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## Guide to the Martin Gardner Papers SC0647

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Department of Special Collections and University Archives

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Green Library

557 Escondido Mall

Stanford 94305-6064

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### **Note**

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**Language of Material:** English

**Contributing Institution:** Department of Special Collections and University Archives

**Title:** Martin Gardner papers

**Creator:** Gardner, Martin

**Identifier/Call Number:** SC0647

**Identifier/Call Number:** 12473

**Physical Description:** 63.5 Linear Feet

**Date (inclusive):** 1957-1997

**Abstract:** These papers pertain to his interest in mathematics and consist of files relating to his SCIENTIFIC AMERICAN mathematical games column (1957-1986) and subject files on recreational mathematics. Papers include correspondence, notes, clippings, and articles, with some examples of puzzle toys. Correspondents include Dmitri A. Borgmann, John H. Conway, H. S. M Coxeter, Persi Diaconis, Solomon W Golomb, Richard K.Guy, David A. Klarner, Donald Ervin Knuth, Harry Lindgren, Doris Schattschneider, Jerry Slocum, Charles W.Trigg, Stanislaw M. Ulam, and Samuel Yates.

**Immediate Source of Acquisition note**

Gift of Martin Gardner, 2002.

**Information about Access**

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**Cite As**

Martin Gardner Papers (SC0647). Dept. of Special Collections and University Archives, Stanford University Libraries, Stanford, Calif.

**Biographical/Historical Sketch**

Martin Gardner was the Mathematical Games columnist for SCIENTIFIC AMERICAN from its inception in 1956 until 1986. He earned his B.A. in philosophy at the University of Chicago in 1936; after his service in the Navy during World War II, he became a writer. He is the author of more than 65 books in the fields of science, mathematics, philosophy, literature, and conjuring.

**Scope and Contents**

These papers pertain to his interest in mathematics and consist of files relating to his SCIENTIFIC AMERICAN mathematical games column (1957-1986) and subject files on recreational mathematics. Papers include correspondence, notes, clippings, and articles, with some examples of puzzle toys. Correspondents include Dmitri A. Borgmann, John H. Conway, H. S. M Coxeter, Persi Diaconis, Solomon W Golomb, Richard K.Guy, David A. Klarner, Donald Ervin Knuth, Harry Lindgren, Doris Schattschneider, Jerry Slocum, Charles W.Trigg, Stanislaw M. Ulam, and Samuel Yates.

**Subjects and Indexing Terms**

Mathematical recreations.

Guy, Richard K.

Diaconis, Persi

Gardner, Martin

Knuth, Donald Ervin, 1938-

Golomb, Solomon W. (Solomon Wo

Coxeter, H. S. M. (Harold Scott Macdonald)

Conway, John Horton.

Borgmann, Dmitri A.

Ulam, Stanislaw M.

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Yates, Samuel.  
Slocum, Jerry.  
Trigg, Charles W.  
Lindgren, Harry.  
Schattschneider, Doris.  
Klarner, David A.

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**Game files Series 1**

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**1/F Music**

**Physical Description:** 3 folder(s)

box 44, folder 2

**1978, April [1 of 2] 1978-1979**

**Scope and Contents note**

MG notes.

"Two Styles in Visual Arts: The Finitely Scaled and the Self Similar", by Benoit Mandelbrot (typescript)

"Physical Systems with Variability on all Time Scales: Flicker Noises", by William Press (typescript)

Correspondents:

Sanders, David

box 44, folder 3

**1978, April [2 of 2] 1977-1978**

**Scope and Contents note**

Correspondents:

Smith, Cyril

Mandelbrot, Benoit

box 44, folder 4

**Papers by Voss 1984**

**Scope and Contents note**

MG notes.

Voss articles and some others

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**24 Cubes & Austin's Dog**

box 24, folder 18

**1971, December 1971-1998**

**Scope and Contents note**

Incomplete article

Correspondents:

Salmon, Wesley

Klamkin, Murray

Golomb, Solomon

Bankoff, Leon

Naranan, S.

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**3-D Objects****Physical Description:** 20 folder(s)

- box 55, folder 1      **3-D Objects: From Box 1 Folder 3: Flexigons undated**  
**Scope and Contents note**  
 6 hexaflexigon models (one with intertwined tie.)  
 1 plastic bag with instructions to "Fortune Teller"  
 1 "Meeba Teaser" (folding puzzle)
- box 55, folder 2      **3-D Objects: From Box 2 Folder 2: Tower of Hanoi undated**  
**Scope and Contents note**  
 Model "The Great pyramid", 9 nesting colorful pyramids.
- box 55, folder 3      **3-D Objects: From Box 7 Folder 10: Bridg-it & Twist undated**  
**Scope and Contents note**  
 Playing layouts and instructions for The Game of Gale (as season's greetings from the Hatchers.)
- box 55, folder 4      **3-D Objects: From Box 8 Folder 14: Spirals undated**  
**Scope and Contents note**  
 Models of spirals
- box 55, folder 5      **3-D Objects: From Box 8 Folder 14: Spirals undated**  
**Scope and Contents note**  
 Spiral drawing device - cardboard (goes with letter from Roger Hayward.)
- box 55, folder 6      **3-D Objects: From Box 10 Folder 10: Topology undated**  
**Scope and Contents note**  
 Two triangular handkerchiefs, from letter of Michael A. Pitzel. Tri-Mobius Brand.
- box 55, folder 7      **3-D Objects: From Box 11 Folder 6: Bouncing Ball in Tetrahedron undated**  
**Scope and Contents note**  
 Original of drawing by Roger Heyword of Stereo pair of helical chain of tetrahedra.
- box 55, folder 8      **3-D Objects: From Box 12 Folder 2: Sliding Blocks undated**  
**Scope and Contents note**  
 "Twice" Sliding Block Puzzle. Description: Square, 3x3, numbered sliding sub-squares: 1, 2a, 2b, 3-7, A.  
 Base has pegs sticking up in 4 corner squares;  
 pieces have grooves in back: 2a, 4: vertical; 2b, A,: horizontal; 1, 5: both (crossing); 3, 6: none  
 (The grooves in back restrict sliding over the corner squares.)
- box 55, folder 9      **3-D Objects: From Box 12 Folder 10: Sliding Block Puzzles undated**  
**Scope and Contents note**  
 Nutzy Puzzle - plastic sliding block puzzle, 7 circle counters in figure-8 slides (slides are like a square with a horizontal line across the middle.)
- box 55, folder 10      **3-D Objects: From Box 13 Folder 18: Hexiamonds undated**  
**Scope and Contents note**  
 1 set hixiamonds, cardboard, sealed, possibly from Niels Gottlieb.
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box 55, folder 11	<p><b>3-D Objects: From Box 16 Folder 4: M. C. Escher undated</b></p> <p><b>Scope and Contents note</b></p> <p>13 Escher bookmarks.</p>
box 55, folder 12	<p><b>3-D Objects: From Box 17 Folder 20: Pascal Triangle undated</b></p> <p><b>Scope and Contents note</b></p> <p>Hexstat: small beads sliding in a triangular array of hexagons, to show various statistical and other relationships, from Science Materials Center. With teachers manual.</p>
box 55, folder 13	<p><b>3-D Objects: From Box 20 Folder 13: The 24 Color Triangles undated</b></p> <p><b>Scope and Contents note</b></p> <p>Try-Angle Puzzle, by Ora &amp; Theo Coster. Set of 16 edge-colored triangles, 5 colors. (Jewish New Years text in colors, for Tishri 5730/Sept. 1969), plus sheet of shapes to make.</p>
box 56, folder 1	<p><b>3-D Objects: From Box 20 Folder 20: Crossed Moebius Bands undated</b></p> <p><b>Scope and Contents note</b></p> <p>4 velcro and zipper strips to experiment with crossed moebius band, from Jean Pedersen.</p>
box 56, folder 2	<p><b>3-D Objects: From Box 24 Folder 5: Pedersen's Strip Solids, Gurule's Work undated</b></p> <p><b>Scope and Contents note</b></p> <p>GeoCube Tree Ornaments (6 fun-to-assemble ornaments), from "The Puzzle Works" (scored cardboard models.)</p>
box 56, folder 3	<p><b>3-D Objects: From Box 26 Folder 7: Napiers Bones undated</b></p> <p><b>Scope and Contents note</b></p> <p>Paper set of "bones" - Abaco Neperiano Perfeccionada (see letter from Luis Benito Quintana.)</p>
box 56, folder 4	<p><b>3-D Objects: From Box 30 Folder 16: Non-Transitive Paradoxes undated</b></p> <p><b>Scope and Contents note</b></p> <p>"Jen-Ken'Pon Chips", by Max Maven (a magic trick/game.)</p>
box 56, folder 5	<p><b>3-D Objects: From Box 39 Folder 4: Penrose Tiles undated</b></p> <p><b>Scope and Contents note</b></p> <p>2 sets of non-periodic tiles (cardboard.)</p>
box 56, folder 6	<p><b>3-D Objects: From Box 46 Folder 7: Minimal Sculpture, Folded Card Paradox 1985</b></p> <p><b>Scope and Contents note</b></p> <p>The Ultracard Puzzle - fancy hypercard, form Gordon Jeppesen, 1985 (puzzle and magic trick.)</p>
box 56, folder 7	<p><b>3-D Objects: From Box 52 Folder 3: Short Problems undated</b></p> <p><b>Scope and Contents note</b></p> <p>15 1-yen coins (for measurement problem)</p>

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**Abacus**

box 22, folder 10	<b>1970, January 1963-1973</b>
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**Accidental Patterns in Pi (& Prose Verse)**

**Physical Description:** 4 folder(s)

- box 49, folder 1      **1979, September undated**  
                                 **Scope and Contents note**  
                                 Just article, plus 1 page notes on "e" curiosity.
- box 49, folder 2      **Accidental Verse 1965-1979**  
                                 **Scope and Contents note**  
                                 Correspondents:  
                                 Starbuck, George
- box 49, folder 3      **Intentionally Concealed Poetry in Prose undated**  
                                 **Scope and Contents note**  
                                 A few newspaper articles.
- box 49, folder 4      **Accidental Meanings 1967-1994**  
                                 **Scope and Contents note**  
                                 Correspondents:  
                                 Lindgren, Harry
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**Advertising Premiums**

**Physical Description:** 3 folder(s)

- box 24, folder 15      **1971, November undated**  
                                 **Scope and Contents note**  
                                 Article & Pony puzzle & Several copies of summation
- box 24, folder 16      **The T-Puzzle 1971**  
                                 **Scope and Contents note**  
                                 Several advertising premiums (T, L, Square) - but some are missing.
- box 24, folder 17      **The Square Puzzle undated**
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**Alephs II & Supertasks**

- box 23, folder 15      **1971, March 1971-1987**  
                                 **Scope and Contents note**  
                                 No article.  
                                 Discussion of details of MG article by Gillman (1982)  
                                 Correspondents:  
                                 Gillman, Leonard  
                                 Golomb, Solomon
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**Anamorphic Art**

**Physical Description:** 7 folder(s)

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box 31, folder 13

**1975, January 1974-1993**

**Scope and Contents note**

"On conformal Transformation and it's use in Painting", by Enrique Castro-Cid (typescript)

Anamorphic pictures of M.G., by Antonio Peticov

Correspondents:

Castro-Cid, Enrique

Cerf, Genevieve

box 31, folder 14

**Slant Art 1975**

**Scope and Contents note**

Various examples and reproductions

box 31, folder 15

**Amsterdam Exhibit 1975-1976**

**Scope and Contents note**

Correspondents:

Elffers, Joost

box 31, folder 16

**Kelly Houle 1975-2000**

**Scope and Contents note**

Article, by Houle, on Anamorphic Art

(Herman letters & photocopies look as if they are from another folder!)

Correspondents:

Houle, Kelly

Herman, Richard

box 31, folder 17

**Cylinders & Cones [1 of 2] 1972-1975**

**Scope and Contents note**

Many (rather poor) photocopies of anamorphic art, and notes on phoning dealers & museums.

box 31, folder 18

**Cylinders & Cones [2 of 2] 1975-1979**

**Scope and Contents note**

More photocopies, etc, of anamorphic art.

Description of method for cylindrical anamorphic projection, by Charles Kluepfel

(Also some rep-tiles, from Jack Giles)

Slides: 6 anamorphic drawings, J. Leupold (1674-1727)

4 of fancy cylinders and cones.

Mention of Scott Kim in letter to Lillian Silver (1975)

Correspondents:

Kluepfel, Charles

Giles, Jack

Silver, Lilian

box 31, folder 19

**Bibliog, References 1976**

**Scope and Contents note**

Also some articles

Amateur Scientist article, by Jearl Walker, SA, July, 1981 (cut-out pages)

"On Brunelleschi's Perspective "Experiments" or Demonstrations", by Nicholas Pastore (preprint), It. Journal of Psychology, 1975

"Adolf Liebig's Anamorphic Art" (news release)

"des rebus optiques Les Anamorphoses" (photocopy) L'Estampille, Apr. 1971

Anamorphosis: In Morphology and the Visual Arts", by Roy Behrens (photocopy) from Worm Runner's Digest, Dec. 1972

"Anamorphoscopes: a Visual Aid for Circle INversion", by Philip Kuchel (pages) - Mathematical Gazette

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**April Fool Column**

**Physical Description:** 7 folder(s)

box 32, folder 11

**1975, April 1975**

**Scope and Contents note**

Note on the amount of correspondance

box 32, folder 12

**Ripoff Rotor 1975-1976**

**Scope and Contents note**

Lots of humerous & serious correspondance

box 32, folder 13

**Da Vinci & Crapper 1975-1978**

**Scope and Contents note**

Much correspondance on the existence of Thomas Crapper, newspaper articles, etc.

Correspondents:

Heath, Peter

Reng, Peter

Oliver, Barney

McCabe, Charles

Burnam, Tom

box 32, folder 14

**Flushed With Pride 1973**

**Scope and Contents note**

Copy of the book, by Wallace Reyburn, subtitle: "The Story of Thomas Crapper", McDonald, 1969 (pb)

box 32, folder 15

**Lorentz-Contraction Paradox 1975**

**Scope and Contents note**

Articles explaining "paradox"

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box 32, folder 16

**e to pi times square root of 163 power 1975-1991**

**Scope and Contents note**

Some proofs it is transcendental, & other examples of near integers

Correspondents:

Devlin, Keith

Good, Jack

Shallit, Jeffrey

Golomb, Solomon

Wrench, John

box 32, folder 17

**The Map 1974-1977**

**Scope and Contents note**

Original letter and map (William McGregor)

Suggestions on how to color maps (Bernhart)

Correspondents:

McGregor, William

Bernhart, Frank

Coxeter, H.S.M.

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**Bacon's Biliteral Cipher**

box 25, folder 18

**1972, November 1972-1973**

**Scope and Contents note**

MG notes.

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**Ball Bouncing Problems**

**Physical Description:** 4 folder(s)

box 11, folder 4

**1963, September 1963**

**Scope and Contents note**

Cube, Tetra, etc.

"Periodic Omnihedral Billiards in Regular Polyhedra and Polytopes", by Mathew Hudelson (typescript)

Correspondents:

Draper, Theodore

Knuth, Donald

Hudelson, Matthew

box 11, folder 5

**Bouncing Ball in Tetrahedron 1960-1963**

**Scope and Contents note**

much Roger Hayward correspondence

Correspondents:

Conway, John

Hayward, Roger

box 11, folder 6

**Bouncing Ball in Cube and Hypercube 1960-1963**

**Scope and Contents note**

Correspondents:

Oliver, Barney

Hayward, Roger

Gordon, Jack

De Jong

box 11, folder 7

**Liquid Pouring (B. Ball as Computer) 1963-1964**

**Scope and Contents note**

Correspondents:

O'Beirne, Thomas

Mattson, H.F.

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**Bells**

**Physical Description:** 8 folder(s)

box 44, folder 5

**1978, May 1978-1999**

**Scope and Contents note**

MG notes.

Mathematica Monongaliae #12 (May, 1971), with bibliographies of Bell & Cataan numbers

Correspondents:

De Camp, L. Sprague

box 44, folder 6

**Murasaki Diagrams 1978**

**Scope and Contents note**

Correspondents:

Gould, Henry

Hitotumatu, Sin

Unger, J. Marshall

box 44, folder 7

**Bell Shuffles 1978-1982**

**Scope and Contents note**

Correspondents:

Bolker, Ethan

box 44, folder 8

**Readers on Bells 1978-1991**

**Scope and Contents note**

Correspondents:

Pratt, Vaughan

Shallit, Jeffrey

Good, I.J.

Sutcliffe, Alan

James, Leigh

Bethe, Henry

Lenard, Andrew

box 44, folder 9

**References Bell Numbers [1 of 2] 1976-1978**

**Scope and Contents note**

Correspondents:

Shallit, Jeffrey

Hoggatt, Vernon

Pleasants, Peter

box 44, folder 10

**References Bell Numbers [2 of 2] 1979**

**Scope and Contents note**

Computer printout of Jeff Shallit's table of 1st 400 Bell numbers

Golomb, Solomon (Cryptograms & Bell Numbers)

Correspondents:

Golomb, Solomon

box 44, folder 11

**Gould 1978**

**Scope and Contents note**

Mostly Henry Gould "Research Bibliography of Two Special Number Sequences",  
Revised Ed, 1976

box 44, folder 12

**Growney & Rogers 1976-1977**

**Scope and Contents note**

Correspondents:

Singmaster, David

Growney, Jo Anne

Rogers, Douglass

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**Bennett on Chaitin's Omega**

**Physical Description:** 3 folder(s)

box 49, folder 15

**1979, November 1979**

**Scope and Contents note**

"Knuth's Trivialization of Chaitin's Number as Problem Solver" (typescript)

Correspondents:

Bennett, Charles

Knuth, Donald

Asimov, Dan

box 49, folder 16

**Turing Machine Def. of "Randomness" (Chaitin) 1968-1977**

**Scope and Contents note**

Several Chaitin articles.

Correspondents:

Huber, Peter

Chaitin, Greg

box 49, folder 17

**Chaitin's Ext. of Godel 1987**

**Scope and Contents note**

Chaitin's articles, with reviews, commentary, & editorials about them.

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**Binary**

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box 6, folder 20

**1960, December 1959-1968**

**Scope and Contents note**

Binary number system

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**Block Packing**

**Physical Description:** 4 folder(s)

box 35, folder 9

**1976, February [1 of 2] 1968-1976**

**Scope and Contents note**

Quadron puzzle description, by J. Hanny

Correspondents:

Foregger, Thomas

Conway, John

O'Beirne, Thomas

box 35, folder 10

**1976, February [2 of 2] 1973-1996**

**Scope and Contents note**

"Brick Tiling and Monotone Boolean Functions", by Jonathan King (typescript)

Correspondents:

Klarnner, David

Brooke, Maxey

Barnes, Frank

Cutler, William

Beeler, Michael

Knuth, Donald

box 35, folder 11

**Ammann's and Barnes solution to all Odd Cubes 1976**

**Scope and Contents note**

Correspondents:

Ammann, Robert

Lagarias, Jeff

box 35, folder 12

**Proofs of 7-cube Impossibility 1976**

**Scope and Contents note**

Correspondents:

Lagarias, Jeff

Klarnner, David

Patrice, Maupou

Barnes, Frank

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**Board Games**

**Physical Description:** 7 folder(s)

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box 6, folder 2

**1960, April 1960**

**Scope and Contents note**

Shogi  
Maharajah winning strategies  
Chess variants, incl. Japan, China, Korea, Mars  
Correspondents:  
Rudge, William  
Smith, Wallace  
Blue, Richard  
Kien, Dennis  
Knight, William  
Golomb, Solomon

box 6, folder 3

**Reversi 1960-1994**

**Scope and Contents note**

(Also called Othello)  
Newspaper article in envelope  
References, analyses, computer programs  
Knuth letter to Woodger re Bell on Reversi  
Michaelsen letter contains history  
Correspondents:  
Bell, Alex  
Knuth, Donald  
Michaelsen, Peter  
Carlson, Robert  
Morgan, Chris  
Brodsky, Daniel  
Peregrine, D.  
Petersen, Jon  
Ondrejka, Rudolf  
Hewlett, Clarence

box 11, folder 8

**1963, October 1963**

**Scope and Contents note**

Correspondents:  
Abbott, Robert

box 11, folder 9

**Games of Black; Pathfinder 1957-1969**

**Scope and Contents note**

Original game and solution in Berlekamp letter  
Game of Black on a hexagonal board  
Description of "Reversal" game  
Correspondents:  
Smith, Donovan  
Berlekamp, Elwyn  
Eisner, Milton  
Hosken, Wesley

box 11, folder 10

**Tablut 1960, 1970**

**Scope and Contents note**

Correspondents:

Berthelsen, Ingmar

Abbott, Robert

Smith, Anthony

box 11, folder 11

**The Military Game 1960-1970**

**Scope and Contents note**

Richard Site's solution (via D. Knuth)

... and others

Correspondents:

Berlekamp, Elwyn

Van der Poel, Willem

Gosling, John

Simmons, Webb

Silver, Roland

Knuth, Donald

box 11, folder 12

**Focus 1963-1967**

**Scope and Contents note**

Booklet of Focus instructions, copyright Sid Sackson

Proof first player cannot win (Yearout)

Correspondents:

Yearout, Paul

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**Boolean Algebra**

**Physical Description:** 4 folder(s)

box 21, folder 2

**1969, February 1971**

**Scope and Contents note**

several articles and errata

box 21, folder 3

**Boolean Algebra as a Lattice 1971**

box 21, folder 4

**Factors of 30, of 210, etc undated**

**Scope and Contents note**

MG notes

box 21, folder 5

**Circuits 1960-1970**

**Scope and Contents note**

Article on Telephone Switching, by Feder & Spencer

"Logical Loops", by Edward Horvath (Article) (note by Don Knuth)

Correspondents:

Givoli, Nachman

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**Braids**

box 5, folder 16

**1959, December 1959-1998**

**Scope and Contents note**

Group Theory

Correspondents:

Fox, Ralph

Papazian, Haig

Turner, Roseline

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**Brain Teasers - 1**

**Physical Description:** 4 folder(s)

box 1, folder 8

**1957, February 1957**

**Scope and Contents note**

"An assortment of maddening puzzles. Warning: The solutions will not be given until March"

box 1, folder 9

**Logician and Forked Road 1957-1990**

**Scope and Contents note**

Correspondents:

Singmaster, David

Stover, Mel

Conway, John

Gummere, John

Sciame, Dennis

Wade, Carleton

Janzen, H.

Laster, Clayton

Roubicek, Juan

Fischer, W.

Polakilwicz, A.

Konikow, Robert

Givson, Robert

Weigle, Oscar

Haggstrom, Warren

Burman, S.

Rector, Charles

Vandegrift, Neil

Henrickson, Patric

Kriegsman, Edwin

Dominguez, Loreto

Oxaal, Gunnar

Lewis, C.I.

Stiles, Sam

Morgan, John

Goldberg, Norton

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box 1, folder 10

**Cutting the Cube 1957-1958**

**Scope and Contents note**

"On the Optimum Method of Cutting a Rectangular Box into Unit Cubes", by Eugene J. Putzer and R.W. Lowen

box 1, folder 11

**Commuter and Wife 1957-1960**

**Scope and Contents note**

Correspondents:

many

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**Brain Teasers - 2**

**Physical Description:** 7 folder(s)

box 2, folder 10

**1957, November 1957-1958**

**Scope and Contents note**

Nine titillating puzzles (November, 1957)

Also: Matematyczne lamiglowki, by Martin Gardner (in Polish)

box 2, folder 11

**The 6 cigarettes 1957-1992**

**Scope and Contents note**

Correspondents:

Shifman, Jerrald

Rybicki, Geroge & John Reynolds

Shoemaker, David

Burling, Robbins

McCoy, Donald

Gray, John

Ceave, Hweitt

Wierum, Carl

Alt, Franz

Nelson, Harry

Klee, Victor

... and many more

box 2, folder 12

**Sam Loyd's Ferry Boats 1957**

**Scope and Contents note**

Correspondents:

Kayser, R.

Parkinson, Percy

Stevenson, W.S.

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box 2, folder 13

**Electrician and Wire Puzzle 1957**

**Scope and Contents note**

Correspondents:

Gannett, Danforth

Fletcher, John

Hernandez, Rogelio

Burton, J.

Sammel, Goodwin

Katz, Louis

Stein, Phil

Deich, Herbert

Lebau, Louis

Williamson, Donald

Kassel, Louis

Brady, Bryce

Knowlton, Kenneth

... and many more

box 2, folder 14

**The 12 Matches 1957-1965**

**Scope and Contents note**

Correspondents:

Hejl, William

Stover, Mel

Putzer, Eugene

Metz, Hugh

Hoefer, H. Carl

Haynes, L.B.

... and many more

box 2, folder 15

**6 Inch Hole in Sphere 1957-1960**

**Scope and Contents note**

Correspondents:

Edwards, Bernard

Roubicek, Juan

Bethany, David

Job, G. Curtiss

Rappaport, Sigmund

Richards, Irving

Brooke, William

Pratt, John

John, Brother H.

