expressions 60.3(2022)281
So: *****
- H-905 To: Two summation identities involving arctangents of reciprocals of Fibonacci numbers
60.3(2022)282
So: *****

ADVANCED PROBLEMS INDEX

Edited by Florian Luca

- H-906 To: Identity involving a differences of sums of Fibonacci number expressions 60.4(2022)373
So: *****
- H-907 To: Prove a combinatorial identity for F_{3n} 60.4(2022)373
So: *****
- H-908 To: Two inequalities involving the sides of a triangle with Fibonacci exponents 60.4(2022)373
So: *****
- H-909 To: Identity involving Lucas numbers and two special summation sequences 60.4(2022)373
So: *****
- H-910 To: Verify and identity involving Lucas numbers 60.4(2022)3734
So: *****

ADVANCED PROBLEMS INDEX

Part II Proposers

A

Agrawal, M.D.: H-344
Alfred, Br. U.: H-6,8,17,29,52,92
Alikhani, S.: H-740
Alt, A.: H-840
Alter, R.: H-192
André-Jeannin, R.: H-439,443,450,465,474,479,481,546
Andrews, G.E.: H-138
Arkin, J.: H-102
Azarian, M.K.: H-497,507,676,678

B

Bachraoui, M.E.: H-700
Basin, S.L.: H-53
Bataile, M.: H-909
Băținețu-Giurgiu, D.M.: H-728,743,748,751,752,755,758,760,763,765,769,771,772,789,793,794,
H-798,799,805,813,816,819,820,822,825,827,845,851,854,865,875,886,887,898,908
Bencze, M.: H-896
Berzsenyi, G.: H-263,266,269,274,291,302
Beverage, D.: H-283
Bloom, D.M.: H-494,543
Blumberg, W.: H-40
Boisen, M., Jr.: H-87
Boots, J.N.: H-483
Boyadzhiev, K.N.: H-721
Brady, W.G.: H-273
Brennan, T.: H-5
Bridger, C.: H-159,207
Brooke, M.: H-89, 96
Brown, J.L., Jr.: H-11,58,71,111,132,137
Bruckman, P.: H-206,219,245,251,280,286,303,308,311,314,320,323,333,335,341,342,347,
H-349,354,359,371,386,397,403,407,411,445,458,463,466,470,472,477,480,485, 488,491,
H-495,496,498,499,501,503,506,509,512,513,515-517,519,521,523,525, 526,528,529,531,
H-532,536,538,540,544,545,549,550,552,553,555,558,565,569,572,576,577,579,584,615,
H-616,632,650,657,704,705-707,725,729,735
Brugia, O.: H-434
Burns, D.W.: H-174
Buschman, R.G.: H-18,38
Byrd, P.F.: H-34,61

ADVANCED PROBLEMS INDEX

Proposers (continued)

C

Carlitz, L.: H-2,26,47,51,56,97,106,112,119,126,134,139,139,144,151,154,156,167, 175,177,
H-178,180,181,185,189,199,202,205,209,220,221,223,226,227,229,231,236,238,240,
H-244,246,250,253,255,258,262,264,268,270,272,289,293,312,325,329
Catalani, M.: H-594,597,604,606,608,609,612,621,630
Cater, F.S.: H-292
Church, C.A., Jr.: H-70
Ciaurri, Ó. H-620
Cohn, E.M.: H-198
Cook, C.K.: H-636,663,741
Cusumano, A.: H-471,656,664,668

D

Daiev, V.: H-81
Daily, J.: H-292
Dujella, A.: H-520,530,533
Davenport, K. H-633,745,828,863,883,906
DeKoven, F.: H-169
Deshpande, M.M.: H-511
Desmond, J.E.: H-135,148,186,453
Deutsch, E.: H-641,695,710,740
Diaz-Barrero, J.L.: H-574,580,581,595,598,605,607,611,620,623,638,644,652,658,672,674,686,708,
H-888
Di Porto, A.: H-424,535
DiSario, R.: H-589