Sholander, Marlow

Buchanan, James

Caffrey, John

box 2, folder 16

**Ford's Problem of the Children and House Number 1957**

**Scope and Contents note**

Correspondents:  
Dubner, Harvey  
Card, William  
Hartwell, Robert

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**Brain Teasers - 3**

**Physical Description:** 4 folder(s)

box 4, folder 2

**1958, August 1958-1973**

**Scope and Contents note**

Correspondents:  
Carter, Geraldine  
Card, L.E.

box 4, folder 3

**Cork Plug 1958-1966**

**Scope and Contents note**

alternate solutions and problems  
Correspondents:  
Cleveland, Forrest  
Hoard, Charles  
Klees, G.W.  
Leary, James  
Carey, Graham  
Robertson, J.S.

box 4, folder 4

**The 3 planes 1958-1991**

**Scope and Contents note**

Correspondents:  
Schlosser, Jon  
Drews, P.  
Phillips, J. and Kesterson, r.  
Fineberg, Mark  
Lerner, Lawrence  
Corbato, F.  
Moruzzi, Hugo

box 4, folder 5

**Triangle Duel (3-way duel) 1958-1997**

**Scope and Contents note**

also: Truel, Triel  
Correspondents:  
Schoenfeld, Gerald (also 3 planes)  
Ford, John  
Funkenbusch, W.  
Kean, Lee  
Schonblom, James  
Kloper, Kenneth

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**Brain Teasers - 4**

**Physical Description:** 2 folder(s)

box 4, folder 20

**1959, May 1958-1959**

**Scope and Contents note**

Absent Minded Teller  
Long Division problem  
Wine and water  
Dividing cake  
Correspondents:  
Richards, Irving  
Bronson, Nathaniel  
Houde, John  
Guskurst, Robin  
Maas, Magela  
Orr, Stanley  
McFarland, David  
Hayashi, Teru  
Gray, Dwight  
Brigham, Robert  
Edgar, David  
Argyle, P.  
Noble, William  
Fletcher, John  
Kneser, H.  
Galvin, Fred

box 4, folder 21

**Desert and Truck 1957-1994**

**Scope and Contents note**

"Problem in Logistics: The Jeep Problem", by Olaf Helmer, Project RAND, RA-15015, 1946  
much analysis  
Correspondents:  
Eisner, Elmer  
Phipps, Cecil  
Swanson, John  
Burchel, Robert  
Gale, David

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**Brain Teasers - 5**

**Physical Description:** 5 folder(s)

box 5, folder 18

**1960, February 1960, 2000**

**Scope and Contents note**

Barr's Belt  
Plane in wind  
Hair color  
(some German references)  
Correspondents:  
Macaluso, Pat  
Killian  
Gaus, Andrew  
Upson, R.  
Lubinski, Robert

box 5, folder 19

**Wife Selection problem [1 of 2] 1958-1960**

**Scope and Contents note**

Numbers on slips of paper - choose highest  
"Googol" game  
various analyses (see correspondents)  
Correspondents:  
Ferguson  
Flood  
Robison  
DeBolt  
Von Nardroff  
Jackson, Robert  
Gaskel, R.  
Adams, Edward N.  
Fox  
Moser, Leo  
Stover, Mel

box 5, folder 20

**Wife Selection problem [2 of 2] 1960-1999**

**Scope and Contents note**

"The Old Maid Problem or When to Accept an Offer", by Robert J. Heppe  
Correspondents:  
Pinkham, Roger  
Heppe, Robert  
Donaldson, Norman

box 5, folder 21

**Courier problem [1 of 2] 1960**

**Scope and Contents note**

Sam Loyd's version of the Courier problem

Running Dog problem

Dog around Cadets problem

(MG notes)

Quartic solutions

Graphical solutions

Correspondents:

Jackson, Robert

Gibson

Edgeworth

Stout

Shepherd

Hinrichs, Ralph

Neare/Rowe

Raynor

Wilsey, Kenneth

Brown, D.

Perkins, E.

box 5, folder 22

**Courier problem [2 of 2] 1960-1963**

**Scope and Contents note**

more analysis, and variations

Correspondents:

Green, D.

Kress, Herbert

Meyer, Weston

Ehrgott, H.

Kerst, Edger

Richards, Irving

Hufstedler, Seth

Meehan, Thomas

Salsburg, David

Keranen, David

Brown, W.Byers

Plice, M.

Stoockly, Robert

Herrington, A.

Younger, F.

Hamann, Jens & Patrick Weidhaas

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**Brain Teasers - 6**

**Physical Description:** 8 folder(s)

box 6, folder 10

**1960, October 1960**

**Scope and Contents note**

Just the article

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box 6, folder 11

**Blue Eyes 1960**

**Scope and Contents note**

problem #6

Correspondents:

Hamilton, Laurens

Brown, Thomas

Kessler, Gilbert

box 6, folder 12

**Game of Hip 1960, 1995**

**Scope and Contents note**

Problem #1

Correspondents:

Merritt, Michael

Templeton, David

Dickensen, Allan

Blechner, Michael & Douglas Garcia

Andree, Richard

Golomb, Solomon

Jordan, William

Vanderpool, Donald

Silverman, David

box 6, folder 13

**Sliced Cube and Torus 1959-1960**

**Scope and Contents note**

Problem #4

Correspondents:

Emerson, E.

Winker, Jean

Bordelon, Derrill

box 6, folder 14

**Switching Puzzle 1960, 1971**

**Scope and Contents note**

Problem #2

Solution in 18 with bottom sliding missing

Flying switch solution

box 6, folder 15

**Track Meet 1960**

**Scope and Contents note**

Short cut solution

box 6, folder 16

**Monad 1960-1961**

**Scope and Contents note**

Problem #5

Other ways to bisect

"Perceptual Analysis of a Symbol of Interaction", by Rudolf Arnheim, Confinia  
Psychiatrica 3/4 (1960)

box 6, folder 17

**Termite 1960**

**Scope and Contents note**

Problem #9

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**Brain Teasers - 7**

**Physical Description:** 4 folder(s)

box 7, folder 5

**1961, June 1961-1962**

**Scope and Contents note**

Letters on Kant's clock problem  
Hexahedron problem  
Rook problem  
Square root problem  
Mountain problem  
Correspondents:  
Hyman, Ray

box 7, folder 6

**Arithmagic Square 1963**

**Scope and Contents note**

Some analysis, and references.

box 7, folder 7

**Toaster Problem 1961-1962**

**Scope and Contents note**

Agricultural Materials Handling Manual, Part 1: Systems Engineering, Seciton 1.1:  
Introduction to Systems Engineering, Printed in Canada, 1962: contains Gantt Chart  
solution (p. 19)  
Correspondents:  
Davis, R.J.  
Marcus, Mitchell  
Dowd, John  
Brouse, Richard  
Johnson, Clark  
Roazen, Harvey  
Schnura, Ronald

box 7, folder 8

**20 Question Problem 1961**

**Scope and Contents note**

"Coding for the Discrete Noiseless Channel", by Solomon Golomb, 1961 (mimegraph)  
Correspondents:  
Golomb, Solomon  
Youngblood, W.  
Zimmerman, Seth  
Johansen, Donald  
Price, Gary

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**Brain Teasers - 8**

**Physical Description:** 5 folder(s)

box 8, folder 3

**1962, February 1962**

**Scope and Contents note**

Article and answers

box 8, folder 4

**Placing 8 Digits 1962-1973**

**Scope and Contents note**

"The No Touch Puzzle and Graphical Complementation", by Frank Harary & Allen J. Schwenk

Correspondents:

Harary, Frank

Gruenberger, Fred

Koplowitz, Herp

Danzer, John

box 8, folder 5

**Lady or Tiger 1961-1962**

**Scope and Contents note**

Correspondents:

Winning, W.C.

Binsack, Joseph

Zeisel, Hans

box 8, folder 6

**6-match Problem 1962, 1973**

**Scope and Contents note**

Correspondents:

Eckhardt, Henry

Hoover, W.

Read, Ronald

Hood, Rodney

Kyrmse, Ronald

box 8, folder 7

**Tennis Match 1962**

**Scope and Contents note**

Correspondents:

Hogan, W.

Ohlin, Goran

Pett, Martin

Carnahan, Paul

Addis, Peter

Gray, Thomas

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**Brain Teasers - 9**

**Physical Description:** 4 folder(s)

box 9, folder 6

**1962, October 1962-1963**

box 9, folder 7

**Archimedes' Crossed Cylinders 1962-1963**

**Scope and Contents note**

3 cylinder case, and other cases

Correspondents:

Sutton, Richard



box 9, folder 8                    **7 File Cards 1962-1963**  
   **Scope and Contents note**  
   Correspondents:  
   Block, James  
   Vanderpool, Donald

box 9, folder 9                    **Floyd's Knob 1962**  
   **Scope and Contents note**  
   Correspondents:  
   Nelson, DeWitte  
   Abbott, Robert

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**Calculating Prodigies**

**Physical Description:** 7 folder(s)

box 18, folder 20                **1967, April 1967**  
   **Scope and Contents note**  
   Various articles.  
   Correspondents:  
   Golomb, Solomon  
   Goodwin, Norris

box 18, folder 21                **William Klein 1967-1976**  
   **Scope and Contents note**  
   Correspondents:  
   Klein, William

box 18, folder 22                **Aitken 1967**  
   **Scope and Contents note**  
   Various articles  
   Correspondents:  
   Aitken, Winifred  
   O'Beirne, Thomas

box 18, folder 23                **Arthur Benjamin 1981**  
   **Scope and Contents note**  
   articles

box 18, folder 24                **Marvelous Griffith 1967**  
   **Scope and Contents note**  
   Arthur F. Griffith: MG notes, article, hand-copy of article

box 18, folder 25                **Willie Dysart 1967**  
   **Scope and Contents note**  
   Articles, letters, photos  
   Correspondents:  
   Roth, David

box 18, folder 26

**Miss. Shakuntala Devi 1977-1993**

**Scope and Contents note**

Newspaper articles, typed bio (by Moe Moss)

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**Calculus of Finite Difference**

**Physical Description:** 3 folder(s)

box 7, folder 13

**1961, August 1961**

**Scope and Contents note**

References, articles

Correspondents:

Gummere, John

box 7, folder 14

**The Necklace Problem [1 of 2] 1960-1961**

**Scope and Contents note**

(from Dudeney)

Golomb's formula

"Equivalence of Cyclic Sequences Under Transformations of the Affine Group", by Robert C. Titsworth

"On Cyclically and Reversibly-Distinct Binary Patterns, and their Application to Memory Coding Systems", by B. Elspas, Stanford Research Institute File Memo 3101, 1960 (mimeo)

Correspondents:

Zeiske, Arnold

Vanderpool, Donald

Szekeres, George

Nadier, Morton

Titsworth, Robert

Pscheidt

Golomb, Solomon

Hobbs, Earl

Elspas, Bernard

box 7, folder 15

**The Necklace Problem [2 of 2] 1961**

**Scope and Contents note**

"Enumeration of the Distinct Cyclic q-ary Code Groups of Length n", by Earl Hobbs, Memo No. 412-AE-1806, McDonnell Aircraft Corporation, 1961 (mimeo)

Correspondents:

Bergman, George

Hobbs, W.W.

Read, Ronald

Isaacs, I. Martin

Harary, Frank

Lorens, Charles

Brown, W.S.

Harter, J.W.

Perkins, Donald

Singmaster, David

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**Cantor's Alephs**

**Physical Description:** 3 folder(s)

box 16, folder 1

**1966, March 1966-1980**

**Scope and Contents note**

Several "flaws" in proof, com  
MG

box 16, folder 2

**Zippin's Problem of Replicating  
1966-1977**

**Scope and Contents note**

Discussion of reproducing fig  
times (Robert Mack, Zippin,

Correspondents:

Mack, Robert

Zippin

box 16, folder 3

**Alephs in Cosmology & Physics**

**Scope and Contents note**

2 articles

Science fiction story "Cantor

Christopher Anvil, "IF", June

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**Card Tricks**

**Physical Description:** 2 folder(s)

box 2, folder 8

**1957, September 1957-1958**

**Scope and Contents note**

Concerning various card tricks with a mathematical message (September, 1957)

Correspondents:

Baily, Joshua

Kroening, Irrwin

box 25, folder 11

**1972, July 1972-1975**

**Scope and Contents note**

"Color Scheme", by Oscar Weigle (reprint)

"Double Cross" by George Sands (lecture notes)

"Oil and Water" by Ed Marlo (photocopy)

"Mantra" (4 page newsletter, 1975), Ed: Sam Dalal

"Upsy Downsy" in letter from "Ron" (no last name)

Correspondents:

Sargeant, Peter

Cohen, Edward

Eto, Jukji

Marlo, Edward

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**Cards**

**Physical Description:** 8 folder(s)

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box 20, folder 4

**1968, June 1977-1999**

**Scope and Contents note**

Shuffling.

Baker's Game (original of Free Cell)

Copy of Russian Translation fo article

Correspondents:

Ondrejka, Rudolf

Barry ??

box 20, folder 5

**Baker's Card Solitaire Game 1967-1983**

**Scope and Contents note**

Correspondents:

Baker, C.L.

box 20, folder 6

**Unsolvable Order-1 Games (& Orders 1, 3, 4) 1967-1968**

**Scope and Contents note**

Correspondents:

Shepherd, Wilfred H.

Hutton, Trevor

Kew, Thomas

Charosh, Mannis

box 31, folder 3

**1974, November 1974-1975**

**Scope and Contents note**

Correspondents:

Wilf, Herbert

box 31, folder 4

**Conway's Botdrops - etc. 1974-1975**

**Scope and Contents note**

Conway games: Botdrops, Topswops, Botswops

Correspondents:

Conway, John

Wilf, Herbert

Silver, Roland

box 31, folder 5

**Silverman Problem 1974**

box 31, folder 6

**Motel Problem (Permuting Adjacent Digits) 1974**

box 31, folder 7

**Ransom's 5 Card Problem 1974-1975**

**Scope and Contents note**

Correspondents:

Rason, Peter

Stover, Mel

Ransom, Tom

Selfridge, Oliver

Weinrich, James

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**Carnival Games**

**Physical Description:** 3 folder(s)

box 4, folder 17

**1959, April 1958-1997**

**Scope and Contents note**

Lebesgue's Minimal area problem

Spot the spot

Coffee & cream problem (cooling the coffee)

Doughnuts and coffee

Cover the Spot (including small physical game in envelop)

Correspondents:

Smith, J.H.

Mallery, Larry

Confort, Edwin

Achener, Pierre

Gridgeman, Norman

DeBra, Daniel

Alberts, Alan

Speiser, A.

Wilder, John

box 4, folder 18

**3-Dice Game 1959**

**Scope and Contents note**

"canned" response from MG, explaining the odds.

Correspondents:

Smith, Howard

box 4, folder 19

**Sliced Torus 1959-1973**

**Scope and Contents note**

Correspondents:

Jones, Alan

Gould, Richard (analysis)

Massey, Dan (generalized to higher dimensions)

Palmquist, Paul (analysis)

Hall, David (analysis)

Martin, Paul

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**Catalan Numbers**

**Physical Description:** 5 folder(s)

box 36, folder 13

**1976, June 1976**

**Scope and Contents note**

No article

Polygons to triangle's, etc (folder subtitle)

"Correspondences Between Some Sets Counted by the Catalan Numbers", by David Singmaster (typescript)

Correspondents:

Meyers, William

Eckler, Ross

Daly, William

Gould, Henry

Singmaster, David

Hoggatt, Vernon

box 36, folder 14

**Catalan's in General 1967-1976**

**Scope and Contents note**

Many examples

"Numbers of Things", by Frank Bernhart (chapt. 4 of Thesis) (typescript)

Correspondents:

Knuth, Donald

Gould, Henry

Nozaki, A.

box 36, folder 15

**Catalans & Trees 1976**

**Scope and Contents note**

Various articles

Correspondents:

Meyers, William

box 36, folder 16

**Catalan Applications 1975-1976**

**Scope and Contents note**

Articles and letters of applications

box 37, folder 1

**Catalan Structures & Correspondences 1977**

**Scope and Contents note**

Thesis, by Michael J. Kuchinski, B.S., 1977, Graduate School, West Virginia University

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**Checkers**

**Physical Description:** 7 folder(s)

box 50, folder 1

**1980, January 1979-1996**

**Scope and Contents note**

Incomplete article.

Many MG notes.

Correspondents:

Beckerson, Alan

Schaeffer, Jonathan

box 50, folder 2

**Sucker Bets 1979**

**Scope and Contents note**

Correspondents:

Stover, Mel

box 50, folder 3

**Checkers - Histor & Variants 1979**

box 50, folder 4

**John Rogers 1979**

box 50, folder 5

**Computer Checker Programs 1979-1996**

**Scope and Contents note**

MG Notes on phone talk with Bierman, about PAASLOW.

Also contains basic checkers rules.

Correspondents:

Tinsley, Marion

Granjean, Burke

box 50, folder 6

**Brown's Interchange undated**

**Scope and Contents note**

Correspondents:

Harris, John

box 50, folder 7

**No-Capture Shortest Games 1979-1980**

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**Chess "Task" problems**

box 25, folder 7

**1972, May 1961-2000**

**Scope and Contents note**

"Solution of a Chessboard Configuration Problem", by G.E.Peterson (typescript)

Correspondents:

Liu, Andy

Cohen, Philip

Moss, Moe

Peterson, G.E.

Row, Thur (Mort Luebbert)

Nelson, Harry

Harris, John

Charosh, Mannis

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**Chess Problems**

**Physical Description:** 6 folder(s)

box 48, folder 5

**1979, June 1979**

**Scope and Contents note**

Joke mate - alternate solutions.

box 48, folder 6

**Unattached SuperQueens (Amazons) [1 of 2] 1979**

**Scope and Contents note**

Correspondents:

Chandra, Ashok

Knuth, Donald

Kahn, David

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box 48, folder 7

**Unattached SuperQueens (Amazons) [2 of 2] 1965-1980**

**Scope and Contents note**

Proofs for (rest of) non-attacking superqueens problem.

Correspondents:

Chandra, Ashok

Pappinghaus, P.

Reineke, J.

Zimmerman, Charles

box 48, folder 8

**Pandiagonal Latin Squares 1972-1977**

**Scope and Contents note**

Notes (by Donald Knuth and Dorothy Webb) on number of solutions of "Quintessence" puzzle.

"Construction of Knut Vik Designs", by A. Atkin, L. Hay & R. Larson (typescript)

"Enumeration and Construction of Pandiagonal Latin Squares of Prime Order", by A. Atkin, L. Hay & R. Larson (typescript)

Correspondents:

Knuth, Donald

Webb, Dorothy

Hay, Louise

Eves, Howard

box 48, folder 9

**Reflecting Queen Problem 1963-1980**

**Scope and Contents note**

Correspondents:

Klarner, David

Guy, Richard

Upton, Leslie

McIntosh, Richard

box 48, folder 10

**"Chromatic No." of Boards undated**

**Scope and Contents note**

Notes and a couple of articles

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**Chessboard Puzzles**

**Physical Description:** 3 folder(s)

box 9, folder 10

**1962, November 1962**

**Scope and Contents note**

Just the article

box 9, folder 11

**Halving the Board 1962-2000**

**Scope and Contents note**

Various calculations and corrections

Correspondents:

Marlow, Tom

Maas, Robert

McCarthy, John



box 9, folder 12

**Quartering the Board 1962-1968**

**Scope and Contents note**

Correspondents:

Patten, William

Moore, John

Grindley, W.H.

Fowler, Bruce

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**Chinese Puzzles & Berrocal**

**Physical Description:** 6 folder(s)

box 43, folder 4

**1978, January 1978-1988**

**Scope and Contents note**

Some photo's of puzzles

Edited typescript of article (photocopy)

box 43, folder 5

**Berrocal [ 1 of 3 ] undated**

**Scope and Contents note**

Contact prints of many Berrocal sculptures (black & white)

box 43, folder 6

**Berrocal [ 2 of 3 ] undated**

**Scope and Contents note**

"Catalogo General / obras recientes 1974" - Berrocal booklet

box 43, folder 7

**Berrocal [ 3 of 3 ] 1977-1979**

**Scope and Contents note**

Catalogs, etc, from Centicore Arts, Internatational and Arnoold Katzen Gallery

Correspondents:

Berrocal, Miguel

Rudolph, James

Flanagan, Dennis

box 43, folder 8

**Burr Enumeration [1 of 2] 1977-1996**

**Scope and Contents note**

Bill Cutler's annual newsletter & catalogs

Correspondents:

Slocum, Jerry

Cutler, William

Cross, Arthur

box 43, folder 9

**Burr Enumeration [2 of 2] undated**

**Scope and Contents note**

2 booklets by Bill Cutler: "A Computer Analysis of All 6-piece Burrs" (1994), "Holey 6-Piece Burr!" (1986)

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**Church of the 4-D**

**Physical Description:** 2 folder(s)

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box 8, folder 1

**1962, January 1962-1999**

**Scope and Contents note**

Fourth Dimension

(See folder on 4th dimension and higher spaces)

(Also folder on Hypercubes (1966))

Correspondents:

MG father

Casey, Graham

Stover, Mel

box 8, folder 2

**The Plaited Leather Strip 1962**

**Scope and Contents note**

Including some leather examples

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**Coincidences**

box 25, folder 17

**1972, October 1967-1972**

**Scope and Contents note**

Correspondents:

Rowe, R.Robinson

Bronowski, Judith

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**Color Triangles, Squares**

**Physical Description:** 4 folder(s)

box 6, folder 24

**1961, March 1961-1977**

**Scope and Contents note**

MacMahon Squares

W.H.Freeman ad using MacMahon Squares

Wade Philpott on MacMahon's Three-color Squares

box 6, folder 25

**Polymerase Game 1974-1979**

**Scope and Contents note**

(2 color squares)

Game invented and discribed by Lasse Winqvist

box 6, folder 26

**Nelson's 24-Tile Game 1972**

**Scope and Contents note**

Description, variations, strategy

Correspondents:

Nelson, Harry

box 7, folder 1

**The 30 Color Cubes 1963-1969**

**Scope and Contents note**

Westerind letter has much analysis

Correspondents:

Carley, J.F.

Westerind, L.G.

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**Combinatorial Math**

**Physical Description:** 3 folder(s)

box 11, folder 1

**1963, August 1963-1967**

**Scope and Contents note**

Column, references

box 11, folder 2

**Stamp Square 1963-1987**

**Scope and Contents note**

Correspondents:

Babcock, Richard

Dunsay, George

box 11, folder 3

**Computer Proofs of Hexagon 1963-1987**

**Scope and Contents note**

Correspondents:

Daly, William

Hansen, Wilfred

Linderson, G.W.

Kierstead, Friend

Wagner, Victoria

Pearlman, Robert

Shimshoni, M.S.

Mattheras, Elsie

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**Communication with Extraterrestrial Life**

**Physical Description:** 4 folder(s)

box 14, folder 19

**1965, August [1 of 2] 1965-1967**

**Scope and Contents note**

Project Ozma, etc

"Extraterrestrial Linguistics", by Solomon Golomb, 1961 (Reprint fomr Astronautics, 6/5, May 1961)

Correspondents:

Golomb, Solomon

Hein, Piet

box 14, folder 20

**Communication with Extraterrestrial Life [2 of 2] undated**

**Scope and Contents note**

articles, newsprint

box 14, folder 21

**Mars & Extraterrestrial Communication 1965-1966**

box 14, folder 22

**Bell's Problem 1964**

**Scope and Contents note**

Correspondents:

Field, Mary K. (Mrs. Richard T.)

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**Conway Biz (Surreal Nos)**

**Physical Description:** 2 folder(s)

box 37, folder 7

**1976, September 1959-1976**

**Scope and Contents note**

Partial column.

Prime Nim, Prim, Welter's game

Correspondents:

Conway, John

Shannon, Claude

Barnet, Alan

Hein, Piet

Ulam, Stanislav

box 37, folder 8

**Knuth's Surreal Numbers & On Conway's Constructions 1974**

**Scope and Contents note**

Correspondents:

Halmos, Paul

Knuth, Donald

Berlekamp, Elwyn

Kruskal, Martin

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**Conway's "Game of Life"**

box 23, folder 5

**1970, October undated**

**Scope and Contents note**

Only some pieces from the article (others cut out.)

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**Conway's Life II**

box 23, folder 14

**1971, February 1970**

**Scope and Contents note**

Incomplete article, single letter.

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**Cooks**

**Physical Description:** 3 folder(s)

box 16, folder 11

**1966, May 1961-1966**

**Scope and Contents note**

Correspondents:

Wheeler, D.H.

Panea, Manuel

Macaluso, Pat

box 16, folder 12

**Dudene's 15-Turn Rook Tour Problem 1966**

**Scope and Contents note**

Many solutions.  
Analysis by Wilfred Shepherd.  
Correspondents:  
Shepherd, Wilfred H.

box 16, folder 13

**Hunter & Bear Problem 1966**

**Scope and Contents note**

Correspondents:  
Schwartz, Benjamin  
Bay, John  
Andrews, P.B.S.

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**Coxeter**

**Physical Description:** 2 folder(s)

box 7, folder 2

**1961, April 1960-1961**

**Scope and Contents note**

Many letters from Coxeter  
Correspondents:  
Coxeter, H.S.M.

box 7, folder 3

**Morley's Theorem 1943-1999**

**Scope and Contents note**

Many articles (mostly proofs) on Morley's theorem

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**Crossing Numbers**

**Physical Description:** 2 folder(s)

box 27, folder 5

**1973, June [1 of 2] 1962-1982**

**Scope and Contents note**

"Ensnaring the Elusive Eodermdrome", by Gary S. Bloom (photocopy) (from Word Ways)  
Various articles  
Correspondents:  
Harary, Frank  
Miller, Donald  
Basin, Stan  
Steindel, Charles

box 27, folder 6

**Crossing Numbers [2of 2] 1973-1991**

**Scope and Contents note**

Correspondents:  
Sheratte, Martin  
Williams, Leo  
Singer, David  
Guy, Richard  
Hill, Anthony

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**Csaszar Polyhedron**

**Physical Description:** 4 folder(s)

box 32, folder 18

**1975, May 1972-1986**

**Scope and Contents note**

Incomplete article

Papers on Steiner Triple Systems, Steiner Quadruple Systems, etc, including (photocopy of) Csaszar article.

Correspondents:

Crowe, Donald

Stewart, Bonnie

Frederickson, Greg

box 32, folder 19

**Room Squares undated**

**Scope and Contents note**

A type of magic square, by T.G. Room

Various articles on Room Squares

Correspondents:

Crowe, Donald

Mullin, Ronald

box 32, folder 20

**Schmucker's Toroid Rings 1975**

**Scope and Contents note**

Toroid rings: 8 octahedra, 8 dodecahedra, 8 icosahedra (and photos of them)

Correspondents:

Coxeter, H.S.M.

Stewart, Bonnie

Schmucker, Kurt

box 32, folder 21

**Hadamard Matrices 1975-1986**

**Scope and Contents note**

Several articles

"Higher-Dimensional Hadamard Matrices", by Paul Shlichta (typescript)

Correspondents:

Sloane, N.J.A.