E

Edgar, H.: H-260
Egozcue, J.: H-598,605
Englund, D.: H-172
Erbacker, J.: H-25
Erdős, P.: H-182S,208
Ernst, H.: H-585
Eswarathasan, A.: H-600

F

Falcón, S.: H-696,701,838,839,853,880
Fecke, R.: H-215
Fedak, I.V.: H-876,902
Ferns, H.H.: H-121,163,165,166,190
Filipponi, P.: H-375,388,392,402,405,417,421,424,427,431,432,434,436,442,457,486,493,534,535
Finkel, D.: H-239
Finkelstein, R.: H-259
Flórez, R.: H-662
Fransen, A.: H-400
Frontczak, R.: H-333,834,837,844,846,847,852,855,856,859,860,871,872,873,874,878,879,882,884,
H-885,891,903,904,910
Fuchs, J.A.: H-25

ADVANCED PROBLEMS INDEX

Proposers (continued)

F

Furdui, O.: H-602,624,634,637,648,653,691,699,709,722,723,761,790

G

Garfield, R.: H-232,241

Gauthier, N.: H-522,527,551,554,556,559,561,563,566,568,573,575,578,583,587,592,647,
H-659,681,684,685,692,697,703,712,714,717a,720,730,732

Gessel, I.: H-187

Ghalauini, B.: H-727

Glebov, G.: H-784

González, J.L.: H-661,868

Gootherts, J.W.: H-67

Gosselin, J.R.: H-592

Gould, H.W.: H-1,13,16,28,37,43,62,68,85,142,170,282

Goy, T.: H857

Graham, R.L.: H-10,32,45

Grau-Sánchez, Miquel 635

Greenberg, R.: H-50

Greig, W.E.: H-282

Greubel, G.C. 634,665,669,671,682,687,774

Guillotte, G.A.R.: H-200,216,225

Gurjar, K.K.: H-889

H

Headley, S.: H-115

Hendel, R.J. H-625,756

Hermann, E.: H-567,568,603,629

Hilton, A. J. W.: H-261

Hisert, G.: H-762,792

Hoggatt, V.E., Jr.: H-,7,13,20,22,31,39,44,51,53,60,72,73,76-78,82,86,88,90,96,104,113,114,
H-116,131,133,136,141,152,183,195,201,203,212,213,218,224,252,257,252,257,256,267,
H-275,276,278,281,285,297,301,304,306,310,313,319,328,330,340,340,343,346,351,361

Horner, W.W.: H-35

Hunter, J.A.H.: H-30,48,79,80,124,146

Huntley, H.E.: H-108

I

Ivanoff, V.: H-107

J

Janous, W.: H-601,642

Jaroma, J.H.: H-643,645,646,675

Jerbic, S.: H-63

ADVANCED PROBLEMS INDEX

Proposers (continued)

K

Karama, M.J.: H-858
Karst, E.: H-105,193,214,256
Kawazu, K.: H-777
Keskin, R.: H-801
Kilic, E.: H-660
Kimberling, C.: H-296,357,383
King, C.H.: H-20
Kiss, P.: H-420
Klamkin, M.S.: H-164
Klarner, D.A.: H-161,162,168
Klauser, H.: H-376
Konhauser, J.D.E.: H-36,42
Kotronis, A.: H-731
Krishman, S.: H-211
Krishna, A.J.: H-394,398
Krishna, H.V.: H-194
Krishna, S.: H-217
Krishnar, S.: H-182
Kubo, I.: H-777
Kuipers, L.: H-298,437

L

Laird, R.A.: H-41
Laurie, D.P.: H-315
Ledin, G., Jr.: H-57,98,109,110,117,118,147,173
Lehmer, D.: H-160
Lehmer, E.: H-160
Leonard, H.T., Jr.: H-141
Lind, D.: H-54,64,66,74,75,91,93,123,128,136,140,145,171
Liu, G.: H-683
Lombard, W.C.: H-114
Luca, F.: H-590,596,599,796,801