Golomb, Solomon

Shlichta, Paul

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**Cyclic No's**

**Physical Description:** 6 folder(s)

box 22, folder 15

**1970, March 1986**

**Scope and Contents note**

Articles & MG notes

Correspondents:

Golomb, Solomon

box 22, folder 16

**Shortcuts in Identifying & Computing 1970**

**Scope and Contents note**

Correspondents:

Yates, Samuel

box 22, folder 17

**142857 As Magic Trick 1955-1959**

**Scope and Contents note**

(Cylies in Magic & Light. Calc) [must mean cycles]

"Die Magische Roulette" (Magic trick)

Correspondents:

Van Klaveren, F.W.

box 22, folder 18

**Cyclics in Other Base Systems 1970**

**Scope and Contents note**

Correspondents:

Koehl, Frederick

Ferguson, Shaun

box 22, folder 19

**Higher Order Cycles 1968-1990**

**Scope and Contents note**

"A Pre-Eminent Decimal", by C.C. Corbet (typescript)

box 22, folder 20

**Cyclic "Magic" Squares 1975, 1978**

**Scope and Contents note**

"Peculiarities of Prime Numbers", by John Ward (typescript)

Correspondents:

Card, L.E.

Ward, John

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**Cycloid**

box 13, folder 9

**1964, July 1964**

**Scope and Contents note**

History discussion (Pascal vs Torricelli) by Alexandre Rothan

Correspondents:

Rothan, A.

Miller, Julius

White, Robert

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**Diag's of Algebraic Identities**

**Physical Description:** 2 folder(s)

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box 27, folder 11

**1973, October (2D&3D) 1973**

**Scope and Contents note**

"Look-See" Proofs

Diagrams of Algebraic Identities (now called "Proofs Without Words")

No article

Lots of MG notes

Correspondents:

McIntosh, Alistair

O'Beirne, Thomas

Smith, Cedric

box 27, folder 12

**33+43+53=63 Dissection (Wheeler, Duffy, etc) 1973-1994**

**Scope and Contents note**

Correspondents:

Duffy, Emmet

O'Beirne, Thomas

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**Dice**

box 20, folder 15

**1968, November undated**

**Scope and Contents note**

Just article (and references)

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**Digital Roots**

box 4, folder 1

**1958, July 1954-1974**

**Scope and Contents note**

"Some diverting tricks which involve the concept of numerical congruence"

number tricks

magic trick: "Remembering the Future", by Stewart James

Correspondents:

Rupert, John

James, Stewart

Eliasberg, Jay

McCracken, Daniel

Buky, Anne

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**Digraphs**

box 50, folder 9

**1980, March 1980-1996**

**Scope and Contents note**

Incomplete article.

Correspondents:

Harary, Frank

Parley, Richard



**Diophantine Analysis**

box 22, folder 27

**1970, July undated**

**Scope and Contents note**

Just article

---

**Dissection Problems**

**Physical Description:** 2 folder(s)

box 7, folder 24

**1961, November 1961-1968**

**Scope and Contents note**

Correspondents:

Gilson, Bruce

Lindgren, Harry

Beyer, William

Egan, Catherine

Grover, William

Van De Sande, Leo

box 7, folder 25

**Lindgren Material 1961-1964**

**Scope and Contents note**

Much correspondence between Gardner and Lindgren, many dissections

Correspondents:

Lindgren, Harry

Eves, Howard

---

**Dividing Figures into n Equal Parts**

**Physical Description:** 5 folder(s)

box 40, folder 10

**1977, July 1976-1977**

**Scope and Contents note**

No article

Lots of MG notes

Correspondents:

Von Meyenfeldt, Carl

box 40, folder 11

**The 3,4,5 Triangle Quartering 1977**

**Scope and Contents note**

Correspondents:

Von Meyenfeldt, Carl

Phipps, Cecil

box 40, folder 12

**Trisection & Quadrature Puzzles 1984-1985**

**Scope and Contents note**

Correspondents:

Golomb, Solomon

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box 40, folder 13

**Bisection Puzzles 1977-1985**

**Scope and Contents note**

Lots of examples

Correspondents:

Golomb, Solomon

Shortz, Will

Berloquin, Pierre

box 40, folder 14

**Bisection Puzzles (Theory) 1977-1978**

**Scope and Contents note**

Correspondents:

Vinokur, Marcel

Ward, Coburn

Knuth, Donald

---

**Divisibility Rules**

**Physical Description:** 2 folder(s)

box 9, folder 4

**1962, September 1962-1999**

**Scope and Contents note**

Lots of (short) articles

box 9, folder 5

**On division by 7 1962-1977**

**Scope and Contents note**

Correspondents:

Kassel, Louis

Merrill, R.

Charosh, Mannis

Lyons, Vosburgh (VOS)

Golomb, Solomon

Chodosch, Robert

Becker, Joseph

Fairbairn, R.

---

**Dollar Bills**

box 20, folder 2

**1968, April 1955-1985**

**Scope and Contents note**

Correspondents:

Heath, Royal

Lyons, Vosburgh (VOS)

Duncan, Fred

---

**Dominoes**

**Physical Description:** 3 folder(s)

box 22, folder 7

**1969, December 1969**

**Scope and Contents note**

No article

"Domino Triplets: A General Solution", by Wade Philpott (typescript)

"Dominoes", by Professor Hoffmann, 1899 (photocopy)

Correspondents:

Philpott, Wade

Card, L.E.

Pijanowski, Lech

Brooke, Maxey

box 22, folder 8

**Domino Magic Squares 1969-1970**

**Scope and Contents note**

Long analysis by Peter Roeder

Correspondents:

Philpott, Wade

box 22, folder 9

**Straight Chains & Bracelets 1969**

**Scope and Contents note**

Correspondents:

Trigg, Charles

---

**Double Acrostics**

**Physical Description:** 2 folder(s)

box 19, folder 10

**1967, September 1967**

**Scope and Contents note**

Article

Correspondents:

Borgmann, Dmitri

box 19, folder 11

**Carroll's D-Acrostic 1966-1968**

**Scope and Contents note**

Many suggestions

Correspondents:

Rowe, R.Robinson

Borgmann, Dmitri

---

**Doug Hofstadter**

**Physical Description:** 2 folder(s)

---

box 48, folder 11

**1979, July [1 of 2] 1978-1983**

**Scope and Contents note**

Scott Kim's summary of GEB.

Doug Hofstadter's summary of GEB.

Doug Hofstadter's comments & corrections of the first draft of the column

Correspondents:

Kim, Scott

Hofstadter, Douglas

box 48, folder 12

**Doug Hofstadter [2 of 2] 1979**

**Scope and Contents note**

More Hofstadter comments for the column.

"Setting Dinner to Music", a Culinary Offering, by Dorothy Denning (typescript):

description of a dinner in the style of A Musical Offering, inspired by Hofstadter's book.

Various reviews of GEB.

Correspondents:

Kim, Scott

Hofstadter, Douglas

Denning, Dorothy

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**Dr. Matrix**

**Physical Description:** 3 folder(s)

box 11, folder 23

**1964, January 1964**

**Scope and Contents note**

Just the column

box 11, folder 24

**Four 4's (and n Fours) [1 of 2] 1964**

**Scope and Contents note**

MANY solutions

Correspondents:

Lindgren, Harry

box 11, folder 25

**Four 4's (and n Fours) [2 of 2] 1964-1976**

**Scope and Contents note**

MANY solutions

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**Dr. Matrix - 5**

**Physical Description:** 3 folder(s)

box 14, folder 1

**1965, January 1965-1968**

**Scope and Contents note**

Correspondents:

Glasheen, Adaline

Cheney, Fitch

---

box 14, folder 2

**Self-Replication Digits & Kaprekar's "6174" 1965-1987**

**Scope and Contents note**

Methods of solving the 4-digit puzzle

Correspondents:

Schaaf, William

Card, L.E.

Arnold, T.E.

box 14, folder 3

**Ruler Problems 1964-1998**

**Scope and Contents note**

Correspondents:

Vaughan, Herbert

Haubrich, Richard

Van Touren, A.

Hodgart, Mathew

Leech, John

---

**Dr. Matrix - Earthquake Column**

**Physical Description:** 3 folder(s)

box 43, folder 1

**1977, December 1971-1978**

**Scope and Contents note**

Computer printout of names of numbers, 0-999, alphabetical

"Alphabetic Number Tables 0-1000", 1972 (MIT) - numbers and Roman Numerals (booklet)

Correspondents:

Mercer, Leigh

box 43, folder 2

**Festoons 1977**

**Scope and Contents note**

Correspondents:

Kierstead, Friend

box 43, folder 3

**Punk Rock undated**

**Scope and Contents note**

Lots of newspaper articles on Punk (the music and the people)

---

**Dr. Matrix - ESP Test**

box 27, folder 8

**1973, August undated**

**Scope and Contents note**

Correspondents:

Newman, James R.

---

**Dr. Matrix - Numerology**

box 5, folder 17

**1960, January 1958-1962**

**Scope and Contents note**

Correspondents:

Halsey, Eric

Winters, M.

March, Georgianna

Lindgren, Harry

Dernham, Monte

Melton, John

---

**Dr. Matrix - Sing Sing**

box 9, folder 15

**1963, January 1963**

**Scope and Contents note**

Just the article, plus clipping on sing-sing.

---

**Dr. Matrix - The Moon Landing, etc.**

**Physical Description:** 5 folder(s)

box 22, folder 1

**1969, October 1969-1974**

box 22, folder 2

**Prob. of Points on Sphere 1969**

**Scope and Contents note**

Correspondents:

Coxeter, H.S.M.

Goldberg, Michael

box 22, folder 3

**ABCDE x 7 = FGHIJ (SPIRO x 7 = AGNEW) 1969-1972**

**Scope and Contents note**

Correspondents:

Trigg, Charles

box 22, folder 4

**Reverse Months & Fri. 13 1969-1981**

box 22, folder 5

**On 1969 1969**

**Scope and Contents note**

Correspondents:

Mosteller, Frederick

Knuth, Donald

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**Dr. Matrix & D.M.**

**Physical Description:** 2 folder(s)

---

box 37, folder 14

**1976, November 1976-1999**

**Scope and Contents note**

No article. "D.M.": Digital Meditation.  
(Also mentions "P.M." for Pentagonal Meditation.  
Spherical Trigonometry and "QWuints".  
Many letters from Sam Dalal  
Correspondents:  
Dalal, Sam  
Bostrom, Robert

box 37, folder 15

**On Calcutta undated**

**Scope and Contents note**

Clippings & articles on Calcutta.

---

**Dr. Matrix & Pyramid**

**Physical Description:** 7 folder(s)

box 30, folder 2

**1974, June 1974**

**Scope and Contents note**

Various travel info on Pyramid Lake

box 30, folder 3

**Numbering -the-Pyramid problem 1974**

**Scope and Contents note**

Correspondents:  
Gutgasz, Hiram Fuller

box 30, folder 4

**Readers Who Took Column Seriously 1974**

**Scope and Contents note**

Mail to SA & MG, as well as replies from both MG and publishers

box 30, folder 5

**Pyramid Guide 1974**

**Scope and Contents note**

A Bi-Monthly newsletter, issues 7-10,12-13, plus "First Year Annual 1972-1973" (bound issues 1-6)

box 30, folder 6

**Pyramid-Canada undated**

**Scope and Contents note**

Mostly newspaper articles on sports team using pyramid power

box 30, folder 7

**Pyramid Power [1 of 2] 1973-1975**

**Scope and Contents note**

Lots of newspaper articles, ads, research  
Correspondents:  
Roosevelt, Cornelius Van S.

box 30, folder 8

**Pyramid Power [2 of 2] 1976**

**Scope and Contents note**

Correspondents:  
Ebon, Martin

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**Dr. Matrix Chess Game**

box 23, folder 13

**1971, January 1969-1971**

**Scope and Contents note**

Matrix # 11

No article

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**Dr. Matrix III**

**Physical Description:** 2 folder(s)

box 6, folder 21

**1961, January 1961-1970**

**Scope and Contents note**

Antimagic squares

box 6, folder 22

**Miss T's Phone No 1961**

**Scope and Contents note**

Moving digits from one end of a number to the other (transposing end digit)

Correspondents:

Hastings, Don

---

**Dr. Matrix in Houston (Perpetual Motion)**

box 24, folder 20

**1972, February 1971**

**Scope and Contents note**

Matrix # 12

Correspondents:

Soph, Bing

---

**Dr. Matrix in Istanbul**

**Physical Description:** 3 folder(s)

box 51, folder 11

**1980, September 1976-1980**

**Scope and Contents note**

Incomplete article.

Correspondents:

Knuth, Donald

Nelson, Harry

Goodman, Gary

Morton, E.

Buhler, Joe

box 51, folder 12

**Istanbul 1980**

**Scope and Contents note**

Many newspaper articles on Istanbul.

Letters correcting geography & language mistakes in column.

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box 51, folder 13

**Trisections of the Cube 1980**

**Scope and Contents note**

Infinite number of trisections.

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**Dr. Matrix in Squaresville**

**Physical Description:** 3 folder(s)

box 19, folder 20

**1968, January 1968-1977**

box 19, folder 21

**Hippies 1968**

**Scope and Contents note**

Many newspaper articles

box 19, folder 22

**Buttons 1968**

**Scope and Contents note**

Various "short quotes" and pictures for buttons, ads, pictures.

---

**Dr. Matrix on Bible**

**Physical Description:** 2 folder(s)

box 33, folder 18

**1975, September 1971-1976**

**Scope and Contents note**

Letters to the editor from later issues

Early typescript of article

Correspondents:

Flanagan, Dennis

**Subjects and Indexing Terms**

Van Roosevelt, Cornelius

box 33, folder 19

**Bible & Word Play 1974-1975**

**Scope and Contents note**

Many notes from Dmitri Borgmann on number & word play in the bible

Correspondents:

Borgmann, Dmitri

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**Dr. Matrix's Robot**

**Physical Description:** 5 folder(s)

box 46, folder 13

**1978, December 1977-1979**

**Scope and Contents note**

No article.

Djinni robot, and ROBOT program

Correspondents:

Walker, Jearl

---

box 46, folder 14

**Kt Switch 1978-1979**

**Scope and Contents note**

Problems exchanging knight (on a chessboard and smaller)

Mauldon's variants (on knight exchange)

Correspondents:

Mauldon, James

Schwartz, Benjamin

box 47, folder 1

**NKST 1978**

**Scope and Contents note**

Words with the letters "NKST" in the middle.

box 47, folder 2

**1/3 Chinese 1978-1979**

**Scope and Contents note**

Can one be 1/3 Chinese?

box 47, folder 3

**Soc. Sec. No. 1978-1979**

**Scope and Contents note**

9-digit number, where product of first n digits is divisible by n, for all n 1-9.

---

**Dudenev**

**Physical Description:** 5 folder(s)

box 3, folder 11

**1958, June 1958-1962**

**Scope and Contents note**

Correspondents:

Glasheen, Adaline

Verbeek, C.C.

box 3, folder 12

**Mrs. Fulleylove & Diary 1960-1977**

**Scope and Contents note**

Margery Fulleylove, Dudenevs' daughter

James Fulleylove, his grandson

Alice Dudenev, wife of Henry, kept a diary, but it is not available. It has been "closed" until 2000.

box 3, folder 13

**Angela Newing 1981-1988**

**Scope and Contents note**

Dudenev expert

box 3, folder 14

**Dudenev Scrapbook, Vol I 1972-1986**

**Scope and Contents note**

Photocopies of scrapbook, containing articles, 1895--1908

box 3, folder 15

**Dudenev Scrapbook, Vol II 1972**

**Scope and Contents note**

Photocopies of scrapbook, containing articles, 1909-1915(?)

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**"e" & Catenary**

**Physical Description:** 7 folder(s)

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box 7, folder 17

**1961, October 1960-1999**

**Scope and Contents note**

'e', the exponential constant

Mostly articles on 'e'

Correspondents:

O'Shea, Owen

box 7, folder 18

**Catenary and Tractrix Curve 1959-1998**

**Scope and Contents note**

notes, articles

Correspondents:

Johansson, Torbjorn

box 7, folder 19

**Rational Fractions for 'e' 1961-1994**

**Scope and Contents note**

Correspondents:

Hendrick, L.

Feldman, John

Clamage, Allan

Lewis, Donald

Patton, Robert

Brown, George

Heitz, Robert

Lassen, Herbert

Fuchs, Helmut

box 7, folder 20

**Mnemonics for 'e' 1957-1966**

**Scope and Contents note**

Correspondents:

Boucher, Claude

Angrick, Warren

Nottingham, R.

Guiteris, Joseph

Jarnagin, William

Sanet, Morton

Brooke, Maxey

Conklin, Edward

Krall, Al

Stand, M.

Greene, John

Swenson, Richard

Duncan, Fred

Widhoff, Gene

Keast, F.

Mage, David

Gianino, Peter

Gruenberger, Fred

Kerslake, R.

McKiggan, I.

Smiley, Richard

box 7, folder 21

**Curious Problems & Formulas Involving e 1961**

**Scope and Contents note**

Correspondents:

Isaacs, I. Martin

Moser, Leo

Heiting, Ted

box 7, folder 22

**Hatcheck Problem (or Matching Cards) undated**

**Scope and Contents note**

Unsigned, undated typescript "To Be Solved With Ease"

box 7, folder 23

**Decimal Expansion of e 1965**

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**Eggs**

**Physical Description:** 2 folder(s)

box 50, folder 10

**1980, April 1980-1997**

**Scope and Contents note**

No article.

Maxwell's Ovals

box 50, folder 11

**Letters on Egg & Bottle 1980**

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**Eleusis II**

**Physical Description:** 5 folder(s)

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box 42, folder 1

**1977, October 1977-2001**

**Scope and Contents note**

Incomplete article.  
Varios other rules suggested.  
Correspondents:  
Abbott, Robert

box 42, folder 2  
box 42, folder 3

**Papers on Eleusis 1980-1981**  
**Research on Eleusis 1966-1982**

**Scope and Contents note**

Several of Robert Abbott's newsletters  
Correspondents:  
Jaworski, John  
Newman, J.Robert  
Abbott, Robert  
Dietterich, Thomas

box 42, folder 4

**Delphi (Kruskal) 1962-1977**

**Scope and Contents note**

Copies of correspondance between Robert Abbott & Martin Kruskal  
Correspondents:  
Kruskal, Martin  
Sackson, Sid

box 42, folder 5

**Pensari 1985**

**Scope and Contents note**

Induction games by Robert Katz  
Correspondents:  
Katz, Robert

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**Elevators**

box 26, folder 6

**1973, February 1972-1973**

**Scope and Contents note**

Correspondents:  
Knuth, Donald  
Sherin, Richard  
Holmes, Robert  
Golomb, Solomon

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**Ellipse**

box 6, folder 23

**1961, February 1961-1999**

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**ESP Machines - SRI (NASA)**

**Physical Description:** 5 folder(s)

- box 34, folder 1                   **1975, October 1975-1976**  
  **Scope and Contents note**  
  Correspondents:  
  Hoppe, Richard  
  Diaconis, Persi  
  Deutsch, Ronald  
  Jones, Earle
- box 34, folder 2                   **Development of Techniques ... 1974**  
  **Scope and Contents note**  
  "Development of Techniques to Enhance Man/Machine Communication", by Russell Targ, Phyllis Cole, and aHarold Puthoff - Final Report for JPL, SRI Project 2613, Aug. 1974 (Technical Report)
- box 34, folder 3                   **Targ's ESP Machine undated**  
  **Scope and Contents note**  
  Model 100A ESP Teaching Machine, Instruction Manual, from Aquarius Electronics (Manual)
- box 34, folder 4                   **Letters From Parapsychologists (P&T, Tart, Cole, Schneider) 1975-1976**  
  **Scope and Contents note**  
  Correspondents:  
  Elgin, Duane  
  Cole, Phyllis  
  Puthoff, Harold  
  Targ, Russell  
  Schmeidler, Gertrude  
  Tart, Charles
- box 34, folder 5                   **ESP Testing Machines 1975**  
  **Scope and Contents note**  
  Reviews & ads of some machines  
  "Testing for Extrasensory Perception With a Machine", by William Smith et.al., Air Force Cambridge Research Labs, Data Sciences Lab Project 4610, May, 1963 (Research Report)  
  Correspondents:  
  Scully, Tim (Aquarius Electronics)  
  Honorton, Charles

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**Everything**

- box 36, folder 12                 **1976, May 1976**  
  **Scope and Contents note**  
  Note (What is There?) by (or from ) Smullyan  
  Correspondents:  
  Knuth, Donald  
  Tompkins, Robert
-

**Factorials**

**Physical Description:** 3 folder(s)

box 19, folder 7

**1967, August 1989**

**Scope and Contents note**

article (incomplete)

box 19, folder 8

**R. E. Smith [1 of 2] 1967**

**Scope and Contents note**

Original Robert Smith article on which the column was based, with correspondence.

Correspondents:

Smith, Robert

Flanagan, Dennis

box 19, folder 9

**R. E. Smith [1 of 2] undated**

**Scope and Contents note**

Computer printouts of factorials in patterns

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**Fallacies**

box 3, folder 1

**1958, January 1889-1984**

**Scope and Contents note**

photocopy: Current Literature, April, 1889 "The Ten Travellers"

Correspondents:

Mooney, John

Allen, Ralph

---

**Fibonacci Numbers**

box 21, folder 6

**1969, March undated**

**Scope and Contents note**

Just the article.

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**Fingers**

**Physical Description:** 3 folder(s)

box 20, folder 10

**1968, September 1968-2000**

**Scope and Contents note**

Correspondents:

Ring, Ken

box 20, folder 11

**Finger Multiplication undated**

**Scope and Contents note**

MG notes.

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box 20, folder 12

**Counting & Number Bases 1958-1968**

**Scope and Contents note**

Story: "How to Count on Your Fingers", by Fred Pohl

Article: "Mathematics and the Folkways", by Martin Gardner, in *Journal of Philosophy*, 47/7, March 1950

Mnemonic for Pi in base 8 (in Knuth letter)

Correspondents:

Pohl, Frederick

Knuth, Donald

---

**Flatland & Hilton**

box 9, folder 1

**1962, July 1961-1981**

**Scope and Contents note**

"Do We Have a Two-Dimensional View of Crime and Deviance?" by Karen Paldan

Biography of C.H. Hinton, by T. Weston

Correspondents:

Coxeter, H.S.M.

Hayward, Roger

Robert, Gegory

Calhamer, Allan

Holmes, Larry

Weston, Timothy

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**Flexagons**

**Physical Description:** 4 folder(s)

box 1, folder 3

**1956, December 1956-2000**

**Scope and Contents note**

(Models in separate folder)

History of flexagons

models, comments, analysis

flexapyramids

Correspondents:

Mott-Smith, Geoffrey

Ransom, Tom

Templeton, Hugh

Little, John

Polyakov, N

George, Douglas

box 1, folder 4

**Bibliography, tearsheets of articles [1 of 2] 1956-1983**

**Scope and Contents note**

The Curious Family of Flexagons, Frank R. Bernhart

Some Elements of Flexagon Theory, Frank R. Bernhart

Interim Report on Hexa-Hexa Aberrations, Donald Comstock 24 Apr, 1979

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box 1, folder 5

**Bibliography, tearsheets of articles [2 of 2] 1954-1993**

**Scope and Contents note**

Flexagon, Nauka i Zhizn (in Russian), 1970

Correspondents:

Tukey, John

box 1, folder 6

**Frank Bernhart's Work 1969 - 1993**

**Scope and Contents note**

Counting flexagons with Feynman diagrams

On flexagon maps

"Some Elements of the Mathematical Theory of Flexagons" (Part 1)

"The Curious Flexagon Family"

Correspondents:

Mitchell, Phil

---

**Fliess**

box 16, folder 17

**1966, July 1966-1980**

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**Game Learning Machines**

**Physical Description:** 6 folder(s)

box 8, folder 8

**1962, March 1961-1977**

**Scope and Contents note**

Hexapawn

Extendapawn

Various analyses of games and machines

Typescript of Hexapawn brochure, from W.R. Aul

box 8, folder 9

**Reader Reports on Hexapawn, Contests, etc. 1962-1965**

box 8, folder 10

**Other Simple Learning Devices 1961-1995**

**Scope and Contents note**

Computer "Family Tree" from Ballistic Research Laboratories Electronic Scientific Computer (BRLESC)

GLIM Learning Machine (Game Learning Intellegent Machine), by Russell Yost

NIMBLE (Nim Box Logic Engine) - Learns to play Nim

Tit Tat To machine

ACE - A Learning Machine

box 8, folder 11

**Reprints of Column & TV Use, etc. 1962-1967**

**Scope and Contents note**

Including Mame Mamu Ka (Russian? magazine) - 1962

Nature and Science Magazine(1966)

box 8, folder 12

**"Baby" Games (Minigames) 1962**

**Scope and Contents note**

Checkers - 4x4 Analysis (MG & W. Grandjean)

Go - 5x5 Analysis (MG & D. Nix)

Chess - 5x5

Pawns - 2x4 (2 matchboxes)

---

box 8, folder 13

**Checkers (5x5) 1962**

**Scope and Contents note**

Analysis - MG, Knuth, Grandjean, Caswell

Correspondents:

Caswell, Robert L.

Grandjean, W.B.

---

**Game Strategies**

**Physical Description:** 4 folder(s)

box 7, folder 9

**1961, July 1961**

**Scope and Contents note**

Just the article (about Bridg-it and Halma, the latter a variation of Chinese Checkers)

box 7, folder 10

**Bridg-It and Twixt [1 of 2] 1958-1963**

**Scope and Contents note**

(Also called Gale.)

Full analysis by Alfred Lehman: "A Solution to the Shannon Switching Game"

Robot Gale players.

--> Booklet in separate envelope, of Gale layouts with instructions for the Game of Gale, marked "Season's Greetings! The Hatchers", about 4x4 inches.

Correspondents:

Shannon, Claude

Lehman, Alfred

Gross, Oliver

Gale, David

Hein, Piet

box 7, folder 11

**Bridg-It and Twixt [2 of 2] 1961-1977**

**Scope and Contents note**

References to "Board Games folder".

"Bridg-it on the 1401", by Gunter Wenzel

Program (for Bridg-it) for HP-97, by Mordecai Schwartz

Correspondents:

Ferguson, Thomas

Shepherd, Wilfred H.

Wenzel, Guenter

Reynolds, A.C.