M

Makri, F.S.: H-379,404,412
Mascella, S.: H-493
Melham, R.S.: H-614,814
Meštrović, R.: H-744
Melter, R.A.: H-406
Metzger, J.: H-353
Miller, D.A.: H-237
Moreno, S.G.: B-717b
Moser, L.: H-2
Mullin, A.A.: H-287,345,401,441,447
Murphy, J.L.: H-300
Mers, B.R.: H-316

ADVANCED PROBLEMS INDEX

Proposers (continued)

N

Nakata, T.: H-777

Nivas, D.: H-204

O

Ohtsuka, H.: H-689,690,693,694,698,702,711,713,715,718,719,724(Listed as 723),726,733,
H-734,736-739,742,746,747,749,750,753,754,757,759,764,766-768,770,773,775,776
H-778-783,785,787,788,791,795-7,802,804,807,809,812,817,818.821,823,824,826,830,832
H-836,841-843,848,849,850,864,867,869,870,877,881,894,897,899,900,901

P

Padmakumar, T.V.: H-440,448,451,455,547

Parker, F.D.: H-14,21,25,46,248,249

Patel, J.M.: H-610,613,619,631,635,640

Perdomo, F.: H-829

Peters, J.F.: H-327

Petković, D.M.: H-381

Philippou, A.N.: H-322,331,348,358,363,368,373,379,382,389,404,412,420

Pla, J.: H-505,514,628

Plaza, Á.: H-696,701,803,810,811,829,838,839,853,862,866,880

Popescu, P.G.: H-674

Propp, J.: H-318

Q

Qin, H.: H-691,699

R

Rabinowitz, S.: H-125,129,362,366,423,425,459,487,537,541,557,564,564,649

Ramanna, J.: H-153

Ramirez, Ó. C: H-611

Redmond, D.: H-452

Roberts, J.B.: H-196

Robinson, D.W.: H-59,100

Rodriguez, J.: H-484

Roelants, H.: H-667

Rorem, S.O.: H-105

Ruggles, I.D.: H-4

S

Sadoveaanuv, I.: H-449,462

Samberg, M.: H-471

Sawhney, M.: H-800,807,808,815

Schaake, A.G.: H-473

Schechter, M.: H-305

Schmutz, H.: H-370

Scoville, R.: H-199,223,226

Seiffert, H.-J.: H-384,395,410,419,433,438,444,460,464,469,476,489,492,500,508, 510,518,
H-524,539,542, 548,560,562,570,586,591,593,617,626,639,651,666,673

Shafer, R.: H-408

Shannon, A.G.: H-233

ADVANCED PROBLEMS INDEX

Proposers (continued)

S

Sharma, T.P.: H-892
Shriki, A.: H-786
Simic, S. H-618,627,654,655
Singmaster, D.: H-179,309,356,456
Sjogren, J.A.: H-446
Sommer, L.: H-197,317,334,336,377,387,391,418,461,468,483,622
Squire, Mrs. W.: H-83
Stanciu, N.: H-728,744,748,751,752,755,758,760,763,765,769,771,772,789,793,794,798,799,813,816,
H-825,827,845,851,854,865,886,887,898,908
Srewaet, S.M.: H-893
Stuparu, A.: H-490
Svinin, A.K.: H-835,895
Svinina, S.V.: H-835
Swamy, M.N.S.: H-69,120,127,150,155,157,158

T

Taddei, G.: H-283
Tallman, M.H.: H-15,23,33
Tausky, O.: H-9
Taylor, L.: H-277,307,326,365,414,415,422,426,428,430,454,467,475,482
Terr, D.: H-861
Terzić, P.: H-831
Thoro, D.E.: H-12
Tomescu, I.: H-406
Tošić, R.: H-435
Trzaska, Z.W.: H-502,504
Tsedenbayar, D. H-571
Turner, J.: H-409,473
Turner, S.: H-352,429
Tyszka, A.: H-688