Gale, David

box 7, folder 12

**Checker Problem 1961**

**Scope and Contents note**

(related to Halma)

22 move solutions, 20 move solutions.

proof (by Vern Poythress) that 20 moves is minimum.

Correspondents:

Vanderpool, Donald

Durling, Allan

Poythress, Vern

---

**Game Theory**

box 19, folder 19

**1967, December 1967-1971**

**Scope and Contents note**

Morra - board and instructions (Piet Hein game).

Various papers by Rufas Isaacs

Correspondents:

Morgenstern, Oskar

Isaacs, Rufus

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**Games**

**Physical Description:** 5 folder(s)

box 26, folder 1

**1973, January undated**

**Scope and Contents note**

Sim, Chomp & Race Track

Mostly article + Ian Stewart article (on Chomp)

box 26, folder 2

**Sim 1972-1981**

**Scope and Contents note**

Analyses: 5-Point Sim, 6-Point Sim, N-Point, Dual, Choice

Dual game analyzed by Leslie Shader (mimeograph)

Correspondents:

Shader, Leslie

Croach, Jesse

Erdos, Paul

Simmons, Gustavus

McLeod, John

Chandra, Ashok

Beeler, Michael

Harary, Frank

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box 26, folder 3

**Race Track 1971-1974**

**Scope and Contents note**

Sci. Am. Christmas card  
Demolition Derby & other variants (James Henle)  
Many variants  
Correspondents:  
Henle, James  
Nievergelt, Jurg  
Falconer, Tomas

box 26, folder 4

**Chomp [1 of 2] 1972-1973**

**Scope and Contents note**

"A Curious Nim-type Game", by David Gale (mimeograph) - original game discription  
"Game of Diisors", by Fred Schuh (typescript) translation by G.J.Westerink  
Correspondents:  
Gale, David  
Thompson, Ken  
Winker, Steve  
Westerink, G.J.  
Beeler, Michael  
Nelson, Harry  
Lunon, Fred

box 26, folder 5

**Chomp [2 of 2] 1972-1986**

**Scope and Contents note**

Partial analysis of 3xN Chomp, from F. Bernhart  
Correspondents:  
Silverman, David  
Westerink, G.J.

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**Games (Jam, Hot, Etc.)**

**Physical Description:** 3 folder(s)

box 18, folder 8

**1967, February 1967**

**Scope and Contents note**

just article.

box 18, folder 9

**Kayles (String Nim) 1964-1967**

**Scope and Contents note**

analysis by Henon  
Correspondents:  
Henon, Michel  
Spoerl, Charles  
Epstein, Richard

box 18, folder 10

**Squad Car Game 1966**

**Scope and Contents note**

Correspondents:  
Isaacs, Rufus

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### **Geometric Fallacies**

box 23, folder 16

**1971, April 1971**

**Scope and Contents note**

No article.

Correspondents:

Leech, John

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### **Golomb's Graceful Graphs**

**Physical Description:** 5 folder(s)

box 24, folder 21

**1972, March [1 of 2] 1972-1977**

**Scope and Contents note**

Many & various articles.

"My views of the Problem", by Takashi Wakui, from Fascinating Puzzles Monthly No. 36, July, 1968 (photocopy)

Correspondents:

Simmons, Gustavus

Golomb, Solomon

Lagarior, Jeff

box 24, folder 22

**Golomb's Graceful Graphs [2 of 2] 1965-1985**

**Scope and Contents note**

Correspondents:

Hollingsworth, Lowell

Hodgart, Mathew

Reid, Robert

Chandra, Ashok

Ashenfelder, Robert

Robertson, Douglas

box 24, folder 23

**Results, etc, from Readers on Graceful Graphs 1972-1994**

**Scope and Contents note**

Correspondents:

Golomb, Solomon

Mixon, Bill

Harries, Wolfgang

box 24, folder 24

**Disproof of Golomb Conjecture 1974**

**Scope and Contents note**

"Large Graceful Subgraphs of the Complete Graph", by Gustavus Simmons (typescript)

Correspondents:

Simmons, Gustavus

Van Rongen, J.B.

Leech, John

Golomb, Solomon

box 24, folder 25

**Recent Papers - Golomb, etc 1982-1984**

**Scope and Contents note**

(Referenced in latest version of column in "Wheels, Life ...")

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**Graphs**

box 13, folder 1

**1964, April 1964**

**Scope and Contents note**

Application of Hamiltonian Lines to hydrocarbons (in Eckroth letter)

Correspondents:

Meally, Victor

Knowlton, Kenneth

Eckroth, David

---

**Gray Codes (& Chinese Rings)**

**Physical Description:** 4 folder(s)

box 25, folder 12

**1972, August [1 of 2] 1972-1974**

**Scope and Contents note**

Various articles.

The Brain, puzzle from Mag-Nif, by Marvin Allison, Jr.

"Cyclic Codes in Analog-to-Digital Encoders", by Chas. Cole (photocopy)

Correspondents:

Allison, Marvin

Deutsch, E.

---

box 25, folder 13

**Gray Codes (& Chinese Rings) [2 of 2] 1972-1997**

**Scope and Contents note**

Gray's patent (Pulse Code Communication), 1953

Gray Codes & Dragon Curves (in George Darwin letter)

Stibitz Patent (Binary Counter), 1943 (predates Gray?)

Puzzles based on Gray codes (see Leslie Upton letter)

"The Treasure of Grayham Binar" (also Leslie Upton letter)

"Lucky Light", by Dave Lederman (magic trick)

Correspondents:

Darwin, George

Stibitz, George

Knuth, Donald

Upton, Leslie

Cipra, Barry

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box 25, folder 14

**Chinese Rings 1972-1998**

**Scope and Contents note**

Various commercial rings, Princeps Puzzle (electronic)

Correspondents:

Golomb, Michael

Knuth, Donald

Ray, David

Rasmussen, Peter

box 25, folder 15

**Paths in N-Cubes 1972-1985**

**Scope and Contents note**

Correspondents:

Read, Ronald

Bradford, L.E.

Harary, Frank

Winkler, Steve

Bell, Alex

Vanderschel, David

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**Groups (Finite)**

**Physical Description:** 4 folder(s)

box 51, folder 1

**1980, June 1980**

**Scope and Contents note**

No article (see next folder: 51/2)

MG notes.

Lots of short articles on groups (& revies of books on groups.)

box 51, folder 2

**Sporatic Groups 1968-1980**

**Scope and Contents note**

SA article.

Golomb lists errors in column.

Lots of MG notes, articles, etc.

Correspondents:

Golomb, Solomon

Grossman, Israel

Lyons, Richard

Gorenstein, Dan

Griess, Robert

McKay, John

box 51, folder 3

**Lie (Infinite) Groups undated**

**Scope and Contents note**

MG notes, a couple of book reviews

box 51, folder 4

**Galois undated**

**Scope and Contents note**

Articles on Galois, mostly by Tony Rothman.

box 52, folder 1

**1980, December 1980-1981**

**Scope and Contents note**

Notes from Richard Guy. Rel  
contains number curios NOT  
primes (& usable in Future C

Correspondents:

Guy, Richard  
Philpott, Wade  
Mullin, Albert  
Yates, Samuel

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**Hakenbush**

box 24, folder 19

**1972, January undated**

**Scope and Contents note**

Correspondents:  
Conway, John

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**Halma**

**Physical Description:** 9 folder(s)

box 24, folder 6

**1971, October undated**

**Scope and Contents note**

Just article & rules for Halma (& references)

box 24, folder 7

**Halma papers by Elithorn 1971**

**Scope and Contents note**

Many papers: preprints, typescripts, reprints, etc.

box 24, folder 8

**Halma Computer Programs undated**

box 24, folder 9

**Transfer Problems 1971-1983**

**Scope and Contents note**

Lots of solutions, by MG and others.

Correspondents:

Knuth, Donald  
Fujimura, Kobon  
Harris, John

box 24, folder 10

**Halma Solitaire Problems 1971**

**Scope and Contents note**

Mostly MG notes and solutions

Correspondents:

Harris, John

box 24, folder 11

**3x3 undated**

**Scope and Contents note**

MG notes

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box 24, folder 12

**4x4 undated**

**Scope and Contents note**

MG notes

box 24, folder 13

**5x5 Square 1971**

**Scope and Contents note**

MG notes

Correspondents:

Widdeer, Vera

Gordon, Leonard

box 24, folder 14

**6x6 Square undated**

**Scope and Contents note**

MG notes

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**Hamilton's Icosian Game**

**Physical Description:** 3 folder(s)

box 2, folder 1

**1957, May 1957**

**Scope and Contents note**

Icosian Game

Tower of Hanoi

Hamiltonian Path

(Polyominoes)

box 2, folder 2

**Tower of Hanoi [1 of 2] 1957-1983**

**Scope and Contents note**

All you ever wanted to know about The Towers of Hanoi but were afraid to ask, by W.F. Lunnon

Correspondents:

Walsh, Timothy

Katz, Sylvan

Moeser, Robert

Armstron, H.

Paciulan, Kenneth

Revennaugh, Vance

Lunnon, Fred

box 2, folder 3

**Tower of Hanoi [2 of 2] 1957-1998**

**Scope and Contents note**

(see model "The Great Pyramid", in box xxx)

Ad, in French, of "Jeux Scientifiques" of Edouard Lucas

The Towers of Hanoi" by Jay Kappraff and Gary Adamson

Correspondents:

Crowe, Donald

Knuth, Donald

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**Harary's Generalized TTT**

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box 48, folder 3

**1979, April 1978-1979**

**Scope and Contents note**

"Achievement and Avoidance Games", by Frank Harary (typescript) -- written for MG for this column. (Talks about various games, and Ramsey Theory.)

Correspondents:

Harary, Frank

Austin, A.K.

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**Helix**

box 10, folder 9

**1963, June 1960-1989**

**Scope and Contents note**

Correspondents:

Katsanis, Theodore

Lind, Douglas

Brown, Robert

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**Hex**

box 2, folder 5

**1957, July 1957-2000**

**Scope and Contents note**

History and discussion about Hex (MG, Nash, Gale)

Con-Tac-Tix (a Piet Hein game)

Correspondents:

Nash, John

Golomb, Solomon

Stover, Mel

Shannon, Claude

Gale, David

Milnor, John

Hayward, Ryan

Van Ryswyck, Jack

Browne, Cameron

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**Hexes & Stars**

**Physical Description:** 7 folder(s)

box 30, folder 9

**1974, July 1972-1978**

**Scope and Contents note**

Photocopy of column, plus some partial cut-outs of the column & some corrections for next month.

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box 30, folder 10

**Square Triangles 1960-1988**

**Scope and Contents note**

"The Address Problem", by Michael Tennor (typescript)

"Triangular-Square-Pentagonal Numbers", by R.J. Stroeker, Report 7701/M,  
Econometric Inst, Erasmus University

Correspondents:

Tennor, Michael

Furry, W.H.

Adler, Irving

Jankovich, Gradimir

box 30, folder 11

**Hexes 1974-1986**

**Scope and Contents note**

Correspondents:

Grinstead, Charles

Shallit, Jeffrey

Hitotumatu, Sin

box 30, folder 12

**Star Numbers 1973-1974**

**Scope and Contents note**

Lots of MG notes

Computer listing of some factorials, printed in "star" format

Correspondents:

Card, L.E.

Milwee, George

McKay, John

Coxeter, H.S.M.

Harris, John

box 30, folder 13

**Triangle Stars 1973**

**Scope and Contents note**

MG notes

Correspondents:

Meally, Victor

Wainwright, Robert

box 30, folder 14

**Square Stars 1973**

**Scope and Contents note**

notes

Correspondents:

Meally, Victor

box 30, folder 15

**The Pell Equation 1973**

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**Hexiamonds**

**Physical Description:** 5 folder(s)

box 13, folder 18

**1964, December 1958-1973**

**Scope and Contents note**

much general information, history, proofs, and solutions

Lewis also deals with non-connected pieces, and ones connected at vertices. Draft of article.

Correspondents:

Williams, Merideth

Povah, Maurice

Struyk, Adrian

Haselgrove, Jenifer

Lewis, Charles

Schaffer, Karl

box 13, folder 19

**New Material From Readers 1964-1983**

**Scope and Contents note**

Correspondents:

Reid, Robert

Struyk, Adrian

Card, L.E.

Philpott, Wade

box 13, folder 20

**The 66 Octiamonds & Higher 1964-1975**

**Scope and Contents note**

Correspondents:

Philpott, Wade

Penrose, Roger

Escher, Mauritis C.

box 13, folder 21

**The Rhombi 1964-1966**

**Scope and Contents note**

Correspondents:

Struyk, Adrian

Philpott, Wade

Fletcher, John

box 13, folder 22

**Triplication Problems (and Twin, etc) 1964-1970**

**Scope and Contents note**

Correspondents:

Philpott, Wade

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**Hyperbola**

**Physical Description:** 2 folder(s)

box 41, folder 12

**1977, September 1961-1977**

**Scope and Contents note**

No article

Thigs of Science: Curve Unit, No. 139 (Instruitions)

MG notes

Correspondents:

Cibulskis, Walter

Klein, Arthur

box 41, folder 13

**Hyperboloids 1977**

**Scope and Contents note**

Information on McDonnell Planetarium

Slides & photos of McDonnell shadows

Correspondents:

Sutherland, Ronald

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**I Ching**

**Physical Description:** 4 folder(s)

box 28, folder 5

**1974, January [1 of 2] 1970-1974**

**Scope and Contents note**

No article (but issue cover)

Correspondents:

Diaconis, Persi

Chen, S.T.

box 28, folder 6

**I Ching [2 of 2] 1974-1980**

**Scope and Contents note**

"I Ching Oracles", magic trick by Sam Dalal, in Swami, Sept. 1974

"Pattern in the Arrangements of the Trigrams of the I Ching", by Nicholas Bolton & Nicol Macleod (typescript)

Correspondents:

Bolton, Nicholas

box 28, folder 7

**The Unsolved Problem of Hexagram Ordering 1973-1986**

**Scope and Contents note**

"Defining Two Sequences of the Hexagrams in the I Ching by Their Linear Symbols", by Mou-Ta Chen (typescript)

"The Riddle of the Number Sequence of the Chines I Ching - a Geomantic Solution", by Norbert Muller (thpescript)

Correspondents:

Miller, Aaron

box 28, folder 8

**N-Cube in Anthropology 1976**

**Scope and Contents note**

"N-Cubes in Anthropological Theory", by Hans Hoffman, 1975 (typescript): paper includes section on I Ching as lattice.

Correspondents:

Hoffmann, Hans

**Imaginary & Complex Numbers**

box 48, folder 13

**1979, August 1965-1979**

**Scope and Contents note**

Notes and articles

Correspondents:

Kierstead, Friend

---

**Induction Paradoxes**

**Physical Description:** 3 folder(s)

box 36, folder 1

**1976, March 1976-1986**

**Scope and Contents note**

Only snippet of article

"Urning a Resolution of Hempel's Paradox", by Stuart Meyer (typescript)

Correspondents:

Meyer, Stuart

Good, Jack

box 36, folder 2

**Solomonoff's Work 1976**

**Scope and Contents note**

Articles by Solomonoff

Correspondents:

Solomonoff, Ray

box 36, folder 3

**Letters on the Pies 1976**

**Scope and Contents note**

\*Lots\* of letters

Correspondents:

Pratt, John

Berent, Paul

Good, Robert

Wittman, Donald

Blyth, Colin

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**Inducton Games**

box 5, folder 1

**1959, June 1959-1964**

**Scope and Contents note**

Eleusis

The Game of Eleusis

Correspondents:

Abbott, Robert

Weinberg, Gerald

---

**Joke Problems**

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box 10, folder 5

**1963, April 1962-1963**

**Scope and Contents note**

Correspondents:

Weber, William

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**Joke Quickies**

box 20, folder 9

**1968, August 1968**

---

**Knights & "Cooks"**

box 19, folder 12

**1967, October 1967**

**Scope and Contents note**

Correspondents:

Golomb, Solomon

Bruce, Robert

Vasco, Charles

Isaacs, Rufus

Shepherd, Wilfred H.

Reid, Robert

---

**Knots**

**Physical Description:** 2 folder(s)

box 7, folder 16

**1961, September 1959-1961**

**Scope and Contents note**

Huffman correspondence: lots of drawings

Correspondents:

Huffman, David

Norman, Richard

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box 53, folder 15

**1983, September 1983-1996**

**Scope and Contents note**

Incomplete article.

Penrose magic trick.

Correspondents:

Brown, Frederick (IGKT)

Thompson, Don

Rolfsen, Dale

Trotter, Hale

Penrose, Roger

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**Knotted Torus**

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box 25, folder 19

**1972, December 1958-1982**

**Scope and Contents note**

Proofs no 2 knots cancel.

A torus, embedded in 3-space, can be knotted in only 2 ways

Cutting a 2-hole solid torus to produce an outside knotted solid torus

... and more

Turning an Arbitrary Two-Sided Surface Inside-Out

"Untying a Knotted Torus", by John Stillwell (typescript)

Correspondents:

Asimov, Dan

Stasheff, James

Bing, R.H.

Stillwell, John

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**Laffer**

**Physical Description:** 4 folder(s)

box 53, folder 6

**1981, December 1981-1991**

**Scope and Contents note**

No article.

Correspondents:

Dennett, Daniel

Flanagan, Dennis

box 53, folder 7

**Letters on Laffer Col. 1981-1982**

**Scope and Contents note**

Correspondents:

Rocourt, Georges

Briland, Joseph

box 53, folder 8

**Phillips Curve 1985**

**Scope and Contents note**

MG notes & some articles.

box 53, folder 9

**Laffer Curve II 1981-1985**

**Scope and Contents note**

Mostly newspaper articles (1984, 1985) on Reagan economics & Laffer.

---

**Latin Squares**

**Physical Description:** 7 folder(s)

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box 5, folder 9

**1959, November 1959-1975**

**Scope and Contents note**

Graeco-Latin Square

Design of Experiments (notes by MG)

"Theoretical Studies on Orthogonal Latin Squares", by R. Aravamudhan (Orthogonal Array)

Correspondents:

Knuth, Donald

Scott, Frank

Betts, Donald

box 5, folder 10

**Order-10 Projective Plane (non-existence of) 1988-1993**

box 5, folder 11

**Arkins Work 1972-1982**

**Scope and Contents note**

Eulerian Magic Cube Problem of Order Ten

Correspondents:

Arkin, Joseph

box 5, folder 12

**Parker - Articles and Letters 1959-1963**

**Scope and Contents note**

Orthogonal Latin Squares

box 5, folder 13

**Latin Cubes 1970-1973**

**Scope and Contents note**

Correspondents:

Taylor, Walter

Peters, James

Arkin, Joseph

box 5, folder 14

**Bachet's Order-4 Card puzzle 1959-1960**

**Scope and Contents note**

analyses by Pugh and Goldenberg

Correspondents:

Pugh, A. Henry

Goldenberg, Bernard

Karfunkel

box 5, folder 15

**Diagonal Provisos and Arkins 10x10 1967-1993**

**Scope and Contents note**

Orthogonal Latin Square, Eulerian Square

Correspondents:

Black, Norton

Most, Mel

Knuth, Donald

---

**Lattice of Integers**

**Physical Description:** 2 folder(s)

box 14, folder 13

**1965, May 1962-1965**

**Scope and Contents note**

"Visibility of Primes", by Robert B. Ely, III (typescript)

Correspondents:

Ely, Robert

Pryde, Geroge

Naranan, S.

box 14, folder 14

**Billiard Problem & G.C.D. Finder 1961-1977**

**Scope and Contents note**

Patent 2,978,816 (GED Finder), A. Zarrotsky

Correspondents:

Becker, Joseph

Hayes, Brian

---

**Left vs. Right**

box 3, folder 5

**1958, March 1958**

**Scope and Contents note**

About left- and right-handedness, mirror images and kindred matters

Correspondents:

Wiener, R.S.

Silver, Helen

Reis, Richard

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**Letters - Col. in general**

box 1, folder 1

**Letters - Col. in general 13 Apr 1989 - 13 Apr 1997**

**Scope and Contents note**

Correspondents:

Schwenk, Allen

Zimmermann, Mark

---

**Lewis Carroll**

box 6, folder 1

**1960, March 1960**

**Scope and Contents note**

Only column; points to Doublets folder

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**Lightning Calculating Tricks**

**Physical Description:** 2 folder(s)

box 19, folder 1

**1967, May 1946-1970**

**Scope and Contents note**

Correspondents:

Jaques, Richard

Becker, Joseph

De Grote, L.H.

Hempel, Carl

box 19, folder 2

**Wallace Lee's Trick For Multiplication "Magic No's" 1967-1972**

**Scope and Contents note**

Copies of "Swami"

Dividing by 7 tricks

Correspondents:

Dalal, Sam

Lee, Wallace

---

**Limits of Infinite Series**

box 13, folder 17

**1964, November 1964**

**Scope and Contents note**

article only (refers to separate folder)

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**Logic**

box 4, folder 15

**1959, February 1956-1959**

**Scope and Contents note**

Smith-Jones-Robinson problem (Dudeney's problem)

Colored hats (Smullyan)

Eddington problem "The Four Liars"

"An Experiment in Symbolic Work on the IBM 704", by John Kemeny, 1956

Correspondents:

Biddy, Charles

Youngdahl, C.A.

Watson, R.

Jonelis, John

Smullyan, Raymond

Hollo, Julius

McMillan, Brockway

Fletcher, John

Manheimer, Wallace

Bookstan, John

Fielding, James

Osborn, Sidney

Hooven, Frederick

Matzger, Alan

---

**M-Pire Problem (& Map Coloring)**

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box 50, folder 8

**1980, February 1978-1980**

**Scope and Contents note**

Correspondents:

Taylor, Herbert

---

**M.C. Escher**

**Physical Description:** 7 folder(s)

box 16, folder 4

**1966, April [1 of 2] 1964-1985**

**Scope and Contents note**

cloth "print" of Fishes & Birds (original??)

Correspondents:

Fomenko, A.J.

Sakane, Itsuo

box 16, folder 5

**M.C. Escher [2 of 2] 1997-1998**

**Scope and Contents note**

various newspaper articles

box 16, folder 6

**Correspondence - Corny Roosevelt 1965-1981**

**Scope and Contents note**

Cornelius Van S. Roosevelt

(Photocopies of letters from Escher to Roosevelt)

2 uncancelled Netherlands stamps designed by Escher

Correspondents:

Roosevelt, Cornelius Van S.

box 16, folder 7

**Correspondence - Escher 1961-1981**

**Scope and Contents note**

Correspondents:

Escher, Mauritis C.

Roosevelt, Cornelius Van S.

box 16, folder 8

**About Escher [1 of 2] 1967-1999**

**Scope and Contents note**

various articles about Escher

Correspondents:

Schattschneider, Doris

Graham, John

Emmer, M.

box 16, folder 9

**About Escher [2 of 2] undated**

**Scope and Contents note**

Newspaper articles about Escher

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box 16, folder 10

**Photos, Prints, Postcards 1971-1989**

**Scope and Contents note**

From an envelop, returning them from Doris Schattschneider to Martin Gardner.

About 8 photos, 22 cards, 8 illus.

Correspondents:

Schattschneider, Doris

Roosevelt, Cornelius Van S.

Jacobs, Harold

---

**MacMahan & 30 Cubes**

**Physical Description:** 9 folder(s)

box 45, folder 9

**1978, September [1 of 2] 1978-1979**

**Scope and Contents note**

No article.

"Some Notes on the 30 6-color Cubes," by M.G. Harman (typescript)

Correspondents:

Harman, Michael

Sonneborg, Henry III

box 45, folder 10

**1978, September [2 of 2] 1978-1992**

**Scope and Contents note**

"Tori of Colored Cubes", by Zoltan Perjes (typescript)

[note on Szilassi 7-hedron, in G.B. Lamb letter]

Photo of Percy MacMahan

Correspondents:

Perjes, Zoltan

Andrews, George

Moskovich, Ivan

Cameron, Peter

Westerlink, G.

box 45, folder 11

**Conway - 30 Cubes 1970-1992**

**Scope and Contents note**

MG notes & Conway notes.

"Thought Cubes", by Moti Ashkenazi & Ehud Artzi (instructions)

Correspondents:

Philpott, Wade

Voz (Vosburgh Lyons)

box 45, folder 12

**8-Block Problems 1967-1971**

**Scope and Contents note**

Various note and proofs, especially of Mayblox & 8 Blocks to Madness.

Notes & colorings, by N.W. Johnson, Eric Cross

Correspondents:

Bernhart, Frank

Philpott, Wade

Davis, Harry

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box 45, folder 13

**Armbruster Set 1970-1973**

**Scope and Contents note**

Correspondence with Frank Armbruster on MG booklet for 30 cubes.

box 45, folder 14

**MacMahan, Book On, etc 1971-1978**

**Scope and Contents note**

Photo copies & thpescripts of MacMahon articles & other notes on his works

Correspondents:

Andrews, George

box 45, folder 15

**Color Cubes - Other Sets 1961-1972**

**Scope and Contents note**

Various sets of cubes: 27 cube game, a 27-cube set, 23 cubes, colored polyhedra, 57 cubes, colored edge cubes

Correspondents:

Meek, William

box 45, folder 16

**Instant Insanity [1 of 2] 1963-1968**

**Scope and Contents note**

6 cube forms

Lots of solutions

box 45, folder 17

**Instant Insanity [2 of 2] 1968-1975**

**Scope and Contents note**

"Instant Insanity and the Theory of Groups", by W.E. Glass (typescript)

"Color Craze", by Frank Bernhart (9 color cube)

Correspondents:

Card, L.E.

Feldman, Dan

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**Magic**

box 13, folder 10

**1964, August 1964**

**Scope and Contents note**

article only

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**Magic & Probability**

box 48, folder 4

**1979, May 1971-1984**

**Scope and Contents note**

"Say Red", Futigawa's 4-card Prediction, The Red Card Prediction

Correspondents:

Diaconis, Persi

Connelly, Robert

Howard, John

Isaacs, Rufus

### **Magic Convention**

**Physical Description:** 2 folder(s)

box 9, folder 2

**1962, August 1961-1979**

**Scope and Contents note**

Correspondents:

Fowler, James

Cheney, Fitch

Jedwab, Jonathan

Brecht, L.E.A.

box 9, folder 3

**Four-Card Problem 1953-1998**

**Scope and Contents note**

descriptions and analyses

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### **Magic Matrix**

box 1, folder 7

**1957, January 1957-1978**

**Scope and Contents note**

Magic square

Addition table

Matrix force

Calendar magic

"Doth", by Phil Goldstein (Magic tricks based on Gilbreath principle)

Correspondents:

Stover, Mel

Lyons, Phil

Kruskal, William

Goldstein, Phil

**Subjects and Indexing Terms**

magic tricks

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### **Magic Squares**

box 4, folder 16

**1959, March 1959**

**Scope and Contents note**

see magic square folders (just the article is in this folder.)

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### **Magic Squares & Cubes**

**Physical Description:** 8 folder(s)

box 35, folder 1

**1976, January undated**

**Scope and Contents note**

Incomplete article

Correspondents:

Staib, John

box 35, folder 2

**Magic Cubes [1 of 3] 1975-2000**

**Scope and Contents note**

Many cubes, and theories of construction in both letters & articles

Correspondents:

Lamb, Gil

Handricks, John

Loewy, Manfred

Taylor, Walter

box 35, folder 3

**Magic Cubes [2 of 3] 1975-1976**

**Scope and Contents note**

"M-Dimensional Queen's Lattices and Magic Arrays", by I.P. Howard (typescript)

Correspondents:

Howard, Ian P.

Walker, Robert

Chaffer, robert

Benson, William

Bird, John

box 35, folder 4

**Magic Cubes [3 of 3] 1975-2000**

**Scope and Contents note**

"Franklyn Magic Cubes", by Donald Piele (typescript)

(Also article on Game of Life, by Piele)

Correspondents:

Piele, Donald

Dorrell, Philip

Benson, William

Ondrejka, Rudolf

Straus, E.G.

Lamb, Gil

box 35, folder 5

**Order 7 Cube 1973-1984**

**Scope and Contents note**

"Perfect Magic Cubes of Order Seven", by Bayard Wynne(photocopy, draft)

More examples and some methods of composition

Correspondents:

Barwell, Brian

Wynne, Bayard

Brooke, Patrick

Theiler, James

box 35, folder 6

**Richard Myers - Order 8 1975-1976**

**Scope and Contents note**

Correspondents:

Myers, Richard

Staib, John

Gosper, Bill



box 35, folder 7

**Magic Hypercubes 1973-1999**  
**Scope and Contents note**  
Correspondents:  
Jaikumar, Ramchandran  
Brooke, Patrick

box 35, folder 8

**Order 8 and Up 1976-1981**  
**Scope and Contents note**  
Correspondents:  
Alspach, Brian  
Benson, William

---

**Magic Stars**

box 15, folder 16

**1965, December undated**  
**Scope and Contents note**  
Just the articles (see hypercube folder)  
(like magic squares, but star shapes)

---

**Magician**

box 6, folder 8

**1960, August 1960-1992**  
**Scope and Contents note**  
Mathemagic: Tricks based on mathematical principles  
Correspondents:  
Liu, Andy

---

**Map Coloring**

box 6, folder 9

**1960, September 1960**  
**Scope and Contents note**  
4 color map problem  
Correspondents:  
Sciame, Dennis

---

**Matches**

**Physical Description:** 2 folder(s)

box 21, folder 16

**1969, July 1969**  
**Scope and Contents note**  
Correspondents:  
Nievergelt, Jurg

---

box 21, folder 17

**Nievergelt's Game: Hit & Run 1967-1978**

**Scope and Contents note**

Correspondents:

Nievergelt, Jurg

Proter, E.H.

Bell, Donald

Shepherd, Wilfred H.

---

**Math. Induction**

**Physical Description:** 4 folder(s)

box 40, folder 5

**1977, May 1977**

**Scope and Contents note**

No article

Spots on forehead, Unfaithful wives, etc

box 40, folder 6

**Pub. Refs on Colored Hats & Forhead Numbers 1957-1977**

**Scope and Contents note**

Notes and articles

Correspondents:

Nelson, Harry

Gale, David

box 40, folder 7

**Letters (Colored hats, Numbers on Forhead) [1 of 2] 1977**

**Scope and Contents note**

Much good analysis

"A Conditional Probability Puzzle", by Glenn Shafer, 1981 (typescript)

Correspondents:

Brams, Steven

Mosteller, Frederick

box 40, folder 8

**Letters (Colored hats, Numbers on Forhead) [2 of 2] 1977**

**Scope and Contents note**

More good analysis

Correspondents:

Gale, David

Isaacs, I. Martin

---

**Math. Zoo**

**Physical Description:** 3 folder(s)

box 44, folder 13

**1978, June 1978-1979**

**Scope and Contents note**

Many articles on math/animals

Several letters on Animals that roll

Correspondents:

Davis, Chandler

---

box 44, folder 14

**Deltahedra 1978**

**Scope and Contents note**

Lots of photos of deltahedra in letter from Emerson Frost

Correspondents:

Schattschneider, Doris

Chaitin, Henrik

Stewart, Bonnie

Frost, Emerson

box 44, folder 15

**Tiling Sphere with Hexagons 1978**

**Scope and Contents note**

Correspondents:

Grunbaum, Branko

Isaacs, Rufus

---

**Mathematical Mailman**

box 14, folder 15

**1965, June 1965**

**Scope and Contents note**

Route problems (best route and worst route)

stamps

Correspondents:

Melton, Charles

Shudde, R.H.

Heile, Frank

---

**Matrix - 6**

**Physical Description:** 2 folder(s)

box 15, folder 17

**1966, January 1965-1966**

**Scope and Contents note**

Psychiatry

Correspondents:

Borgmann, Dmitri

box 15, folder 18

**Honest Numbers 1966-1990**

**Scope and Contents note**

Many examples

Correspondents:

Lindgren, Harry

---

**Mazes**

box 4, folder 14

**1959, January 1908-1975**

**Scope and Contents note**

plan of Hampton Court Palace maze

maze robots

Correspondents:

Gaskell, Philip

Wallace, Richard

---

**Mechanical Puzzles**

box 5, folder 4

**1959, September 1959-1963**

**Scope and Contents note**

about Lester A. Grimes (and L.D. Whitaker)

Photos of the collection

---

**Melody Machines**

**Physical Description:** 5 folder(s)

box 31, folder 8

**1974, December 1974-1981**

**Scope and Contents note**

Article not complete.

Correspondents:

Deitch, Donald

O'Beirne, Thomas

Knuth, Donald

box 31, folder 9

**Mozarr: Waltzes, Country Dances 1974-1975**

**Scope and Contents note**

Various articles, descriptions and ads, including copy of Mozarts' original instructions.

box 31, folder 10

**O'Beirne 1965-1974**

**Scope and Contents note**

Several articles by T.H. O'Beirne, on computers and music.

Correspondents:

O'Beirne, Thomas

box 31, folder 11

**Haydn-Stadler Trios 1974**

**Scope and Contents note**

Correspondents:

O'Beirne, Thomas

Thomas, Gunter

box 31, folder 12

**"Buzzword" Charts 1974-1975**

**Scope and Contents note**

Correspondents:

Gross, Herbert

---

**Minimal Sculpture**

**Physical Description:** 9 folder(s)

- box 46, folder 4      **1978, November [1 of 2] 1978-1993**  
**Scope and Contents note**  
Incomplete article.  
4 photo negatives of sculptures  
Lots of articles (with pictures) of sculptures & artistes
- box 46, folder 5      **1978, November [2 of 2] undated**  
**Scope and Contents note**  
Newspaper articles with pictures of minimalist sculptures.
- box 46, folder 6      **The Apple Cut 1982**  
**Scope and Contents note**  
"Le Coupe Du Roi and its Relevance to Stereochemistry", by Frank Anet et. al.  
(typescript)  
Correspondents:  
Mislow, Kurt
- box 46, folder 7      **Folded Card Paradox 1978-1985**  
**Scope and Contents note**  
Hypercards.  
"Hypercard Experiments", by Ben Harris (bound photocopy)  
Various versions of hypercards and magic tricks based on them.  
Correspondents:  
Stover, Mel  
Iles, Kim  
Merva, Paul
- box 46, folder 8      **Picasso - Paper Fold Sculpture undated**  
**Scope and Contents note**  
Mostly newspaper articles on Picasso sculpture "Bust of Sylvette" & Chicago  
Letter from MG to New York Times, anti-Bust.
- box 46, folder 9      **Serra's NYC "Arc" undated**  
**Scope and Contents note**  
Various magazine & newspaper articles
- box 46, folder 10      **Carl Andre 1976-1990**  
**Scope and Contents note**  
Photos of his work, articles, etc.  
Book: "Carl Andre, Sculpture 1959-1977", by David Bourdon, Jaap Rietman Inc, NY  
1978

box 46, folder 11

**Kenneth Snelson 1978**

**Scope and Contents note**

Catalog: Kenneth Snelson, Skulpturen, Nationalgalerie Berlin, 1977

Photos and articles.

Correspondents:

Snelson, Kenneth

Hein, Piet

McClellan, John

box 46, folder 12

**Scilassi Polyhedra 1978-1981**

**Scope and Contents note**

Picture of glass model of polyhedron, from David Barnhouse

[Unit fractions in Steward letter]

Correspondents:

Quimby, Shirley

Szilassi, Lajos

Guy, Richard

Stewart, Bonnie

Grunbaum, Branko

---

**Misc. Comb. Puzzles**

**Physical Description:** 5 folder(s)

box 37, folder 9

**1976, October undated**

**Scope and Contents note**

Only contains answers to column.

box 37, folder 10

**Sam Loyd's Klondike Maze 1976-1987**

**Scope and Contents note**

Correspondents:

Smith, Maxine

Bennett, Harold

Kravitz, Sidney

Shortz, Will

box 37, folder 11

**Chinese Checker Transfers 1961-1985**

**Scope and Contents note**

Correspondents:

Levenspiel, Octave

box 37, folder 12

**My No-3-in-line (Minimum) Problem 1975-1976**

**Scope and Contents note**

Several articles.

Correspondents:

Ainley, Stephen

Harris, John

box 37, folder 13

**Letters on No-3-in-line (Maximum) Problem 1975-1986**

**Scope and Contents note**

Correspondents:

Harris, John

Sands, Bill

Guy, Richard

Beeler, Michael

---

**Mnemonics**

box 2, folder 9

**1957, October 1925-1973**

**Scope and Contents note**

How to remember numbers by mnemonic devices such as cuff links and red zebras (October, 1957)

"Number Dictionary", by Bruno Furst

"Zufall's Memory Trix", Numbers 1, 2, 4, by Bernard Zufall (packet)

"The Zufall Collection", by H. Adrian Smith

Correspondents:

Rhodes, Leon

Dasgupta, S.

Low, Barbara

Spenser, D.

Moran, Carl

---

**Modulo Arithmetic**

box 52, folder 2

**1981, February 1981**

**Scope and Contents note**

No article.

MG notes.

Correspondents:

Weeks, Dennis

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**Moebius Bands**

**Physical Description:** 7 folder(s)

box 20, folder 16

**1968, December 1953-1992**

**Scope and Contents note**

"The Afghan Border Race" (Magic Trick, preprint).

Moebius Toy designs, by Narynov: "Mystery of the Moebius Strip", "Earth & Comet Galley", "Kazakh Bottle"

Instructions for making Moebius Hat, Scarf

Correspondents:

Tuckerman, Bryant

Ransom, Tom

Grim, Bruce

Narynov, Saken

---

box 20, folder 17

**Moebius Strip in Fiction & Verse 1972**

**Scope and Contents note**

Various articles and reprints, including:

"A. Botts and the Moebius Strip", by William Hazlett Upson

"Star, Bright", by Mark Clifton

"Delayed Action", by Charles V. DeVet

"The Wall of Darkness", by Arthur C. Clarke

"The Geometrics of Johnny Day", by Nelson S. Bond

box 20, folder 18

**Moebius Strip in Technology & Science 1967-2000**

**Scope and Contents note**

Several Patents and articles.

Correspondents:

Peterson, Ivars

Engel, Douglas

box 20, folder 19

box 20, folder 20

**Moebius Xmas Cards undated**

**Crossed Moebius Bands 1962-1997**

**Scope and Contents note**

Separation: 4 Zippered material bands, to experiment with (from Jean Pedersen?)

Nagashima: long letter with diagrams, in Japanese

Correspondents:

Gordon, Leonard

Barr, Steven

Nagashima, Takahiro

Huff, William

Pedersen, Jean

box 20, folder 21

**Double, Triple, etc - Bands 1961-1977**

**Scope and Contents note**

Correspondents:

Malette, Vincent

Woodbury, Steve

Munger, Elmer

Thurston, David

box 20, folder 22

**Moebius Strip in Art 1974-2000**

**Scope and Contents note**

Also history of strips (Roman Mosaics)

From The Worm Runners Digest (magazine), reprints of articles by Tom McClellan:

"Strange Interlude" (14/1)

"Love in Sud Nim" (July, 1973, 15/1)

"Dogmatic Dog on Mobiles" (18/2)

---

**Mohr-Mascheroni**

**Physical Description:** 4 folder(s)



box 21, folder 22

**1969, September 1969-1976**

**Scope and Contents note**

Geometric constructions with compass & straightedge or straightedge alone

Correspondents:

Hallerberg, Arthur

box 21, folder 23

**Mash. Problems 1963-1969**

**Scope and Contents note**

Bisect line, the square, Phi, hexagon, center of circle

Correspondents:

Goldberg, Michael

box 21, folder 24

**6-arc solutions to diagonal point 1969**

box 21, folder 25

**Toothpick Const's (Dawson) 1969-1973**

**Scope and Contents note**

Correspondents:

Charosh, Mannis

Johnson, Crockett

---

**Monkey and Coconuts**

**Physical Description:** 2 folder(s)

box 3, folder 6

**1958, April 1951-1993**

**Scope and Contents note**

"Coconuts", by David Singmaster (history of the problem. Unpublished?)

Correspondents:

Kirchner, Roger

Shaw, A.

Healey, Tom

Weaver, Warren

Wright, Alfred

Danskin, John

Wilson, J.Walter

Anning, Norman

Whitehead, J.H.C.

Dirac, P.A.M.

Browne, Owens Hand

box 3, folder 7

**Monkey and Coconuts [2 of 2] 1958-1989**

**Scope and Contents note**

Correspondents:

Borgeson, Carl

Miller, Donald

Glicksman, Abraham

Detwiler, V.

Gibson, Robert

Kazarinoff, Nicholas

Krasner, Sol

Whitlock, Bill

Weaver, Warren (with Xerox of Lewis Carroll letter)

---

**Mr. Apollinax**

box 7, folder 4

**1961, May 1961-1965**

**Scope and Contents note**

Several math hoaxes: 4-color counterexample, flaw in relativity, Fermat's last theorem proved, prediction and other paradoxes.

Correspondents:

Good, Jack

---

**My Steiner Problem**

**Physical Description:** 7 folder(s)

box 54, folder 1

**1986, June 1985-1996**

**Scope and Contents note**

No article.

MG notes.

Correspondents:

Hwang, Frank

Piel, Jonathan

Liu, Andy

Graham, Ron

Chung, Fan

box 54, folder 2

**Isometric Steiner Trees undated**

**Scope and Contents note**

One small article on Steiner Minimal Trees on Chinese Checkerboards, by Hwang and Du.

---

box 54, folder 3

**Extensions By Readers 1986**

**Scope and Contents note**

3-D extensions (cubes, tori, Klein's bottles, etc.)

Correspondents:

Letaw, John

Ellis, Michael

Pechenick, Kay

Oblak, Frank

Gascoigne, Stuart

Giuseppe, Argento

box 54, folder 4

**Improvements on 10 & 22 Squares 1986**

**Scope and Contents note**

Correspondents:

Carlson, Eric

Selfridge, Oliver

Ashenfelter, Robert

Wainwright, Robert

Putney, Charles

Hubbard, A.C.

box 54, folder 5

**Steiner Minimum Trees [1 of 2] 1986**

**Scope and Contents note**

Variou articles (some quite long.)

Correspondents:

Haug, Eberhard

box 54, folder 6

**Steiner Minimum Trees [2 of 2] 1962**

**Scope and Contents note**

Problem for triangles.

Cauchy's apparatus (use of weights to solve.)

Soap film.

Algorithm from Rufas Isaacs.

Correspondents:

Van der Poel, Willam

box 54, folder 7

**Rectilinear Steiner Trees undated**

**Scope and Contents note**

3 articles & some references.

---

**Napiers Abacus**

**Physical Description:** 5 folder(s)

box 26, folder 8

**1973, April 1969-1973**

**Scope and Contents note**

Much more on chessboard computer from Craige Schensted

Correspondents:

Schensted, Craige

box 26, folder 9

**Negative-Base Systems 1968-1974**

**Scope and Contents note**

"The Acid Test", by John Staib (typescript) on base-10

Correspondents:

Strung, John

Staib, John

box 26, folder 10

**DeRegt Papers on Negative-base Notation [1 of 2] 1968-1973**

**Scope and Contents note**

Maurits P. de Regt - several papers and a patent

box 26, folder 11

**DeRegt Papers on Negative-base Notation [1 of 2] 1968-1973**

**Scope and Contents note**

Continuation

box 26, folder 12

**Fibonacci Notation 1973-1976**

**Scope and Contents note**

Correspondents:

Harris, John

Keller, Tim

---

**Napiers Bones**

box 26, folder 7

**1973, March 1972-1973**

**Scope and Contents note**

Ron Edward's Lightning Cal. Trick

Abaco Naperiano Perfeccionado

Correspondents:

Kierstead, Friend

Burkhart, William

Quintana, Luis Benito

---

**Negative Numbers**

box 40, folder 9

**1977, June 1977-1990**

**Scope and Contents note**

No article

"Negative Membership", by Wayne Blizard, Notre Dame Journal of Formal Logic, 31/3, 1990 (reprint)

"A Theory of Shadows", by Wayne Blizard, 1989 (reprint)

Many articles & teaching suggestions for negative numbers

---

**New Games (Cram, Crosscram, Bynum, Quadruphage)**

**Physical Description:** 10 folder(s)

box 28, folder 9

**1974, February 1985-1998**

**Scope and Contents note**

No article

box 28, folder 10

**Cram 1958-1966**

**Scope and Contents note**

Analysis of "Domino game", possibly by Conway, but no signature.

Correspondents:

Mott-Smith, Geoffrey

box 28, folder 11

**Cross-Cram 1973-1974**

**Scope and Contents note**

Correspondents:

Andersson, Goran

Chandra, Ashok

box 28, folder 12

**1xN Cram 1974-1976**

**Scope and Contents note**

"Strategies in Simple Cases of Cram", by Magnus Tideman (photocopy): Analyzes 5x5, nx1 and others

"Some Remarks on Nim-like Games", by Sin Hitotumatu, preprint

Conway notes on 1xM Cram

Correspondents:

Hitotumatu, Sin

Banerji, Ranan

Weber, Robert

Anick, David

Silverman, David

Charosh, Mannis

Klein-Buimovici, Dorian

Singmaster, David

Henon, Michel

box 28, folder 13

**Bynum's Version of Tactix 1972-1975**

**Scope and Contents note**

Original description of Bynum's Game (Unit Elimination), by Jim Bynum

Analysis by Conway, Bynum

Correspondents:

Bynum, Jim

Conway, John

box 28, folder 14

**Quadraphage (Square-Eater) 1970-1974**

**Scope and Contents note**

"Quadraphag, Chessgo, Dukego and Kinggo", by Elwyn Berlekamp (typescript)

Various analyses; note by Don Knuth (on MG notes)

Correspondents:

Berlekamp, Elwyn

Golomb, Solomon

Charosh, Mannis

Silverman, David

Haubrich, Joseph

- box 28, folder 15      **Trapping Rook, B's, & Q 1974**  
    **Scope and Contents note**  
    Correspondents:  
    Chandra, Ashok  
    Shapiro, Eli
- box 28, folder 16      **Trapping Knight with 3 Quads 1974**  
    **Scope and Contents note**  
    Correspondents:  
    Adams, Edward N.
- box 28, folder 17      **Kt. With 2 Quads 1974**  
    **Scope and Contents note**  
    Correspondents:  
    Butters, Jerry  
    Adams, Edward N.
- box 28, folder 18      **Blass & Conway - Angels, Pope, Fool, etc 1974**  
    **Scope and Contents note**  
    Notes from Conway, Blass
- 

**Newcomb's Paradox**

- box 27, folder 7      **1973, July undated**  
    **Scope and Contents note**  
    Empty - refers to March, 1974 column.
- 

**Nim**

**Physical Description:** 3 folder(s)

- box 3, folder 2      **1958, February 1958-1974**  
    **Scope and Contents note**  
    "How to Play Dr. Nim" (pamphlet)  
    Origin of name  
    Correspondents:  
    Distler, Dan  
    Hart, M.  
    Kunik, I. Jordan (with patent)
- box 3, folder 3      **Nim Machines 1958-1960**  
    **Scope and Contents note**  
    Correspondents:  
    Chapman, Seville  
    Potter, Jack  
    Monti, A.
-

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box 3, folder 4

**Tac Tix (NIMBI) 1958-1980**

**Scope and Contents note**

Nimbi, by Piet Hein (pamphlet)

Correspondents:

Abreu, Ruben

Hinrichs, Ralph

Trowbridge, James

Buckley, Michael

Beeler, Michael

Wolfberg, Michael

Mott-Smith, Geoffrey

Berg, Monroe

Fraenkel, Aviezri

---

**Non-Euclidean Geometry**

**Physical Description:** 5 folder(s)

box 53, folder 1

**1981, October 1981**

**Scope and Contents note**

No article.

Coxeter corrections to column.

MG notes.

Some discussion of consistency of elementary geometry, and paper by Tarski on it.

Correspondents:

Coxeter, H.S.M.

Miller, Arthur I.

box 53, folder 2

**Poincare & Whitehead 1971**

**Scope and Contents note**

Details of Whitehead's thoughts on relativity, by Lowe.

MG notes on Poincare.

"Whitehead's Philosophy of Science", by Adolf Grunbaum, on Whitehead vs Einstein on Relativity (typescript.)

Correspondents:

Lowe, Victor

box 53, folder 3

**References on Non-Euclidean Geometry 1990-1998**

**Scope and Contents note**

Many articles, plus MG list (of references) and some reviews.

box 53, folder 4

**Parallel Postulate (Playfair) and False Proofs 1951-1952**

**Scope and Contents note**

MG notes.

Many articles & excerpts.

Correspondents:

Callahan, J.J.

box 53, folder 5

**Models of Hyperbolic Plane (Escher III) undated**

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**Non-Transitive Paradoxes**

**Physical Description:** 6 folder(s)

box 30, folder 16

**1974, October [1 of 2] 1970-1978**

**Scope and Contents note**

No article

Magic Tricks: Little Bingo, Chip Flip, the Right Bettor (from Karl Fulves)

The Upstream Game (from A.K. Austin)

Bar Racudda (Bob Farmer)

Jan-Ken-Pon Chips (Max Maven) (in separate folder)

"A Gaming Wheel Based on Cyclic Advantage", by Walter Funkenbusch (typescript)

Correspondents:

Stover, Mel

box 30, folder 17

**Non-Transitive Paradoxes [2 of 2] 1991**

**Scope and Contents note**

Partial manuscript on Nontransitive games, by Karl Fulves

Correspondents:

Fulves, Karl

box 30, folder 18

**Voting Paradoxes [1 of 2] 1974**

**Scope and Contents note**

various articles

Correspondents:

Fishburn, Peter

Usiskin, Zalman

box 30, folder 19

**Voting Paradoxes [2 of 2] 1970-1975**

**Scope and Contents note**

"What it Takes to Avoid Arrow's Paradox", by Howard Margolis (typescript)

"A Rational Voting Procedure", by Kenneth Norton (typescript)

Correspondents:

Klahr, David

Smith, Tony

Blyth, Colin

Diaconis, Persi

Rudkin, Arthur

box 31, folder 1

**Non-T. Triplets [1 of 2] 1971-1977**

**Scope and Contents note**

(Bagley letter includes photocopy of original article)

Correspondents:

Varga, Tamas

Conway, John

Wolk, Barry

Nelson, Harry

Silverman, David

Bagley, Desmond



box 31, folder 2

**Non-t. Triplets [2 of 2] 1974-1977**

**Scope and Contents note**

Analysis of probabilities in binary strings, by Stanley Collings

Correspondents:

Wendel, J.G.

Knuth, Donald

Collings, Stanley

Odlyzko, Andrew

Connolly, Michael

Hurst, Bryce

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**Nothing (& Conway's No's)**

**Physical Description:** 2 folder(s)

box 32, folder 1

**1975, February 1975-1998**

**Scope and Contents note**

No article

Correspondents:

Hein, Piet

Kaplan, Bob

box 32, folder 2

**Null and zero (and the Null-graph) 1975**

**Scope and Contents note**

"Is the Null-Graph a Pointless Concept?", by Frank Harary & Ronald Read (photocopy)

Correspondents:

Mosteller, Frederick

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**Nozick**

**Physical Description:** 8 folder(s)

box 29, folder 1

**1974, March 1973**

**Scope and Contents note**

On Newcomb's Paradox

Correspondance between MG and Nozick for column on Reflections on Newcomb's Problem

Correspondents:

Nozick, Robert

box 29, folder 2

**Other Refs on Newcomb [1 of 2] 1974-1986**

**Scope and Contents note**

Various articles

"Newcomb's Problem and the Dominance Principle", by Paul Snow (typescript)

"Newcomb's Paradox", by Jerry Malom (typescript)

Correspondents:

Asimov, Isaac

Hohman, William

Richter, Reed

---

box 29, folder 3

**Other Refs on Newcomb [2 of 2] 1998**

**Scope and Contents note**

"A Proof That "Newcomb's Paradox" is not a Genuine Paradox", by Dugald Keith (typescript)

"Newcomb Without Tears: The Role of Causal Factors in Rational Decision", by Brian Skyrms (typescript)

"The Predictor Versus the Rational Chooser: A Solution to Newcomb's Problem", by Dean Clark (typescript)

**Correspondents:**

Nozick, Robert

Langan, Chris

Kruskal, Martin

Newcomb, William

Sorensen, Roy

box 29, folder 4

**Bar Hillel 1974**

**Scope and Contents note**

"Newcomb's Paradox Revisited", by Maya Bar-Hillel & Avishai Margolit (offprint, Brit. J. Phil. Sci. 23(1972) 295-304

**Correspondents:**

Bar-Hillel, Maya

box 29, folder 5

**Schlessinger's Article, & Papers On It 1974**

box 29, folder 6

**Bram's Paper 1975-1976**

**Scope and Contents note**

"Newcomb's Problem and Prisoners Dilemma"

Also: Curriculum Vita (of Brams)

**Correspondents:**

Brams, Steven

box 29, folder 7

**Papers by Eells [1 of 2] 1985**

**Scope and Contents note**

Offprints & typescripts, 1984-1985

box 29, folder 8

**Papers by Eells [2 of 2] 1985**

**Scope and Contents note**

1985 paper

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**Op Art**

**Physical Description:** 3 folder(s)

box 14, folder 16

**1965, July [1 of 2] 1965-1966**

**Scope and Contents note**

mostly many examples

box 14, folder 17

**Op Art [2 of 2] undated**

**Scope and Contents note**

Newsprint articles

box 14, folder 18

**The 4 Bugs 1965**

**Scope and Contents note**

Correspondents:

Good, I.J.