U

Umansky, H. L.: H-27,101

V

Vaughan, T.: H-244
Ventas, A.: H-907

W

Wachtel, M.: H-350,360,364,367,370,372,378,385,390,393,396,399
Wall, C.R.: H-19,49,99,143,149,338,339,369,374,380
Wang, K.: H-905
Ward, M.: H-24
Whitney, R.E.: H-55,66,122,184,188,222,228,234,254,271
Winthrop, H.: H-50
Wlodarski, J.: H-65
Wulczyn, G.: H-210,230,235,243,247,279,284,288,290,294,295,299,321,324,337,355,413,416
Wyler, O.: H-84

ADVANCED PROBLEMS INDEX

Proposers (continued)

Y

Yalavigi, C.C.: H-176

Z

Zeitlin, D.: H-14,103,191,332

Zielinski, R.: H-890

Part III

Solvers other than Proposers

A

Abel, U, H-500, 835

Agrawal, M.D.: H-294,319

Akkuş,I.: H-609,714,739

Alfred(Brousseau), Br. U.: H-6

Ali, A.: H-752,755

Alptekýn, G. H-615,631,635,638

Altinisik, E.: H-635

Al-Slalm, W.A.: H-44,45

Amghibeck, S.: H-623,624

AN-anduud Problem Solving Group: H-761

Anderson, P.G.: H-478

André-Jeannin, R.: H-418-420,425,426,428,437,438,448,449,468

Anglin, R.H.: H-65

Anonymous: H-197

Antypenko, I.: H-876

Antzoulakos, D.: H-407,412,414

Arkin, J.: H-41,44

Arora,G.: H-574,597,613

Atanassov, K.: H-451

B

Bacon, M.: H-684

Ballieu, M.: H-490

Ballot, C.: H-737

Barile, M.: H-478

Barley, W.: H-173

Bataille, M: H-850,851,853,856,863-866,874-877

Beasley, B.: H-520,553

Bedker, M.S.: H-650

Benjamin, A. H-616

Berg, M.: H-42,65

Berzsenyi, G.: H-248,257,275

Beverage, D.: H-259,263-265

Bicknell, M.R.: H-8,17,57,65,124

Biggs, J.: H-117,248

Bloom, D.: H-495,530

Blumberg, W.: H-341

Bowen, E.W.: H-105

ADVANCED PROBLEMS INDEX

Solvers other than Proposers (continued)

B

- Boyadzhiev, K.N.: H-653,691,709,761,,835,859,863
Bradie, B.: H-783,784,787,792-794,799,806,810,811,821,825,826,829,833,834.837,838-840,842,844,
H-846,847,849-853,855,856,858,859,862-865,869-872,874-877
Brady, W.: H-155,172,237,238,257,270,291
Breault, D.A.: H-37
Bridger, C.A.: H-38,44,79,80,87,118,120,124,173,176,206,241
Brietzke, E.H.M.: H-683,685,703,727,800,801
Brooke, M.: H-12,14,35,41
Brown, J.L.: H-3-5,7,8,16,20,21,29-33,39,44,48,54,57,64,68,74,75,81
Brousseau, Br. A.(Alfred): H-105
Bruckman, P.: H-192-194,198,201,205,207,210,211,213,216-218,231-238,246-250,252,257-259,
H-262-270,272-276,279,281-285,288-291,293,295,297,298,301,302,310,312,313,315,317,
H-319,321,322,324-332,334,336,339,340,343-345,348-352,355,356,358,360-364,366-370,
H-372-381,383-385,387,389-391,394-396,398-402,404-406,408-410,412-414,416-429,
H-430,432-434,436-444,446,449-457,460-462,464-469,471,473,474,475,476,478,479,481-484,
H-486,487,489,490,492-494,497,504,505,507,508,510,511,514,518,520,522,524,527,530,
H-533-535,537,539,541-543,546-549,551,554,556,557,559-562,564,566-568,571,573-575,
H-578,581-583,585-595,597,598,601-604,606-608,610-614,617,619-631,633-649,651-656,
H-658,659,661-669,671-690, 692-694,696-703,708-725.727,728,730-734
Brugia, O.: H-370,371,407,410,423,425
Byrd, P.F.: H-66,293,302,438