McCall, Storrs

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**Optical Illusions**

box 22, folder 23

**1970, May 1970**

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**Origami**

box 5, folder 2

**1959, July 1959-1961**

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**Oulipu - Word Play**

**Physical Description:** 5 folder(s)

box 39, folder 8

**1977, February 1976-1988**

**Scope and Contents note**

(Leight also includes analysis of 2-pile Nim game)

Correspondents:

Gummere, John

McClennan, John

Eckler, Ross

Leight, Walter

box 39, folder 9

**From Readers (Oulipu) 1977**

**Scope and Contents note**

Lots of anagrams, poems, and other word play.

box 39, folder 10

**Italo Calvino undated**

**Scope and Contents note**

Articles and book reviews about Calvino

box 39, folder 11

**Harry Mathews [1 of 2] 1976-1982**

**Scope and Contents note**

Some of his work

"Oulipian" poems

("Selected Declarations of Dependence" in next folder)

Mathews Algorithm (in French) (typescript)

Snowball poem

Mathews Algorithm (in English, translation by HM) (typescript)

Correspondents:

Mathews, Harry

box 39, folder 12

**Harry Mathews [2 of 2] undated**

**Scope and Contents note**

"Selected Declarations of Dependence", by Harry Mathews ("A Novel" crossed out),  
illustrated by Alex Katz (newsprint)

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## Packing of Squares

**Physical Description:** 10 folder(s)

box 49, folder 5

### 1979, October 1978-1979

#### Scope and Contents note

Incomplete article.  
Articles and a few letters  
Correspondents:  
Krieger, Michael

box 49, folder 6

### Returned by Friedman [1 of 2] 1979-1997

#### Scope and Contents note

(Most of these files were lent to Friedman, and returned in a batch.)  
Many letters and some articles on square packing.  
"Packing Unit Squares in Squares: A Survey and New Results", by Erich Friedman (typescript) (mid-'90's)  
Correspondents:  
Friedman, Erich  
Potjewyd, John  
Konopasek, Milos  
Engler, Paul  
Crowther, Joseph  
Ammann, Robert  
Stoll, Douglas  
Graham, Ron  
Stromquist, Walter  
Trump, Walter

box 49, folder 7

### Returned by Friedman [2 of 2] 1978-1984

#### Scope and Contents note

3 issues of "Ronden", magazine, with square packing problem: 4/80, 9/80, 12/80  
Correspondents:  
Gustafsson, Mats  
Cottingham, Charles  
Hamalainen, Pertti  
Gobel, Fritz

box 49, folder 8

### Tiling Plane (Consecutive Squares) 1972-1986

#### Scope and Contents note

Golomb's Problem (notes)  
Correspondents:  
Golomb, Solomon  
Tutte, W.T.  
Penrose, Roger

box 49, folder 9

**Graham & Erdos undated**

**Scope and Contents note**

Mostly articles.

box 49, folder 10

**Wainwright's Square Pack Problem  
1981-1992**

**Scope and Contents note**

Correspondents:

Wainwright, Robert

box 49, folder 11

**Unit Squares Into Squares undated**

**Scope and Contents note**

List of conjectured values of  $S(N)$

Correspondents:

Friedman, Erich

box 49, folder 12

**The 70x70 Problem 1966-1980**

**Scope and Contents note**

Also on a torus.

"The Tesselator", by Zoltan Perjes  
(typescript) 1987: Algorithm for tiling with  
unequal squares.

Correspondents:

Blyth, Colin

Britton, Dick

Taylor, James

Conway, John

Shepherd, Wilfred

Reid, Robert

box 49, folder 13

**Tiling Space With Distinct Cubes 1991**

**Scope and Contents note**

Correspondents:

Wainwright, Robert

Graham, Ron

Gordon, Basil

box 49, folder 14

**Tiling Space With Distinct Cubes - No 2  
Face-to-Face undated**

**Scope and Contents note**

Just article by S. Stein

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**Palindromes**

box 22, folder 28

**1970, August undated**

**Scope and Contents note**

Newspaper clippings.

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**Paper Cutting**

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box 6, folder 6

**1960, June 1960-1998**

**Scope and Contents note**

also folding

Folding the black cube (with models)

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**Paper Folds (Neale)**

**Physical Description:** 5 folder(s)

box 23, folder 17

**1971, May 1971**

**Scope and Contents note**

Various magic tricks & puzzles by Bob Neale: Odd & Even Flex; Sheep & Goats.

Flexing model

Correspondents:

Neale, Robert

Swinford, Paul

box 23, folder 18

**1xN (Linear Strip) [1 of 2] 1961-1981**

**Scope and Contents note**

Articles on Map & Stamp Folding, by Lunnon, Koehler

box 23, folder 19

**1xN (Linear Strip) [2 of 2] 1966-1982**

**Scope and Contents note**

Correspondents:

Bohigian, Haig

Knuth, Donald

Kaplan, Saul

Wells, Mark

Zbikowski, Mark

box 23, folder 20

**3x3 Map 1967-1971**

**Scope and Contents note**

Beelzebub puzzle

Correspondents:

Neale, Robert

box 23, folder 21

**Rectangles 1970-1971**

**Scope and Contents note**

Articles, MG notes

Correspondents:

Russell, Mike

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**Parabola**

box 52, folder 13

**1981, August 1969-1982**

**Scope and Contents note**

Incomplete article.

Artwork from article.

MG notes.

Untitled paper, by Sam Matlin, on a geometric transformation relating parabolas and triangles, and generalized conics (typescript)

Various articles on the parabola.

Correspondents:

Matlin, Sam

Graham, Ron

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**Paradox of the Unexpected Examination**

**Physical Description:** 4 folder(s)

box 10, folder 1

**1963, March [1 of 2] 1948-1981**

**Scope and Contents note**

Various articles, including most of the ones from Mind, with comments by Gardner

Quines letters include history of the problem

Correspondents:

Quine, W.V.

Meltzer, Bernard

Schoenberg, Judith

Mendelson, Elliott

Norwood, Rick (Prisoner's Card Game)

box 10, folder 2

**Paradox of the Unexpected Examination [2 of 2] 1979-2000**

**Scope and Contents note**

more articles

Correspondents:

Chow, Timothy

box 10, folder 3

**Roy Sorensen 1986-1991**

**Scope and Contents note**

Correspondents:

Sorensen, Roy

box 10, folder 4

**Letters on Paradox of Unexpected Hanging 1963-1984**

**Scope and Contents note**

Many letters!

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**Parity**

box 11, folder 22

**1963, December 1959=1964**

**Scope and Contents note**

"Informal deduction in algebra: properties of odd and even numbers", by Commission on Mathematics of the College Entrance Examination Board", pamphlet, 1959

MG notes

Correspondents:

Pugh, A. Henry

Seiner, John

Singleton, C.R.J.

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**Parodies**

box 1, folder 2

**Parodies 1959-1977**

**Scope and Contents note**

Parodies:

New Yorker, 1965

New Yorker, 1976

National Lampoon, 1977

Gardner's proposal for Humanistic science magazine

Correspondents:

Flanagan, Dennis

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**Pascal Triangle**

**Physical Description:** 9 folder(s)

box 17, folder 19

**1966, December [1 of 2] 1966**

**Scope and Contents note**

Various articles

box 17, folder 20

**Pascal Triangle [2 of 2] undated**

**Scope and Contents note**

"Chromatics, as Applied to Mathematics Studies with Pascal's Triangle", by Prof. Siegfried Rosch, 1964, in

Palette 15 (Internal house magazine of SANDOZ, Ltd.

"The Incredible Pascal Triangle", by Margaret J. Kenney, Booklet II, Motivated Math Project Activity, Boston College Math. Inst., 1976

HexStat, from Science Materials Center (rolling beads in a hexagonal layout), with teachers manual [in separate envelop, filed elsewhere.]

box 18, folder 1

**Misc. Properties & Puzzles 1966-1975**

**Scope and Contents note**

Many articles

Correspondents:

Hoggatt, Verner, Jr.

Braun, William

Struyk, Adrian

Golomb, Solomon

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box 18, folder 2

**Pascal Triangle & Probability 1963-1968**

**Scope and Contents note**

(Ruchlis on HexStat, see Box 17, folder 20 [2 of 2] for model

Correspondents:

Ulrich, James

Ruchlis, Hy

Morgan, James

box 18, folder 3

**Generalized to Trinomials, etc 1960-1967**

**Scope and Contents note**

articles & analysis

Correspondents:

Stuermann, Walter

Tangen, John

box 18, folder 4

**Fibonacci Numbers 1966-1972**

**Scope and Contents note**

Correspondents:

Hoggatt, Verner, Jr.

box 18, folder 5

**Patterns of Primes, Multiples of n, etc. [1 of 2] 1966-1971**

**Scope and Contents note**

"The Increase of Error Probability When Using P.C.M. Repeaters with Code Converters", by L.E. Legers, Philips research Labs Technical Note 155/66

"Patterns and Algorithms", by Jerome Rothstein, CIS Research Center Tech. Report, 1971

Correspondents:

Kirka, Richard

Legers, L.E.

box 18, folder 6

**Patterns of Primes, Multiples of n, etc. [2 of 2] 1965-1977**

**Scope and Contents note**

German articles by Sigfried Rusch (English of one is in Box 17/20 [ 2 of 2])

"Exploring the Pascal Triangle", by class of The Hyde School, 1975

box 18, folder 7

**Apex, & Related Material 1966-1982**

**Scope and Contents note**

Correspondents:

Collings, Stanley

Wevers, J.H.

Bonello, Antonio

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**Pathological Curves**

**Physical Description:** 3 folder(s)

box 37, folder 16

**1976, December 1976**

**Scope and Contents note**

Fragments of article, marked for book.

Correspondents:

Goldberg, Michael

Shanks, Merrill

Hitotumatu, Sin

Mandelbrot, Benoit

box 37, folder 17

**Gosper's Flowsnake Curve 1975-1977**

**Scope and Contents note**

Many diagrams from Gosper

Correspondents:

Gosper, Bill

Fry, Alan

box 37, folder 18

**Gosper's Comment on Chapter 1977-1988**

**Scope and Contents note**

More diagrams (from Gosper), many with comments.

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**Pedersen's Strip Solids**

**Physical Description:** 4 folder(s)

box 24, folder 2

**1971, September 1971**

**Scope and Contents note**

Correspondents:

Pargeter, A.R.

box 24, folder 3

**"Sphericity" of Platonic Solids 1971**

**Scope and Contents note**

Correspondents:

Gridgeman, Norman

Dewar, Robert

box 24, folder 4

**From Mrs. P[edersen] undated**

**Scope and Contents note**

Jean Pedersen correspondence

"A New Look at the Platonic Solids", by Jean Pedersen (typescript)

Various strips for models

Correspondents:

Pedersen, Jean

box 24, folder 5

**Gurule's Work 1971-1985**

**Scope and Contents note**

Ben Gurule

Pictures of his braided polyhedra.

Patent claims and counterclaims

Correspondents:

Gurule, Ben

Pedersen, Jean

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**Pennies**

**Physical Description:** 8 folder(s)

box 15, folder 19

**1966, February 1966**

**Scope and Contents note**

Article, includes triagnular solitaire

box 15, folder 20

**Rolling Coins 1965-1993**

**Scope and Contents note**

Correspondents:

Goldberg, Michael

box 15, folder 21

**Isometric Solitaire 1966-1967**

**Scope and Contents note**

(Triangular and rhombic)

"The Official Triangular Peg Solitaire Handbook", by William Miller, 1979 (typescript)

analyses by Choros and Harris, and comments on Philpotts analysis (which is in 15/22)

Correspondents:

Charosh, Mannis

Harris, John

box 15, folder 22

**Varient Brands 1966-1986**

**Scope and Contents note**

Davis (on Rhomboids) (Harry Davis)

Philpott analysis (isometric) - triangles and rhombic

"Think & Jump" (hexagonal)

Polytaire Problems (Piet Hein)

Correspondents:

Davis, Harry

Hein, Piet

Philpott, Wade

box 15, folder 23

**The 10-Triangle 1966 (?)**

**Scope and Contents note**

Martin Gardner notes

box 15, folder 24

**The 15-Triangle 1965-1988**

**Scope and Contents note**

Solutions, proofs

"A Problem in Triangular Peg Solitaire", by B.L. Schwartz (typescript), 2 versions

Correspondents:

Philpott, Wade

Davis, Harry

Thomas, R.E.

Schwartz, Benjamin

box 15, folder 25

**9 Moves for 15-Triangular with 5-move sweep 1966**

**Scope and Contents note**

Correspondents:

Kierstead, Friend

box 15, folder 26

**21-triangle & 28-triangle & 36-triangle 1966**

**Scope and Contents note**

Various minimum solutions (with some proofs)

Philpott's comments on Charosh comments

Correspondents:

Philpott, Wade

Davis, Harry

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**Penrose Tiles**

**Physical Description:** 25 folder(s)

box 38, folder 1

**1977, January [ 1 of 3 ] 1975-1997**

**Scope and Contents note**

Partial article.

Some slides of paintings by Richard Kurman

Photo of rug by Tony Banford

"Quasicrystallography: Some Interesting New Patterns", by P.A.B. Pleasants (photocopy of typescript)

Correspondents:

Penrose, Roger

Shephard, Geoffrey

Guy, Richard

Pleasants, Peter

box 38, folder 2

**Penrose Tiles [2 of 3] 1988-1997**

**Scope and Contents note**

Penrose corrections to original article.

"Penrose Tilings", by Tami Martin & Art Johnson, ~1992 (typescript)

Sample of Penrose toilet paper.

"Termeszt Vilaga" (magazine), Sept. 1997 (includes article by MG)

Correspondents:

Penrose, Roger

Martin, Tami

Golomb, Solomon

Osborn, John

box 38, folder 3

**Penrose Tiles [3 of 3] undated**

**Scope and Contents note**

"Termeszt Vilaga" (magazine) Augusst, 1997 (includes article by MG)

Several articles on Penrose tilings.

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box 38, folder 4

**Quasi-Crystals [1 of 3] 1985-1999**

**Scope and Contents note**

Lots of articles, clippings, etc, on quasi-crystals.

Rhombic Hexahedron modules, pictures, patent (of C. Perry), instructions -- from Helmut Bergman

Correspondents:

Bergman, Helmut

box 38, folder 5

**Quasi-Crystals [2 of 3] 1989-1997**

**Scope and Contents note**

More articles.

Correspondents:

Heldring, Otto

box 38, folder 6

**Quasi-Crystals [3 of 3] 1986-1999**

**Scope and Contents note**

More articles.

box 38, folder 7

**Conway's Non-Periodic 3D Tile (Convex) 1993**

**Scope and Contents note**

The model framework on file-folder paper (to be cut out), and a short article from Focus.

box 38, folder 8

**Nori's Algorithm 1987**

**Scope and Contents note**

"A Very Simple Algorithm That Generates an Infinite Sequence of Aperiodic Patterns", by Marco Ronchetti and Franco Nori ["Just a Preliminary and Incomplete Draft"] (typescript), along with around 30 examples.

Correspondents:

Nori, Franco

box 38, folder 9

**de Bruijn Material [1 of 2] 1980-1982**

**Scope and Contents note**

2 papers (typescript) by de Bruijn

Correspondents:

De Bruijn, N.G.

box 38, folder 10

**de Bruijn Material [2 of 2] undated**

**Scope and Contents note**

More de Bruijn papers.

Bibliography of de Bruijn papers on Penrose patterns.

box 38, folder 11

**Ammann's Tiles 1969-1996**

**Scope and Contents note**

Many hand-drawn aperiodic examples.

Some proofs, in letters

Correspondents:

Ammann, Robert

Penrose, Roger

Grunbaum, Branko

box 38, folder 12

**Originals of duplicated pages undated**

**Scope and Contents note**

From folder 38/11

box 38, folder 13

**Conway Material 1975-1980**

**Scope and Contents note**

Notes on Conway lecture on the tiles, Bell Labs, 1980.

Lots of notes (and corrections) about the tiles.

Slides from a Conway lecture

Correspondents:

Guy, Richard (for J.H.C.)

Conway, John

Knuth, Donald

box 38, folder 14

**Originals of duplicated pages undated**

**Scope and Contents note**

From folder 38/13

box 38, folder 15

**Forcing Theory 1977**

**Scope and Contents note**

MG report to Penrose on what Conway has been doing with Penrose tiles, partly on how Ammann bars "force" other infinite sets.

Correspondents:

Penrose, Roger

box 38, folder 16

**Non-Periodic Tiling 1970-1981**

**Scope and Contents note**

Spiral and other non-periodic (but not aperiodic) tilings.

Correspondents:

Goldberg, Michael

Kershner, R.

Knuth, Donald

Wallace, John

Schattschneider, Doris

Hein, Piet

box 38, folder 17

**3-Space Non-Periodic Tilings 1976-1989**

**Scope and Contents note**

Correspondents:

Ammann, Robert

Kim, Scott

Coxeter, H.S.M.

Penrose, Roger

box 38, folder 18

**Ellen Perstein 1999-2001**

**Scope and Contents note**

"Tilings with Penrose Rhomb Clusters", by Ellen Perstein (color computer output), plus discussion.

Correspondents:

Perstein, Ellen

Schattschneider, Doris

box 39, folder 1

**Wnag Dominoes 1965-1977**

**Scope and Contents note**

Articles & letters on Wang tiles.

"Computers, Games, and Logic", by Hao Wang (typescript)

Correspondents:

Hart, Tim

Robinson, Raphael

box 39, folder 2

**Robinson - on th ePenrose Tiles 1975-1976**

**Scope and Contents note**

Articles (& letters) on Penrose tiles

"Comments on the Penrose Tiles - September 1975", by Raphael M. Robinson (typescript)

Correspondents:

Robinson, Raphael

box 39, folder 3

**Eric Rogener undated**

**Scope and Contents note**

Some kite and dart tilings

box 39, folder 4

**Harborth & P. Hein 1976**

**Scope and Contents note**

Correspondents:

Harborth, Heiko

Schattschneider, Doris

box 39, folder 5

**Pauling's Criticisms undated**

**Scope and Contents note**

About quasicrystals

box 39, folder 6

**Theo Bense (New Zealand) 1991-1992**

**Scope and Contents note**

Various 3-D models based on Penrose tiling, with pictures & description. Also article in Dutch.

Correspondents:

Bense, Theo

box 39, folder 7

**Miyazaki 1978**

**Scope and Contents note**

"On Some Periodical and Non-Periodical Honeycombs", by Koji Miyazaki, 1977 (booklet, with many laid-in photos. Also mentions Golden Polytopes and Golden Isozonohedra.)

Correspondents:

Miyazaki, Koji

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**Pentomino Games**

**Physical Description:** 3 folder(s)

- box 15, folder 5                    **1965, October 1965-1994**  
   **Scope and Contents note**  
   "The Game of Pentominoes: A First Player Win", by Hilarie K. Orman, 1994 (typescript)  
   Correspondents:  
   Golomb, Solomon
- box 15, folder 6                    **De Bono's L-Game 1974-1984**  
   **Scope and Contents note**  
   Correspondents:  
   Dewdney, A.K.  
   Penszko, Marek
- box 15, folder 7                    **Rectification Problem (form rectangles) 1964-1989**  
   **Scope and Contents note**  
   "Rectifiable Polyominoes", by "Group Four", VCP (reproduction)  
   "Polyominoes Which Tile Rectangles", by Solomon Golomb (typescript)  
   Correspondents:  
   Harris, John  
   O'Beirne, Thomas  
   Klarner, David  
   Spira, Robert
- 

#### **Pentominoes**

**Physical Description:** 2 folder(s)

- box 6, folder 18                    **1960, November 1960-1962**  
   **Scope and Contents note**  
   Correspondents:  
   Golomb, Solomon
- box 6, folder 19                    **Domino's and Fault-Free Rectangles 1960-1976**  
   **Scope and Contents note**  
   Correspondents:  
   Philpott, Wade
- 

#### **Perfect No's**

- box 20, folder 1                    **1968, March 1968**  
   **Scope and Contents note**  
   Just article.  
   Other folders: Weird numbers, number problems
- 

#### **Phi**

- box 5, folder 3                    **1959, August 1959**  
   **Scope and Contents note**  
   (just the article)
-



**Pi**

box 6, folder 7                   **1960, July 1960-1993**  
  **Scope and Contents note**  
  "The Number Pi", by Edmund Kelly

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**Pierce**

**Physical Description:** 5 folder(s)

box 45, folder 1                   **1978, July 1978**  
  **Scope and Contents note**  
  Charles Sanders Pierce  
  Incomplete article.  
  Correspondents:  
  Eisele, Carolyn  
  Knuth, Donald  
  Jones, Charles

box 45, folder 2                   **Pierce's 1, 2, & 3rd ness 1978**  
  **Scope and Contents note**  
  MG notes.  
  Correspondents:  
  Hartshorne, Charles  
  Fisch, Max

box 45, folder 3                   **Burks, on Pierce 1976**  
  **Scope and Contents note**  
  Papers (typescript) by Arthur Burks  
  Correspondents:  
  Burks, Arthur

box 45, folder 4                   **Chas. Pierce - Misc. Papers on undated**  
box 45, folder 5                   **Pierce's Card Trick 1965-1985**  
  **Scope and Contents note**  
  Correspondents:  
  Anderson, Sabra  
  Eisemann, Kurt  
  Halmos, Paul

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**Pigeon-Hole Principle**

box 51, folder 10               **1980, August 1980**  
  **Scope and Contents note**  
  Incomplete article (article written by Ross Honsberger)  
  Dewdney SA article on Honsberger  
  Correspondents:  
  Rebman, Ken

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**Platonic Solids**

box 4, folder 13

**1958, December 1958-1962**

**Scope and Contents note**

Resistance Cube Puzzle

Correspondents:

Wetter, Arthur

Parkenson, R.A.

Eklund, Karl

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**Pocket Calculator**

box 37, folder 2

**1976, July 1970-1992**

**Scope and Contents note**

Correspondents:

DeLong, Howard

Knuth, Donald

Hitotumatu, Sin

McPhee, Mary Jo

Jud, Wallace

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**Point-Set Coverings of Spheres**

**Physical Description:** 2 folder(s)

box 27, folder 10

**Point-Set Coverings of Spheres (Conway, Simmons) [2 of 2] 1973**

**Scope and Contents note**

Lots of correspondence & articles from/with Simmons

Correspondents:

Simmons, Gustavus

box 27, folder 9

**1973, September [1 of 2] 1973-1985**

**Scope and Contents note**

No article (1 page photocopy)

Correspondents:

Croft, H.

Angstrom, Knut

Alma, G.G.P.

Golomb, Solomon

Simmons, Gustavus

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**Polycubes (& Soma II)**

box 25, folder 16

**1972, September undated**

**Scope and Contents note**

Just article (incomplete)

(includes Slither)

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**Polyominoes**

box 2, folder 17

**1957, December 1957**

**Scope and Contents note**

More about complex dominoes (December, 1957)

References a separate box of letters

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**Primes**

**Physical Description:** 7 folder(s)

box 12, folder 13

**1964, March 1964**

**Scope and Contents note**

Column

box 12, folder 14

**Ulam's Spiral 1964-1966, 2000**

**Scope and Contents note**

"A Visual Display of Some Properties of the Distribution of Primes", by M.L.Stein, S.M. Ulam, M.B.Wells (typescript of article)

Correspondents:

Ducker, W.L.

Ulam, Stanislav

Jones, Florence

Amick, Owen

Clark, Arthur C.

box 12, folder 15

**Correspondence on the Spiral Pattern [1 of 2] 1964-1966**

**Scope and Contents note**

Are the pictures wrong?

Hexagonal plot

Rows of squares

"The Structure of the Prime Number", by Wang Chia-chu (photocopy of typescript)

Correspondents:

Richter, Charles

Nelson, W.L.

Stuart, James

Baumgart, Bruce

Eisenberg, Frank

Phelan, Stephen

Ulam, Stanislav

Vanderpool, Donald

box 12, folder 16

**Correspondence on the Spiral Pattern [2 of 2] 1985-1987**

**Scope and Contents note**

3 Reports from Naval Surface Weapons Center, by R. S. Sery:

"A New Method for Finding Prime-Rich Equations of the Type  $I=x^2-x+c$ " (1986)

"Prime-Rich Row Equations of the "Special" Array" (1987)

"Relationships Between Prime-Rich Euler Type Equations and a Triangular Array of the Odd Integers" (1985)

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box 12, folder 17

**Triangular Grids [1 of 2] 1932-1964**

**Scope and Contents note**

"A Triangular Arrangement of Numbers Leading to the Graphical Determination of Euler Sequences", by L.M.Klauber (1932) (Thermofax of typescript)

"Never Prime" Seive, & "Prime Likely" Sieve (triangular), by Klauber

Correspondents:

Klauber, L.

box 12, folder 18

**Triangular Grids [2 of 2] 1963-1964**

**Scope and Contents note**

Correspondents:

Brooks, Rodney

box 12, folder 19

**Hexagonal Grids` 1964-1987**

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**Prismatic Rings**

**Physical Description:** 3 folder(s)

box 45, folder 6

**1978, August 1976-1990**

**Scope and Contents note**

Slides from Ikuo Sakurai, photos from Quimby

Correspondents:

McAdams, H.T.