C

- Carlitz, L.: H-10,13,15,16,18,24,28,39,44-46,77-81,85,86,88,92,93,120,121,128,131,135,138,142,
H-149,160,161,164,165,172,173,183,190-192,195,196,216,219,237,265,280,282-284,298,320
Carothers, D.: H-420
Carroll, T.: H-193
Castrillón, A.C.: H-859 ,863
Catalani, M.: H-578,586,587,589,592,595,598,604
Chainbus, G.: H-291
Cheng, B.: H-333
Chouteau, C.: H-232
Cidra, M.: H-794,795
Civciv, H.: H-584
Clifford, J.: H-701
Cloud, J.D.: H-74
Cook, C.K.: H-486,543,553,549,581,610,613,616,635,644,647,650,684,856
Cooper, C.: H-759

ADVANCED PROBLEMS INDEX

Solvers other than Proposers (continued)

D

Das, M.K.: H-795
Davenport, K.B.: H-506,572,584,586,594,595,597,598,610,613,614,617,618,635,636,647,
H-650,658,667,669,672,674,676,681,684,687,691,692,694,701,703,704,711,714-716,719-722,
H-725,727,733,735,741,744,751,752,755,758-60,763,765,766,769,776,778,784,793-795,799,806,
H-811,816,820,822,830,833,834,837,840,846,861
Davis, A.: H-704
Davlianidze, P.: H-821
De Koninck, J-m.: H-807
DeLeon, M.J.: H-319
Dence, T.: H-79, 81
Deshpande, M.: H-471,716
Desmond, J.E.: H-59,65,91,92,136,401
Deutsch, E.: H-616
Díaz-Barrero, J.L.: H-613,631,635
Dilcher, K.: H-409
Dinside, G.: H-412
Di Porto, A.: H-371
Dobrovolska, I.: H-805,808,839
Dresel, L.A.G.: H-367,370,375,377,378,390,391,395,396,475,477,483,496,498,499,504,
H-511,512,516,529,530,533,547,549,550,564,565,567,569,584,589,598
Dresner, Z.: H-10,14,16,17,29,31,32,33
Dujella, A.: H-490,494-498,503,504,508,511,512
Dunn, A.” H-850
Dutta, R.: H-790

E

Edgar, G.A.: H-136
Edgar, T.: H-857
Edwards, S: H-850
Egeciouglu, Ö.: H-349
Elmore, M.: H-13
Erbacher, J.: H-8,17
Eswaratgasan, A.: H-600
Euler, R.: H-425

F

Fálcon, S.: H-595,668,684,697,703,704
Fangmin, Z. H-766
Fecke, R.: H-190
Ferns, H.H.: H-39
Filipponi, P.: H-367,370,371,396,407,410,414,416,423,425,426,428,451,478,479,633
Finkel, D.: H-193
Flanigan, F.J.: H-462,477
Fleischman, D.:H-718,719,721,724,728,741,742.744-746,748,750,751,754,759,760,763,765-767
H- 769,771,773-778,780,782-784,787-807,810,811,813,815-829,832,834-841,846-867,869,877
Flórez, R.: H-644,647

ADVANCED PROBLEMS INDEX

Solvers other than Proposers (continued)

F

Ford, G.: H-47, 51,55
Frankel, E.: H-131
Freitag, H.T.: H-273,340,341
Frohman, L.: H-190,194
Frontczak, R.: H-819,829,832,861,863,869,870
Fuchs, J.A.: H-8,17
Furdui, O.: H-578,581,584,589, 607,608,610,615,620,623

G

Gao, G.G.: H-451
Georghiou, C.: H-320,340,342,351,359,371,373,379-381,394-396,398,403,404,407,408,410,
H-411,416,419,420,425,426,445,452,462-464,486,506,511,513,514
Gera, A.E.: H-714
Gibson, A.: H-712
Gioia, A.A.: H-44,45
Giuli, R.M.: H-166,169,231,281,282,319
Goldberg, M.: H-19
Good, I.J.: H-237
Goodstein, R. L.: H-234
Gould, H.W.: H-123,219
Grau-Sánchez, M.: H-631,635
Greubel, G.C. H-620,621,635,638,650,656,657,659,663,664,666,670a,725,729,730,733,745,761,763,
H-850,852,853
Grimaldi, R.P.: H- 635,641
Gurjar, K.K.: H-850,855,856
Gwyn, H.: H-871,872

H

Halton, J.H.: H-13,24,28
Hamelin, S.: H-150
Haukkanen, P.: H-463,517
Hautus, M.L.J.: H-151
He, F.: H-370,371
Hendel, R.J.: H-426,428,433,434,437,442,451,453,458,463,475,478,615
Herdy, M.: H-173
Herrman, E.: H-582
Higgins, F.: H-237,257,263
Higuira, R.: H-721,722,741,744
Hillman, R.A.: H-644
Hoggatt, V.E., Jr.: H-27,50,52,169,208,231,267,275,280
Howard, F.T.: H-268,443
Howell, J.: H-248
Hung, D.T.: H-273
Hunsucker, J.L.: H-230
Hunter, J.A.H.: H-14,37,101,105,173

ADVANCED PROBLEMS INDEX

Solvers other than Proposers (continued)

I

Iannucci, D.: H-569,574,675
Ire, J.: H-187
Israel, R.B.: H-433,466
Ivie, J.: H-194, 210,248

J

Jackson, W.D.: H-74
Jaiswal, D.V.: H-117,126,127,129,131,133-135,141,142,144,147,150,151,153,155,157,158,
H-163,165
Jakubczyk, Z. H-693,701,704,711,715,719,733,745,751,752,755,763,769
Janous, W.: H-340,341,344,349,351,369,371,394-396,407,420,578,588,589,594,595,597,
H-598,602,608,610,611
Jarden, D.: H-3,8
Jaroma, John: H-553
Jennings, D.: H-702
Jensen, N.: H-452,453,478,479,481,488-495
Jeong, W.K.: H-835,863
Johnson, N.: H-276
Johnson, V.: H-786
Just, E.: H-187

K

Kappus, H.: H-469,506,522
Killic, E.: H-714,739
King, B.: H-120,135,160
Kizilaslan, G.: H-609
Klamkin, M.: H-238,270
Klarner, D. A.: H-22,46,53,58,149,151,168,183
Klauser, H.: H-291
Klein, S.: H-349
Knuth, D.: H-39
Kocer, E.G.: H-640
Konhauser, J.D.: H-42,82
Košťál, J.: H-451,504,514
Kotronis, A.: H-706,709,714,716,721,729,745,761
Krishna, A.: H-394
Krishna, H.V.: H-109,117,173
Kuipers, L.: H-343,344,348,351,353,359-361,367,369,371,378,386,387,390,392,394-396,
H-398,401,410,413,414,416,418,419,421-423,425,426,428,430,433
Kushnirevych, V.: H-500
Kwong, Y.H.H.: H-428,435,438,445,449,451,463,547,549,561,562,569,589,603,612,613,619,639,
H-640,644,670,672,683,684,712,714,716,719,732,733,740,741,744,747,751-753,766,786

ADVANCED PROBLEMS INDEX

Solvers other than Proposers (continued)