Sequin, Carlo

Peavey, L.H.

Quimby, Shirley

Evans, Pierce

Draper, S.W.

Ferguson, Helaman

Engel, Douglas

box 45, folder 7

**Early Letters on 1964-1978**

box 45, folder 8

**Scott Kim on 1976-1978**

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**Probability II**

**Physical Description:** 4 folder(s)

box 5, folder 5

**1959, October 1959, 1991**

box 5, folder 6

**Broken Stick 1959-1990**

**Scope and Contents note**

analysis of "at random"

Correspondents:

Kling, Frederick, John Ross, Norman Cliff

Redheffer, Ray

Adams, Edward N.

James, Robert

Lynch, Gerald

Bach, G. and R. Sharp

Knalf, David

Geschwind, Norman

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box 5, folder 7

**Random Chord (Bertrand's Problem) 1939-2002**

**Scope and Contents note**

Correspondents:

Goldman, Thomas

Lydiard, J.M.

Jaray, R.J.

Bauer, Richard

MacQueen, J.T.

box 5, folder 8

**Paradox of 2nd Child 1959-1992**

**Scope and Contents note**

Correspondents:

McVey, Joseph

Kemeny, John

Rosenstock, Herbert

Heironimus, J.P.

Baron, Julius

Smith, Howard

Collier, J.H.

Lincoln, Alexander

Olson, Roger

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**Probability Paradoxes**

**Physical Description:** 8 folder(s)

box 1, folder 13

**1957, April 1957**

**Scope and Contents note**

"Paradoxes dealing with birthdays, playing cards, coins, crows and red-haired typists"

box 1, folder 14

**Hempel's Paradox 1968**

**Scope and Contents note**

MG card model of Hempel's paradox (undated)

box 1, folder 15

**Letters on Hempel's Paradox 1957-1988**

**Scope and Contents note**

Correspondents:

Arabadjis, Gus

Smith, Preston

MacIver, Donald

Hobson, Paul

Chodosch, Robert

Alchian, Armen

Barnhart, E. Paul

Isen, Werner

Geppert, Donovan

"Steve"

Smith, Dan

Colman, Morris

Michie, Donald

Porte, Jean

Meyer, Stuart

box 1, folder 16

**Papers and references on Hempel's Paradox [1 of 2] 1946-1985**

**Scope and Contents note**

"The Priggish Principles", I.F. Good

Correspondents:

Hacking, Ian

box 1, folder 17

**Papers and references on Hempel's Paradox [2 of 2] 1957-1997**

**Scope and Contents note**

Correspondents:

Swinburne, Richard

Michie, Donald

Hempel, Carl

Stove, David

Shotwell, David

box 23, folder 10

**1970, December 1969-1971**

**Scope and Contents note**

No article.

Various discussions of paradoxes

box 23, folder 11

**Non-Transitive Dice [1 of 2] 1970-2000**

**Scope and Contents note**

Several articles.

"Non-Transitive Dominance Relations Among Dreichels", by R. Tenney & Caxton Easten (typescript)

Correspondents:

Stover, Mel

Rosen, Joe

Efron, Bradley

Hein, Piet

Thorp, Edward

box 23, folder 12

**Non-Transitive Dice [2 of 2] 1975**

**Scope and Contents note**

"Latest Last Entry Time and Proper Strategic Choice from Among a Certain Set of Options having Non-Transitive Advantages", by W.W. Fukenbusch, Dept. of Math, Michigan Tech. U., 1974 (booklet)

Correspondents:

Funkenbusch, W.

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**Problems**

**Physical Description:** 10 folder(s)

box 25, folder 1

**1972, April 1967-1972**

**Scope and Contents note**

Correspondents:

Silverman, David

box 25, folder 2

**Dudney's Digit Problem 1972**

**Scope and Contents note**

Many computer solutions of problem #7

box 25, folder 3

**Variants - using Digits 1972**

**Scope and Contents note**

Of problem #7, multiplying numbers using the 9 digits, different bases, addition, etc.

Correspondents:

Card, L.E.

Crocker, Guy

box 25, folder 4

**10-Digit Variant 1972**

**Scope and Contents note**

Variants of #7, but multiplying using 10 digits (0-9)

box 25, folder 5

**Simmon's Band and Cord Variant, etc 1972**

**Scope and Contents note**

Variants of #1, folding strip with ends attached (also folding cards.)

box 25, folder 6

**Frieze Patterns (Coxeter & Conway) 1971-1972**

**Scope and Contents note**

Various reprints & preprints of articles on Frieze patterns.

Conway notes (June, 1972) on Frieze patterns, also "unimpartial hackenbush"

"The Geometry of Frieze Patterns", by D. Broline & D.W. Crowe (typescript)

Correspondents:

Coxeter, H.S.M.

Conway, John

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box 49, folder 18

**1979, December 1977-1996**

**Scope and Contents note**

Incomplete article.  
Corrections to several problems.  
Correspondents:  
Boas, R.P.h  
Schwartz, Benjamin  
Penny, Walter

box 49, folder 19

**The "Impossible" Number Problem [1 of 2] 1979**

**Scope and Contents note**

Lots of solution procedures, reports on statement error (sum cannot be limited to 20), etc.  
Correspondents:  
Dijkstra, Edsger  
Berlekamp, Elwyn  
Hull, Thomas  
Stover, Mel  
McCarthy, Don

box 49, folder 20

**The "Impossible" Number Problem [2 of 2] 1979-1993**

**Scope and Contents note**

"The Impossible Problem", by Lee Sallows (typescript)  
Correspondents:  
Agin, Gerald  
Lew, John  
Sallows, Lee

box 49, folder 21

**Taylor's Linked Toruses 1979-1980**

**Scope and Contents note**

Various alternative diagrams of solutions (and variations)  
Photos of a solution in clay & brass ring (by Fieux).  
Correspondents:  
Francis, George  
Taylor, Herbert

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**Problems - 11**

**Physical Description:** 9 folder(s)

box 11, folder 13

**1963, November 1963**

**Scope and Contents note**

Lohr, Lenox

box 11, folder 14

**Bracing a Square 1963**

**Scope and Contents note**

Correspondents:  
Robinson, Raphael



box 11, folder 15	<b>23-Rods 1963</b> <b>Scope and Contents note</b> Correspondents: Andersen, Eric
box 11, folder 16	<b>Rigidifying Higher Polygons 1999</b> <b>Scope and Contents note</b> Bracing a pentagon & hinged dissection Correspondents: Frederickson, Greg
box 11, folder 17	<b>3-D Mazes 1962-1964</b> <b>Scope and Contents note</b> Correspondents: Abbott, Robert
box 11, folder 18	<b>Word Squares 1963-1965</b> <b>Scope and Contents note</b> Correspondents: Borgmann, Dmitri
box 11, folder 19	<b>Clock Problem 1963-1964</b> <b>Scope and Contents note</b> Correspondents: Klarnar, David
box 11, folder 20 box 11, folder 21	<b>Schuh's Problem 1963</b> <b>Proofs of Max. Move Chess Problem 1963</b>

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**Problems - 13**

**Physical Description:** 8 folder(s)

box 15, folder 8	<b>1965, November 1964-1965</b> <b>Scope and Contents note</b> Word and number problems Article Source of #6 Comment on key & ring
box 15, folder 9	<b>Sam Loyd's toothpick Problem 1965</b> <b>Scope and Contents note</b> Various general solutions and proofs Correspondents: Brown, J.C. Ungar, Andrew Beach, Breat Allen, D.J. Shepherd, W.A. Dickson, John Brewster, George Bienenfeld, David

box 15, folder 10

**Rectangle-Free Squares 1965-1966**

**Scope and Contents note**

also Formulas for rectangle-free problem on squares

Correspondents:

Hodgart, Mathew

Harris, John

Bienenfeld, David

Knowlton, William

box 15, folder 11

**Lady in Lake 1965-1967**

**Scope and Contents note**

Correspondents:

Max, Nelson

Perry, R.L.

box 15, folder 12

**Glass-Test Goof 1964-1965**

**Scope and Contents note**

Correspondents:

Barr, Steven

Hall, David

box 15, folder 13

**The Anagram Dictionary 1964-1966**

**Scope and Contents note**

Correspondents:

Temperley, Nicholas

Shepherd, Wilfred H.

Borgmann, Dmitri

box 15, folder 14

**Barr's Sets of Cocircular points 1965**

box 15, folder 15

**Rolling Cube Tours 1964-1997**

**Scope and Contents note**

Gough describes games: Relate, Egyptian Game

Correspondents:

Harris, John

Gough, John

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**Problems with Game Material**

**Physical Description:** 6 folder(s)

box 43, folder 10

**1978, February 1972-1978**

**Scope and Contents note**

Correspondents:

Silverman, David

box 43, folder 11

**Sicherman Dice 1977-1979**

**Scope and Contents note**

Correspondents:

Hitotumatu, Sin

Gallian, Joseph

Broline, Duane

Sicherman, George

Knuth, Donald

box 43, folder 12

**The Complex Polytope 1977-1992**

**Scope and Contents note**

Karl Scherer's proof of square problem: 8 is minimum no. of equal squares with each vertex shared

Correspondents:

Youngs, Dale

Scheerer, Karl

Coxeter, H.S.M.

Mycielski, Jan

Kim, Scott

box 43, folder 13

**27 Dice Problem 1978**

**Scope and Contents note**

Some nice analysis

Correspondents:

Funkenbusch, W.

Jackman, Kenneth

Lipscomp, Kenneth

Vanderschel, David

Lopow, Leonard

box 43, folder 14

**Conway's Checker Jump 1979, 1997**

**Scope and Contents note**

Only 2 articles on problem and variations

box 43, folder 15

**Kruskal Kount 1975-1976**

**Scope and Contents note**

Various discussions of presentation

Correspondents:

Endfield, Cy

Kruskal, Martin

Lerman, Benjamin

Marlo, Edward

Hudson, Charles

Fulves, Karl

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**Pythagorean Theorem**

**Physical Description:** 4 folder(s)

box 13, folder 13	<b>1964, October 1958-1972 (1998)</b> <b>Scope and Contents note</b> Also Pythagorean triangles Proofs, generalizations Correspondents: Beyer, William Trigg, Charles Loomis, E.G.
box 13, folder 14	<b>Equiareal PP Triangles 1960</b> <b>Scope and Contents note</b> Correspondents: Whitlock, Bill
box 13, folder 15	<b>Pythagorean Triples 1960-1995</b> <b>Scope and Contents note</b> "The Pythagorean Numbers in Vector Problems", by Leo Lavatelli (typescript) Correspondents: Umansky, Harlan Rathbun, Randall
box 13, folder 16	<b>Matrix' Prediction 1964</b> <b>Scope and Contents note</b> (tail end of October article, Pythagorean Theorem) Notes on how he (MG) did it, with other possibilities

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#### **Quicky Problems**

**Physical Description:** 3 folder(s)

box 23, folder 23	<b>1971, July 1971</b>
box 23, folder 24	<b>Pentagon Viewing Problem 1971</b> <b>Scope and Contents note</b> Lots of claims of falsity Correspondents: Silverman, David
box 23, folder 25	<b>The 24 Touching Cubes 1971</b> <b>Scope and Contents note</b> Also details of 22 cube solution; also hypercube solutions Correspondents: Fischer, Michael Holmes, Robert Fawcett, Kenneth Riley, John Ogilvy, Stan

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#### **Ramsey Theory**

**Physical Description:** 15 folder(s)

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- box 42, folder 6                    **1977, November 1977-1989**  
   **Scope and Contents note**  
   Incomplete article  
   Correspondents:  
   Knuth, Donald  
   Harary, Frank  
   Ulam, Stanislav
- box 42, folder 7                    **Ramesy Theory (Refs) 1979-1996**  
   **Scope and Contents note**  
   Notes by MG  
   Various papers, reviews, etc  
   Long survey article (typescript) by Stefan Burr, nd (about 1975)  
   Correspondents:  
   Harary, Frank
- box 42, folder 8                    **Papers by Fan Chung 1982-1988**  
   **Scope and Contents note**  
   Correspondents:  
   Chung, Fan
- box 42, folder 9                    **R(4,5)=25 (Ann Landers) 1993**  
   **Scope and Contents note**  
   Ann Landers mention of Ramsey(4,5) being 25, with letter from MG in response
- box 42, folder 10                   **Readers - Corrections & New Material 1977**  
   **Scope and Contents note**  
   Correspondents:  
   Harary, Frank  
   Basin, Lewis  
   Schwenk, Allen  
   Lorden, Gary
- box 42, folder 11                   **Forced Chromatic Triangles in Graphs (& Blue-empty ones) 1962**  
   **Scope and Contents note**  
   Correspondents:  
   Schwenk, Allen  
   Jenks, Robert
- box 42, folder 12                   **Ramsey No's for Cycles (Polygons) undated**  
   **Scope and Contents note**  
   MG notes and 2 article reprints
- box 42, folder 13                   **Graham's Hypercube Problem undated**  
   **Scope and Contents note**  
   Knuth article on large numbers, but \*no Graham!\*
- box 42, folder 14                   **Multiple Disjoint Triangles undated**  
box 42, folder 15                   **Ramsey No's for Stars undated**  
   **Scope and Contents note**  
   MG notes, 2 articles (by Burr & others)
-

- box 42, folder 16      **Spoked Wheels undated**  
                                 **Scope and Contents note**  
                                 MG notes
- box 42, folder 17      **R(3,3,...) Problems 1977**  
                                 **Scope and Contents note**  
                                 MG notes & articles by Folkman  
                                 Correspondents:  
                                 Fletcher, John
- box 42, folder 18      **Erdos-Graham Problem 1977**  
                                 **Scope and Contents note**  
                                 MG notes & some articles  
                                 Correspondents:  
                                 Schwenk, Allen
- box 42, folder 19      **Euclidean Ramsey Theory undated**  
                                 **Scope and Contents note**  
                                 MG notes  
                                 "Euclidean Ramsey Theorems", I, II, III, by Erdos, Graham et. al. (photocopy)
- box 42, folder 20      **Related Problems (Ramsey Type) 1978**  
                                 **Scope and Contents note**  
                                 Lots of articles  
                                 Correspondents:  
                                 Shader, Leslie

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**Random Numbers**

**Physical Description:** 2 folder(s)

- box 20, folder 7      **1968, July 1968**  
                                 **Scope and Contents note**  
                                 Fink letter on Borges.  
                                 Correspondents:  
                                 Fink, Federico
- box 20, folder 8      **Random Number Generators 1968**  
                                 **Scope and Contents note**  
                                 Several articles  
                                 Correspondents:  
                                 Hull, Thomas

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**Random Walks I (Linear)**

box 21, folder 11

**1969, May 1968-1983**

**Scope and Contents note**

MG notes on betting games with Red/Black cards (with letter from Enn Norak and notes from Persi Diaconis)

Correspondents:

Mosteller, Frederick

Mackay, Alan

Oliver, Barney

Norak, Enn

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**Random Walks II (Plane and Space)**

**Physical Description:** 4 folder(s)

box 21, folder 12

**1969, June 1969**

**Scope and Contents note**

Einstein knew of Brownian motion: excerpts of translations of Einstein, from Karol Mysels

Various other non-technical articles on random walks, from Quandum, the Sciences, American Science, Math Horizens, Sci. Am.

box 21, folder 13

**2-Dim. Walks 1969**

**Scope and Contents note**

Notes & articles on Brownian Motion

MG notes on triangular random walks

Correspondents:

Weiss, Mitchell

box 21, folder 14

**3-D Walks on Skeletons of Solids 1969**

**Scope and Contents note**

Correspondents:

O'Beirne, Thomas

box 21, folder 15

**Self-Avoidance Walks undated**

**Scope and Contents note**

Just one article: "How to Avoid Yourself", by Brian Hayes, from American Scientist, Vol. 86

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**Reflections & Rotations**

**Physical Description:** 3 folder(s)

box 8, folder 15

**1962, May 1958-1970**

**Scope and Contents note**

"Symmetry and asymmetry and the strange world of upside-down art"

"Explorations", Ed. Marshall McLuhan, containing "If Wittgenstein had been an Eskimo", by Edmund Carpenter

Correspondents:

Legman, G.

---

box 8, folder 16                    **Upside-Down and Side Pix 1962-?**  
   **Scope and Contents note**  
   lots of pictures

box 8, folder 17                    **Upside-Down Houses 1869-1984**

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**Rep-Tiles**

**Physical Description:** 3 folder(s)

box 10, folder 6                    **1963, May 1963-1996**  
   **Scope and Contents note**  
   "Mutession: New Tiling Relationship Among Planar Polygons", by Rochelle Meyer  
   Correspondents:  
   Golomb, Solomon  
   Vanderpool, Donald  
   Hinrichs, Ralph  
   Mandel, Mark  
   Reid, Robert

box 10, folder 7                    **Self-Similar Fractals [ 1 of 2 ] 1965-1976**  
   **Scope and Contents note**

   Correspondents:  
   Golomb, Solomon  
   Giles, Jack Jr.  
   Gosper, Bill  
   Knuth, Donald  
   Schattschneider, Doris

box 10, folder 8                    **Self-Similar Fractals [ 2 of 2 ] 1991-1994**  
   **Scope and Contents note**  
   "Classification of Self-Affine Lattice Tilings", Christoph Bandt & Goetz Gelbrich  
   "Self-Affine Lattice Reptiles with Two Pieces in  $R^n$ ", by Goetz Gelbrich  
   "Crystallographic Reptiles", by Goetz Gelbrich  
   "Fractal Penrose Tilings I", by Christoph Bandt and Petra Gommelt

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**Rotors**

**Physical Description:** 4 folder(s)

box 9, folder 16                    **1963, February 1963-1999**  
   **Scope and Contents note**  
   Curves of Constant Width  
   7-sided coin (United Kingdom, 50p)  
   Article: "Roundness and its Ramifications", by E. Lindberg  
   "Megalithic Compound Ring Geometry", by Thaddeus Cowan  
   Correspondents:  
   Knowlton, William  
   Herdan, R.

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box 9, folder 17

**Kekeya Needle and Other Turning Problems 1963-2001**

**Scope and Contents note**

Several articles and papers

Correspondents:

Neches, Bernard

box 9, folder 18

**Drills for Square Holes, etc. 1959-1964**

**Scope and Contents note**

"How to Drill Square Hexagon Octagon Pentagon Holes", pamphlet from Watts Bros. Tool Works, 1959

Correspondents:

Beck, Dereck

box 9, folder 19

**Rotors in Polygons etc (Goldberg) 1962**

**Scope and Contents note**

Articles on N-Gon rotors

Correspondents:

Goldberg, Michael

---

**Sackson's Game Book**

box 22, folder 6

**1969, November 1964-1978**

**Scope and Contents note**

About "A Gamut of Games", by Sid Sackson

Correspondents:

Sackson, Sid

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**Sam Loyd**

**Physical Description:** 2 folder(s)

box 2, folder 6

**1957, August 1897-1997**

**Scope and Contents note**

two donkey puzzle (donkey puzzle)

14-15 (or Boss) puzzle

Get off the Earth puzzle

Correspondents:

Slocum, Jerry

Shortz, Will

Knuth, Donald

Keeler, Donald

Slocum, Jerry

box 2, folder 7

**Trick Donkey & other Sam Loyd premiums 1884-1999**

**Scope and Contents note**

Various commercial uses of Sam Loyd puzzles

Article on Mel Stover, by Max Maven

Donkey puzzle

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**Scarne**

box 7, folder 26

**1961, December 1961**

**Scope and Contents note**

Several newspaper articles on gambling.

Correspondents:

Stout, John

Russ ??

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**Science Puzzles**

**Physical Description:** 7 folder(s)

box 16, folder 18

**1966, August 1963-1974**

box 16, folder 19

**Compton Tube 1966-1995**

**Scope and Contents note**

In Fultz letter, MG mentions his experiences with Compton

Correspondents:

Fultz, Dave

box 16, folder 20

**Hourglass Toy 1963-1967**

**Scope and Contents note**

Correspondents:

Paulus, George

Hein, Piet

box 17, folder 1

**Bell Rope Problem 1966**

box 17, folder 2

**Hose Problem 1966**

box 17, folder 3

**Bird in Box 1960-1966**

box 17, folder 4

**Electrical Paradox of 2 Bulbs 1960-1967**

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**Scott Kim**

**Physical Description:** 5 folder(s)

box 52, folder 8

**1981, June 1981-1996**

**Scope and Contents note**

Correspondents:

Temperley, Nicholas

Kim, Scott

box 52, folder 9

**Kim's Symmetry Art & Lettering 1979-1981**

**Scope and Contents note**

Many, many inversions - photocopies of hand-drawn, plus first draft of text of Inversions book.

Omni article.

Some inversions by readers.

Kim's Christmas cards.

Correspondents:

Kim, Scott

Montalvo, Fanya

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box 52, folder 10

**Word Inversions & Reflections 1964-1992**

**Scope and Contents note**

Various examples of word inversions, etc (not Kim's.)

More inversions (from Scot Morris)

Correspondents:

Kim, Scott

Lee, Wallace

McClellan, John

Croft, Dick

box 52, folder 11

**Scott Kim's Queens Problem 1975-1996**

**Scope and Contents note**

Many notes, proofs, etc (Kim & other readers.)

Correspondents:

Kim, Scott

Diaconis, Persi

Hayes, Peter

box 52, folder 12

**Scott Kim Problems (Snakes, etc) 1977-1997**

**Scope and Contents note**

Correspondents:

Kim, Scott

Nelson, Harry

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**Short Problems**

**Physical Description:** 74 folder(s)

box 14, folder 8

**1965, March 1964**

box 14, folder 9

**6 Blades Grass 1967**

**Scope and Contents note**

"Brain Teasers and Information Theory", by Waldean Schulz, 1967 (photocopy of typescript)

box 14, folder 10

**The 8-Puzzle 1964-1987**

**Scope and Contents note**

"A Method to Calculate the Minimum Moves Required to Reverse the Serial Position of N-1 Consecutively Numbered Blocks on N Unit Spaces When N is ODD and the Square Root of N an Integer", by Harry Davis (typescript)

Correspondents:

Mitchie, Donald

Schofield, P.D.

Davis, Harry

box 14, folder 11

**T-Teller, Liar, & Randomizer 1965**

**Scope and Contents note**

Correspondents:

Metakides, Th.

Abbott, Robert

O'Beirne, Thomas

box 18, folder 11

**1967, March 1963-1967**

**Scope and Contents note**

Correspondents:

Wolff, Alan W.

box 18, folder 12

**NORA x L = ARON 1967**

**Scope and Contents note**

Correspondents:

Card, L.E.

Gaiennie, Bernerd

box 18, folder 13

**Polyomino Colon "Maps" 1966-1967**

**Scope and Contents note**

Correspondents:

Harris, John

Reid, Robert

box 18, folder 14

**The 3 Pennies (Lucky Light) 1967**

box 18, folder 15

**The 10 Soldiers 1964-1967**

**Scope and Contents note**

Correspondents:

Lindon, J.A.

O'Beirne, Thomas

Kruskal, J.B.

Schensted, Craig

box 18, folder 16

**{1,3,8,120,0} 1967-1983**

**Scope and Contents note**

Correspondents:

Van Lint, J.H.

Rowe, R.Robinson

Harman, M.G.

Denton, Arthur

box 18, folder 17

**Dragon Curve (paper fold) [1 of 2] 1966-1967**

**Scope and Contents note**

Lots of drawings of curve

Correspondents:

Harter, William G.

Seitz, Charles

Davis, Chandler

box 18, folder 18

**Dragon Curve (paper fold) [2 of 2] 1967-1998**

**Scope and Contents note**

Couple of articles from Quantum (1995, 1996)

Correspondents:

Knuth, Donald

Hoey, Dan

Franke, Herbert

Sethi, A.S.

Dekking, F.M.

Heighway, John

box 18, folder 19

**3-D Dragon (Wire-bend Curves) 1987**

**Scope and Contents note**

2 copies of "Wire Bending" paper, by Michel Mendes France & J.O. Shallit

Correspondents:

Shallit, Jeffrey

box 19, folder 13

**1967, November 1960-1967**

**Scope and Contents note**

Article

Rope & Knot, Circle of Truths & Liars, Sheep problem

Correspondents:

Charosh, Mannis

Joho, Werner

Coe, Carl

box 19, folder 14

**Folded Cube 1967-1968**

box 19, folder 15

**Fertilia - (boys-girls) 1967-1968**

box 19, folder 16

**O'Beirnes Tri-Hex Game 1967**

**Scope and Contents note**

Correspondents:

O'Beirne, Thomas

box 19, folder 17

**Langford's Problem 1967j-1999**

**Scope and Contents note**

"Some Notes on Langford's Problem", by E.J. Groth (typescript)

Correspondents:

Langford, C. Dudley

Miller, John

box 19, folder 18

**General Langford Problem (Triplets, Etc) 1967-1989**

**Scope and Contents note**

Various technical articles on Langford (& Langford-Skolem) Problem

Correspondents:

Roselle, David

Levine, Eugene

Bosch, Warren

Buler, Michael

Miller, John

box 21, folder 7

**1969, April 1969**

**Scope and Contents note**

Analysis of perfect square problem with negative & irrational bases (Schensted)

Correspondents:

Schensted, Craig

Holt, Anatol

box 21, folder 8

**Counter & Urn Problems 1969-1975**

**Scope and Contents note**

Correspondents:

Kruskal, Martin

Bock, Jay

Perry, R.L.

box 21, folder 9

**The Rotation Table 1964-1969**

**Scope and Contents note**

Lots of solutions

Correspondents:

Isaacs, I. Martin

Knuth, Donald

Kruskal, Martin

Horwitz, Paul

box 21, folder 10

**Presto Chess 1969**

**Scope and Contents note**

Correspondents:

Silverman, David

Stover, Mel

Mills, William

Golomb, Solomon

Knuth, Donald

box 22, folder 11

**1970, February 1968-1970**

**Scope and Contents note**

Correspondents:

Pohl, Frederick

box 22, folder 12

**"Self-Descriptive" No's 1970**

**Scope and Contents note**

analysis

Correspondents:

Hoffman, Dean

box 22, folder 13

**Geography Game 1969**

**Scope and Contents note**

Correspondents:

Silverman, David

Kierstead, Friend

box 22, folder 14

**Angle-Sum Proofs 1970**

**Scope and Contents note**

MG folder title was picture of the problem: 3x1 rectangle divided into 3 squares, with 3 lines from base of each verticle to the right-top vertex, as in the article.