L

LaGrange, J.: H-283
Lai, W-K: H-794,799,803,813,816,822,825,833,850,858,869,875
Laird, R.A.: H-41
Lajos, S.: H-117
Lau, K-W,: H-521,531
Laurie, D.P.: H-341,349
Law, A.G.: H-157
Ledin, G., Jr.: H-29
Lee, J.S.: H-394-396,398,399,409,410
Lee, J.Z.: H-394-396,398,399,409,410
Liggins, K.: H-701
Lind, D.: H-26,38,44,45,47,49-52,57,61,63,68,73,80,96,99,107,111,149,172
Lindstrom, P.: H-183
Lombard, W.: H-107
Long, C.: H-125,152,211,215,306,418,420
Lord, G.: H-206,219,251,257,263,279,280,285,319,340,616
Lossers, O.P.: H-208,238
Luca, F.: H-596,599,600,613,614,622,647,652,656,674,814

M

Mahon, J.: H-414
Makri, F.: H-414
Mansour, T.: H-592
Manthani, S.: H-352
Martin, R.: H-555,558,565,567,569
Mathe, V.: H-586,589-592,594,595,597,598,601-605
Mcanally, N.: H-766
Metzger, J.: H-370,378
Milsom, J.: H-163
Mohanty, S.: H-429
Mondal, S.: H-798,799
Monteferrante, S.A.: H-437
Morrison, J.: H-578,635
Morton, L.: H-11,44
Moser, W.O.J.: H-283,356,412

O

Ohtsuka, H.: H-708,716,741,744,752,755,760,762,763,765,769,784,792,794,799,810,811,833,834
H-837,838,840,856,858,861,874
Ovidiu, F. 572

ADVANCED PROBLEMS INDEX

Solvers other than Proposers (continued)

P

Pacheco, J.M.: H-668
Padwa, S.: H-188
Papastavridis, S.: H-377,379,381,382,389
Parker, F.D.: H-3,35,52,57,64,67,79,80,88,89,103,107,117,124,168,180,235,319
Peck, C.B.A.: H-32,44,45,52,65,67,68,81,103,107,117,120,124,129,150,162-165,168,173,248,296
Philippou, A.: H-283
Pinilla-Barrera, A.: H-850
Plaza, Á.: H-595,668,684,697,702-706,714,727,728,730,735,741,748,749,751,752,755,758,765,769,
H-771,783,786,789,793-795,799,805,819,825,833,834,844,847,855,856,858,864,865,869,871
Poonen, B.: H-389,390,391,392
Popov, B.: H-489
Prakash, R.: H-819
Prielipp, B.: H-273,280,281,283,291,310,319,344,349,367,370,407,410,414,426,440,451,453
Priest, D.: H-183,187
Prodinger, H.: H-714,766

R

Rabinowitz, S.: H-117,446,452-454
Rahman, Rajib: H-553
Ramanna, J.: H-103
Rao, G.: H-394
Ratchford, M.: H-163
Rattaggi, D.: H-856
Redmond, D.: H-448,466
Ricardo, H.: H-856
Risher, J.: H-799,803,816,833
Rivlin, T.J.: H-349
Rizavi, S.: H-444
Roberson, M.: H-712
Robinson, E.: H-282
Rodríguez, K.D.L.: H-819
Rose, M.A.: H-635,644
Rouholamini, A.: H-715
Rousseau, C.: H-704,712
Russell, D.: H-238,302,341
Russell, P.: H-281,283

S

Sagan, B.: H-616
Saxena, N.: H-352
Schlage-Puchta, J.-Ch.: H-590
Schmutz, E.: H-333,352
Schumacher, R.: H-806,807,809-811,817-821,828,830,832,833,836,837,840,842,843,846-852
H-855-861,863,869-872,874,877
Seaman, D.J.: H-7

ADVANCED PROBLEMS INDEX

Solvers other than Proposers (continued)

S

Seiffert, H.-J.: H-367,414,420,421,425,426,443-446,451,453,459,474,477,479,481,483,484,
H-486,488,490,491,494-496,498,499,504-507,511,512,514,515,517,521,522,523,525,
H-528,529,531,532,536,537,540,544-546,549-559,561,562,564-567,569,572,574, 575,
H-578,581,588,594,602,603,605-608,613,615,616,620,621,623-625,630,632,634,635,638
H-642-644,648,652,653,658,670,672

Sellers, J.A.: H- 635

Senadheere, J.N.: H-856,859

Shallit, J.: H-237,278,281,407,425

Shannon, A.G.: H-101,104,105,107,109,117,120,121,124,126,128,129,131,136,141,143,150,
H-158,160,163,165,166,180,231-235,237,238,245,248,257,269,273,275,283,293,302,320,
H-334,340,474,479

Shi, L.-L.: H-595

Shields, C.: H-341

Shieu, P.: H-394

Shirali, S.: H-429

Shtefan, D.: H-805,808,839

Shu, D.L.: H-866

Siafarikas, P.: H-377, 379,382,389

Singh, S.: H-263,291,319,345,426,440

Singmaster, D.: H-105,200

Sjoherg, J.C.: H-69

Smith, G.: H-532

Smith, J.L.: H-803,821,828,842,846,850,855-857,870

Smith, P.: H-124,190,241

Smith, S.: H-183

Somer, L.: H-285,291,319,322,345,362,364,369,370,375,378,401,413,416,424,440,442,443,
H-477,512,68

Sowers, D.: H-36

Spilker, J.: H-569,589,590

Spraggon, J.: H-344

Stadler, A.: H-761,818,819,829,845-850,852-877

Stanley, R.: H-366

Steutel, F.: H-394

Starke, E.: H-291

Stewart, S.M.: H-859,863,871,872,874

Strazdins, I.: H-529,535,549

Suarez, A.: H-819

Suck, J.: H-349,351,352

Swamy, M.N.S.: H-57,64,68,71-73,77,79,80,82,83,88,93,95,99,101,111,124

Sypsas, P.: H-377,379,382,389

ADVANCED PROBLEMS INDEX

Solvers other than Proposers (continued)

T

Tallman, M.: H-12
Taskara, N.: H-715
Terr, D.: H-506,520,776,784,793,795,803,809,828,833,839,845,856,859,862,863,871,872
Toroitich, D.: H-701
Tracy, P.: H-197,207,210,211,217,219,230,231,236,245,250,251
Tuglu, N.: H-577,581,584,638
Tuyt, A.: H-543
t'Wood, A.N.: H-478
Tzermias, P.: H-418,420,424

U

Unnithan, S.: H-597
Urbanija, F.: H-42

V

Van Hamme, L.: H-477
Ventas, A.: H-861-867,871,873-876
Vogel, J.: H-284
Volodin, N.A.: H-421,435,438
von Batenburg, W.C.: H-717

W

Wachtel, M.: H-319,335,341,346,351,352,354,371
Wall, C.R.: H-25,27,44,45,48,57,95,103,107,111,112,143,327,328
Wayland, K.: H-187
Weinshenk, R.: H-29,39
Weintraub, S.: H-105
Weland, K.: H-47,51
Wessner, J.: H-36,44,68,88,124
Western, A.B., Jr.: H-65
White, T.: H-378,387,404,414,416,423
Whitney, R.E.: H-19,29,44,48,118,124,125,169,174,182,319,396
Whyburn, C.T.: H-44
Wittwer, P.: H-333
Wulczyn, G.: H-187,207,221,232,241,263,265,266,273,275,278,280,281,291,298,310,332,
H-336,419,433,439

Y

Yalavigi, C.C.: H-107,153
Yazlik, Y.: H-715
Yff, P.: H-283
Yilmaz, N.: H-715
Yoder, M.: H-136,137,140,143-145,147,149,150,157-160,163-168
Young, P.: H-646

ADVANCED PROBLEMS INDEX

Solvers other than Proposers (continued)

Z

Zeitlin, D.: H-58,64,66,68,97,104,106,107,111,117,123,131,135,141,143,147,155,155,157,
H-160,180,192,193,298,425

Zhang, L. { H-869

Ziegenfus, C.: H-44

Zloata, N.: H-763,765,769,771,784,819,825

Note: A concise index of advanced problems H-1 to H-296 appears in 17.4(1979)378.