Correspondents:

Trigg, Charles

Card, L.E.

Bankoff, Leon

Hoggatt, Vernon

Golomb, Solomon

box 23, folder 6

**1970, November 1969-1970**

**Scope and Contents note**

Article not complete.

Correspondents:

Freeman, Dyson

Milligan, W.Lloyd

Rasig, Richard

Mosteller, Frederick

Rowe, R.Robinson

box 23, folder 7

**Diophantine Problem of 20 Deposits 1966-1984**

**Scope and Contents note**

(20th deposit= 1 million dollars)

Correspondents:

Monzert, Leonard

Hoggatt, Vernon

Schroeder, Manfred

box 23, folder 8

**Cheyney: PI Numbers 1969-1971**

**Scope and Contents note**

Correspondents:

Heech, John

Cheney, Fitch

Hoggatt, Vernon

Longley-Cook, Mark

box 23, folder 9

**Conway's Dodecahedron Puzzle - & Related Ones 1970**

**Scope and Contents note**

Conway's analysis of coloring edges of icosahedra & dodecahedra

Philpotts analysis of othe regular polyhedra

Correspondents:

Philpott, Wade

Conway, John

Hein, Piet

- box 26, folder 13      **1973, May 1963-1973**  
    **Scope and Contents note**  
    Article - not complete  
    Original letters (to MG) for many of the problems  
    Correspondents:  
    Smullyan, Raymond  
    Rosenwald, Robert  
    Philpott, Wade  
    Pratt, Vaughn  
    Nokakovic, Miodrag  
    Huffman, Dean
- box 26, folder 14      **Maximum rook Tours (Arrows) 1968-1985**  
    **Scope and Contents note**  
    "Rooks Roaming Round Regular Rectangles", by Edward Peters (typescript)
- box 26, folder 15      **Infinite Ladders (paradoxes) 1960-1973**  
    **Scope and Contents note**  
    Towers of exponents
- box 26, folder 16      **Skewes No. & Other Biggies 1972**  
    **Scope and Contents note**  
    Ackerman's Function  
    "Skewered!", by Isaacs Asimov (article from Fantasy and Science Fiction magazine, Nov, 1974 on Skewes Number)
- box 26, folder 17      **Polypowers (Ladders) 1973-1990**  
    **Scope and Contents note**  
    Number of ways to put parentheses in finite ladders of powers  
    Correspondents:  
    Sternheimer, R.M.  
    Skekeres, G.  
    Grosse, Aristid
- box 27, folder 1      **Grosse Letters 1972-1973**  
    **Scope and Contents note**  
    About polypowers  
    Correspondents:  
    Grosse, Aristid
- box 27, folder 2      **Sternheimer (on Polypowers) [1 of 2] 1977-1979**  
    **Scope and Contents note**  
    Papers by Sternheimer  
    Correspondents:  
    Sternheimer, R.M.
- box 27, folder 3      **Sternheimer (on Polypowers) [2 of 2] 1977**  
    **Scope and Contents note**  
    One more Sternheimer article



box 27, folder 4

**Other Letters - Polypowers 1973-1974**

**Scope and Contents note**

Skinner discusses "Skinner Function", related to Ackerman's.

Correspondents:

Kramer, Roy

Skinner, Lee

Mullin, Albert

Waldvogel, Jorg

Pechenick, Kay

box 29, folder 9

**1974, April 1974**

**Scope and Contents note**

No article.

Reverse-the-fish letters

box 29, folder 10

**Smullyan's Monochromatic Chess Problem 1974**

**Scope and Contents note**

Correspondents:

Hooker, C.J.

Butler, William

Blasberg, Steven

box 29, folder 11

**Circle Theorem 1974**

**Scope and Contents note**

Correspondents:

Hein, Piet

box 29, folder 12

box 29, folder 13

box 29, folder 14

**Bookcases Problem 1973-1974**

**7 x 13 = 28 Routine 1968-1974**

**Flipping Coin (Persi) (Irrational Prob's) 1973-1981**

**Scope and Contents note**

Typed notes (by MG?) about Persi's problem of Irrational Probabilities

Correspondents:

Diaconis, Persi

Shallit, Jeffrey

**Subjects and Indexing Terms**

Garwin, Richard

Adams, E.N.

box 29, folder 15

box 29, folder 16

box 32, folder 3

**Gun Port Problem 1974**

**Functional Fixedness Tests 1974**

**1975, March 1975**

**Scope and Contents note**

Incomplete article

Letter on "Sigil of Scoteia"

box 32, folder 4

**Rubber Rope & Worm 1974-1975**

**Scope and Contents note**

Photocopy of French article by Berloquin

Correspondents:

Silverman, David

Gutgasz, Hiram Fuller

box 32, folder 5

**The 11 Poker Chips 1967-1975**

**Scope and Contents note**

Proof (?) 11 coins is minimum, by Thom Sulanke, also by O.P. Lossers, Allen Schwenk

Correspondents:

Crowe, Donald

Golomb, Solomon

Starke, E.P.

Bernhart, Frank

box 32, folder 6

**3 Circles 1975**

**Scope and Contents note**

Correspondents:

Keeler, Donald

Sleater, Daniel

Ogilvy, Stan

Oliver, Barney

Klamkin, Murray

box 32, folder 7

**Mendelsohn's 12345 Game 1974-1997**

**Scope and Contents note**

Silverman's Game (described by Ronal Evens)

"The Game Without A Name Revisited", by N.S. Mendelsohn & Barry Wolk (typescript)

Correspondents:

Stover, Mel

Nelson, Harry

Mendelsohn, Nathan

box 32, folder 8

**Obliterated Chess Game 1973-1975**

**Scope and Contents note**

Correspondents:

Shephard, Geoffrey

box 32, folder 9

**3x3 Cube Rolling Problem 1974-1981**

**Scope and Contents note**

Lots of analysis by Harris

Many computer solutions

Correspondents:

Harris, John

Trigg, Charles

Woods, Donald

box 32, folder 10

**Kaprekar's "Self-Numbers" 1974-1978**

**Scope and Contents note**

Other Kaprekar problems:

"The Political Leaders' Birthday Puzzle",

"A Wonderful Process of Fattening all the Numerical Terms in an Equation Giving Equality in Sum of the Squares of all Terms on Each Side",

"On the Wonderful Arrival of Final Zeroes by Reversed and Subtraction Continuous Process".

Correspondents:

Stolarsky, Kenneth

Kaprekar, D.R.

Sloane, N.J.A.

Dalal, Sam

Woods, Donald

box 34, folder 15

**1975, December 1968-1975**

**Scope and Contents note**

The Sixth Symbol & Other Problems (typescript)

Correspondents:

Warshaw, Stephen

Eckler, Ross

Brown, Spencer

box 39, folder 17

**1977, April 1959-1977**

**Scope and Contents note**

No article

Brief MG notes on Steiner Ellipse problem

Letter on torus distortions

Correspondents:

Salmon, Royes

box 39, folder 18

**15 Pool Balls [1 of 3] 1976-1977**

**Scope and Contents note**

Various impossibility proofs, notes on difference triangles, etc.

Correspondents:

Sicherman, George

Trigg, Charles

Taylor, Herbert

Coxeter, H.S.M.

box 39, folder 19

**15 Pool Balls [2 of 3] 1995-1996**

**Scope and Contents note**

"Uniform Perfect Systems of Sets of Iterated Differences of Size 4", by G.M. Hamilton, C. Ramsay, et.al., Aug 7, 1995 (preprint)

"Regular Perfect Systems of Sets of Iterated Differences", by G.M. Hamilton, I.T. Roberts, D.G. Rogers, Sep. 1995 (typescript)

Correspondents:

Rogers, Douglass

Ramsay, Colin

box 39, folder 20

**15 Pool Balls [3 of 3] 1977-1997**

**Scope and Contents note**

More proofs

"Counting Certain Triangles of Modular Sums", by Marc Roth & Harry Nelson (typescript)

Correspondents:

Agre, Phil

Nelson, Harry

Rogers, Douglass

Ramsay, Colin

box 40, folder 1

**Lost King tours 1977**

**Scope and Contents note**

Correspondents:

Kim, Scott

box 40, folder 2

**Tetrads 1977-1992**

**Scope and Contents note**

Many solutions.

Full exploration by Scott Kim

Correspondents:

Kim, Scott

Frederickson, Greg

Scherer, Karl

box 40, folder 3

**Points of Different Distances 1976-1977**

**Scope and Contents note**

Limericks

"The Number of Different Distances Determined by a Set of Points in the Euclidean Plane", by Fan Chung et. al. (typescript)

"Lattices with Few Distances", by John Conway & N.J.A. Sloane, 1990 (typescript)

Correspondents:

Nelson, Harry

Gruenberger, Fred

Beeler, Michael

Erdos, Paul

box 40, folder 4

**No-3-in-line Problem undated**

**Scope and Contents note**

Contains note: original folder has been replace

A photocopy of an article on "Progress on the No-Three-in-Line Problem"

box 47, folder 14

**1979, February 1974-1979**

**Scope and Contents note**

MG notes on Conway's Turnablock

"Iterating the Product of Shifted Digits", by Samuel Wagstaff (mimeograph copy)

Correspondents:

Sloane, N.J.A.

Knuth, Donald

box 47, folder 15

**Rotating Table 1979-1995**

**Scope and Contents note**

Lots of analysis of variations

Correspondents:

Ahrens, Richard

Mason, John

Diaconis, Persi

Ehrenborg, Richard

box 47, folder 16

**Tiling With Incomparable Rectangles [Reingold] 1974-1979**

**Scope and Contents note**

Various analyses & solutions

Correspondents:

Reingold, Edward

Duijvestijn, A.J.W.

box 48, folder 1

**Boxing Boxes (Scott Kim) 1979-1985**

**Scope and Contents note**

Several articles and typescripts

Paper model: 6 pieces, 3 + 3 mirrored, rectangular box dissections, so no 2 rectangles share a common dimension, by Scott Kim

Correspondents:

Poniachik, Jaime

Den Hertog, M.

Cutler, William

box 52, folder 3

**1981, April 1970-1983**

**Scope and Contents note**

Collection of letters to Mainichi Daily News on measurements with one yen coins (column by Vladimir Tamari.)

15 on yen coins.

Correspondents:

Hein, Piet

Tamari, Vladimir

Conway, John

box 52, folder 4

**Obtuse Triangle & Square 1959-1985**

**Scope and Contents note**

Also acute triangle dissections.

Several proofs that minimum no. of acute triangles in a square is 8.

Correspondents:

Gerver, Joseph

Federico, P.J.

Sutcliffe, Alan

Lindgren, Harry

Vanderpool, Donald

Coxeter, H.S.M.

Goldberg, Michael

box 52, folder 5

**Isosceles Triangles 1981**

**Scope and Contents note**

Split equilateral triangle into 5 isosceles, square to acute triangles

Correspondents:

Cundy, H.M.

box 52, folder 6

**Bram's Map Game 1980-1981**

**Scope and Contents note**

Correspondents:

High, Bob

Brams, Steven

box 52, folder 7

**Generalized Quilt Problem 1981**

**Scope and Contents note**

MG notes, various analyses, generalizations.

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**Short Problems - 12**

**Physical Description:** 6 folder(s)

box 13, folder 3

**1964, June 1964**

**Scope and Contents note**

article only

box 13, folder 4

**Oil Well Problem 1964**

box 13, folder 5

**Moon Trip Problem 1964**

**Scope and Contents note**

Improved solutions by robert Elgin, Witt. Shepherd

Correspondents:

Elgin, Robert

Shepherd, Wilfred H.

Hodgart, Mathew

box 13, folder 6

**Sprague's 16-coin Problem (=100) 1964**

**Scope and Contents note**

"The Postage Stamp Problem", by P. Wegner & A. Doig (typescript)

Correspondents:

Wegner, Peter

Hodgart, Mathew

box 13, folder 7

**Ranking Weights 2964-1996**

**Scope and Contents note**

Correspondents:

Henon, Michel

Johnson, Selmer

Knuth, Donald

box 13, folder 8

**Word Square 1964**

**Scope and Contents note**

Correspondents:

Card, L.E.

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**Shuffles**

**Physical Description:** 5 folder(s)

box 17, folder 9

**1966, October 1984-1996**

**Scope and Contents note**

Several articles by and about Persi Diaconis

No original article

box 17, folder 10

**The Repeated Pattern Shuffle 1961-1972**

**Scope and Contents note**

Correspondents:

McMillan, Edwin

Van Arsdale, Daniel

box 17, folder 11

**Faro Shuffles [1 of 2] 1968-1975**

**Scope and Contents note**

Many articles from magic journals.

Correspondents:

Diaconis, Persi

Marlo, Edward

Racherbaumer, Jon

Hudson, Charles

Swinford, Paul

Fairfax, John

Carroll, Charles

Morris, S. Brent

box 17, folder 12

**Faro Shuffles [2 of 2] 1975-1984**

**Scope and Contents note**

More articles, both from magic and math journals

Correspondents:

Bonfield, Murry

Hudson, Charles

Diaconis, Persi

box 17, folder 13

**Oct . 31 = Dec. 25 1966-1995**

**Scope and Contents note**

Alphabetic solution

Preprint: "Cycle Lengths in Sequences of Permutations", by N.S. Mendelsohn (typescript)

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**Simple Games**

**Physical Description:** 6 folder(s)

box 33, folder 1

**1975, June 1975**

**Scope and Contents note**

Missing (most of) article

Correspondents:

Hitotumatu, Sin

box 33, folder 2

**Tromino 1xn Cram, & Vlam's Square Version 1974-1976**

**Scope and Contents note**

"Reverse Cram With Block Sizes Not Exceeding 13", by Ronald Evans (typescript)

Correspondents:

Ulam, Stanislav

Silverman, David

Hitotumatu, Sin

box 33, folder 3

**Dodgem 1975**

**Scope and Contents note**

Algorithm for Dodgem (Rebertus)

Correspondents:

Rebertus, Dennis

Fremlin, David

Vanderschel, David

Vout, Colin

box 33, folder 4

**Lewthwaite's Game 1975**

**Scope and Contents note**

Correspondents:

Lewthwaite, G.W.

Elwell, David

box 33, folder 5

**Beck's Hex & Rex (Reverse Hex) 1957-1989**

**Scope and Contents note**

Correspondents:

Winder, Robert

Evans, Ron

Silverman, David

Harris, John

Schensted, Craige

Beck, Anatole

box 33, folder 6

**Ulam's Game undated**

**Scope and Contents note**

"New rules and Old Games", by Stanislav Ulam (photocopy)

Some variants on Cram, on Go-Moku, and Linear Tic Tac Toe

Correspondents:

Ulam, Stanislav

Beidler, John

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**Simplicity**

**Physical Description:** 4 folder(s)

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box 21, folder 18

**1969, August 1969**

**Scope and Contents note**

many articles

Correspondents:

Van Heerden, P.J.

box 21, folder 19

**N. Goodman - On Simplicity undated**

**Scope and Contents note**

Many articles & references

box 21, folder 20

**Von Aubel's Theorem (Squares on Quadrilaterals) 1969**

**Scope and Contents note**

Correspondents:

Goodwin, W. Nelson

box 21, folder 21

**Moser's Spots on a Circle 1967-1973**

**Scope and Contents note**

Correspondents:

Phipps, S.

Moser, Leo

Rowe, R. Robinson

Kruskal, Martin

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**Sliding Block Puzzles**

**Physical Description:** 12 folder(s)

box 12, folder 1

**1964, February 1964-1989**

**Scope and Contents note**

Correspondents:

Hordern, Edward

Cutler, William

box 12, folder 2

**Sliding Blocks (Unit Squares) 1964-1999**

**Scope and Contents note**

"Twice" Puzzle in envelope

H. Davis has minimum moves

Correspondents:

Knuth, Donald

Davis, Harry

Gordon, Leonard

Charosh, Mannis

box 12, folder 3

**Triangle & Hexagonal Forms 1964-1969**

**Scope and Contents note**

Correspondents:

Klemper, B.

box 12, folder 4

**Stotts Tiger Puzzles 1963-1964**

**Scope and Contents note**

Discriptions and solutions

Correspondents:

Wilson, Ted

Stotts, Sherley

Stotts, Edna

Grimes, Lester

box 12, folder 5

**Concave Pieces 1964-1965**

**Scope and Contents note**

Ma's Puzzle (23 move solutions)

Traffic Jam

Various solutions

Patents

box 12, folder 6

**Varients of Red Donkey 1963-1964**

**Scope and Contents note**

(L'Ane Rouge)

box 12, folder 7

**Escott's Puzzle 1962-1964**

box 12, folder 8

**Escott's Slider - Solutions in 48 1970**

box 12, folder 9

**L'Ane Rouge 1961-1977**

**Scope and Contents note**

Computer programs

box 12, folder 10

**Unit Squares (counters) But Non-Rect 1964-1978**

box 12, folder 11

**Sliding Blocks (Rectangles) 1963-1987**

**Scope and Contents note**

Filipak's 1-2-3 puzzle

Line Up the Quinties (Fatiguant)

Dad's Puzzle (also Pennant Puzzle, Moving Day, Charlie Chaplin)

Flying Puzzle, New Boss Puzzle, Tokyo Parking

Correspondents:

Fulves, Karl

Dalgety, James

Vejmola, Stan

Rogers, Tom

Conway, John

Gordon, Leonard

Yoshagihara, Nob

box 12, folder 12

**Piet Hein's Blox Box 1972-1973**

**Scope and Contents note**

Correspondents:

Knuth, Donald

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**Smullyan**

box 44, folder 1

**1978, March 1978-1988**

**Scope and Contents note**

Partial column

Correspondents:

Sickel, Sharon

Kennedy, James

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**Solar System**

**Physical Description:** 2 folder(s)

box 22, folder 21

**1970, April 1970-1978**

box 22, folder 22

**Bode's Law 1970-1992**

**Scope and Contents note**

"Bode and Kepler", by David Hanna (typescript)

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**Solitaire**

**Physical Description:** 6 folder(s)

box 8, folder 18

**1962, June 1962-1969**

**Scope and Contents note**

Instructions for Polytaire, a Piet Hein game

"25-Hole Triangular Solitaire", by Nob Yoshigahara (from Puzzle World)

Various proofs of minima.

Correspondents:

Philpott, Wade

Willcocks, T.H.

Davis, Harry

Beasley, John

box 8, folder 19

**Theory 1962-2000**

**Scope and Contents note**

Stewart's Method

Aker's Method

Correspondents:

Rubenstein, Michael

Akers, Shelden

Gordon, Gary

Philpott, Wade

Charosh, Mannis

box 8, folder 20

**Problems undated**

**Scope and Contents note**

(of solitaire)

box 8, folder 21

**Solitaire 1965**

**Scope and Contents note**

Single letter from MG to Davis, about 3-D solitaire

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box 8, folder 22

**Beasley, John 1981-1985**

**Scope and Contents note**

Much correspondence, for Beasley's book on peg solitaire.

Correspondents:

Beasley, John

Maltby, John

Hutchings, Robert

box 8, folder 23

**Square & Rectangular Boards undated**

**Scope and Contents note**

Preprint: "Advances in Peg Solitaire", by Benjamin L. Schwartz

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**Soma Cube**

box 4, folder 6

**1958, September 2002**

**Scope and Contents note**

reference to "Polycube folders", unknown location.

One article from MAA "Nine Cubits or Simple Soma", by Guy and Paulhus

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**Sphere Packing**

**Physical Description:** 2 folder(s)

box 6, folder 4

**1960, May 1950-1960**

**Scope and Contents note**

Several monographs

Small pieces of paper, 3x5 cards, etc, in envelopes

Reports on experiments

Hodgden letter mentions B. Fuller & tensegrity; Hodgden claims discovery of tensegrity to a sphere.

Correspondents:

Coxeter, H.S.M.

Hodgden, Lee

box 6, folder 5

**Sphere Packing [2 of 2] 1960-1966**

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**Spheres & Hyperspheres**

box 20, folder 3

**1968, May 1968**

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**Spirals**

box 8, folder 14

**1962, April 1962-1978**

**Scope and Contents note**

... and Helices

"Spirals", by Gerald Oster (typescript)

Several models for drawing spirals of various types

Correspondents:

Lemon, Harvey

Hayward, Roger

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**Sprouts & Brussels Sprouts**

**Physical Description:** 2 folder(s)

box 19, folder 5

**1967, July [1 of 2] 1967-1976**

**Scope and Contents note**

Lots of analysis, variations, proofs

Correspondents:

Paterson, Mike

Conway, John

Hartshorne, David

Gans, Eric

Isaacs, Rufus

Moore, Thomas

box 19, folder 6

**Sprouts & Brussels Sprouts [2 of 2] 1967-1998**

**Scope and Contents note**

More analysis

Correspondents:

Layman, Robert

Grubin, Mike

Maas, Robert

Conway, John

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**Square Packing**

**Physical Description:** 4 folder(s)

box 17, folder 5

**1966, September 1965-1996**

**Scope and Contents note**

Mrs. Perkins Quilt

Correspondents:

Conner, W.J.

Grindley, W.H.

Wainwright, Robert

Cutler, William

box 17, folder 6

**Moser's Work 1960-1966**

**Scope and Contents note**

Correspondents:

Moser, Leo

Lindgren, Harry

box 17, folder 7

**49 Solutions 1966-1996**

**Scope and Contents note**

Correspondents:

Cutler, William

Reid, Robert

box 17, folder 8

**Minimum Square Problem (for  $1+2+\dots+n$ ) 1966-1978**

**Scope and Contents note**

Correspondents:

Golomb, Solomon

Perjes, Zoltan

---

**Squaring the Square**

**Physical Description:** 5 folder(s)

box 4, folder 8

**1958, November 1958-1984**

**Scope and Contents note**

"Tables of Simple Squared Squares of Orders 13 through 21 and  $2 \times 1$  Simple Squared Rectangles of Orders 17-21", by R.J.W. Duijvestijn, Department of Applied Mathematics, Technische Hogeschool Twente, 9-Aug-79

Correspondents:

Spindler, William

Tutte, W.T.

box 4, folder 9

**Squaring the Square [2 of 2] 1973-1999**

**Scope and Contents note**

"Catalogue of simple squared rectangles of orders nine through fourteen and their elements", by C.J. Bouwkamp, A.J.W. Duijvestijn and P. Medema, Department of Mathematics, Technische Hogeschool, 1960

"Lowest Order Squared Rectangles and Squares with a Cross", by A.J.W. Duijvestijn and P. Leeuw, Technische Hogeschool Twente, Memorandum Nr. 278, 1979

"Lowest Order Squared Rectangles and Squares with the Largest Element not on a Boundry", by A.J.W. Duijvestijn and P. Leeuw, Technische Hogeschool Twente, Memorandum Nr. 279, 1979

"Two Simple Perfect Squared Squares of Order 22", by A.J.W. Duijvestijn, Technische Hogeschool Twente, Memorandum Nr. 230, 1978

Correspondents:

Bordelon, Derrill

Willcocks, T.H.

box 4, folder 10

**Federico's History 1978-1983**

**Scope and Contents note**

Various articles by Pasquale Federico, and his historical review + bibliography

Correspondents:

Federico, P.J.

box 4, folder 11

**Squared Cylinders, Toruses, Mobius Strips, Klein Bottles, and Projective Planes 1961-1997**

**Scope and Contents note**

Correspondents:

Duijvestijn, A.J.W.

Ellis, Ray

Federico, P.J.

Goldberg, Michael

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box 4, folder 12

**The 21 Dissection 1983**

**Scope and Contents note**

see Federico folder (4/10)

Correspondents:

Schattschneider, Doris

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**Steen - Approval Voting**

box 51, folder 14

**1980, October 1980**

**Scope and Contents note**

Written by Lynn Arthur Steen.

Several articles by Steven Brams.

Discussion of future of Games column (with Steen)

Correspondents:

Brams, Steven

Ottewell, Guy

Lundgren, Carl

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**Steiner Triples, Kirkman Schoolgirls, & Handcuffed Prisoners (& Bridge)**

**Physical Description:** 5 folder(s)

box 50, folder 12

**1980, May 1980-1996**

box 50, folder 13

**Ollerenshaw & Bands (Handcuffed Prisoners) 1980**

**Scope and Contents note**

Correspondents:

Ollerenshaw, Kathleen

box 50, folder 14

**Handcuffed Prisoners 1973-1980**

**Scope and Contents note**

MG notes.

Correspondents:

Mendelsohn, Nathan

box 50, folder 15

**Bridge Tournaments 1980**

**Scope and Contents note**

MG notes.

(Also Whist tournaments.)

box 50, folder 16

**Kirkman Schoolgirls - etc 1980**

**Scope and Contents note**

MG notes.

Correspondents:

Knuth, Donald

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**Strange maps**

**Physical Description:** 9 folder(s)

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box 34, folder 6	<b>1975, November 1975-1978</b> <b>Scope and Contents note</b> "Wallpaper Mapes", by M.D. McIlroy (reprint?) Correspondents: Flanagan, Dennis Gilbert, Edgar Post, J.B.
box 34, folder 7	<b>Projections 1975-1998</b> <b>Scope and Contents note</b> Various articles and examples Correspondents: Hill, Karl (Cahill)
box 34, folder 8	<b>E. N. Gilbert Mapes 1975</b> <b>Scope and Contents note</b> Correspondents: Gilbert, Edgar
box 34, folder 9	<b>Dissection Maps 1976</b> <b>Scope and Contents note</b> Quincunial Projection Butterfly Map (Cahill) Refs to gnomonic projection to cube; gnomonic projection to Icosahedron
box 34, folder 10	<b>On Harrison 1975</b> <b>Scope and Contents note</b> Richard Edes Harrison (Some very nice color maps of portions of the world in separate location.)
box 34, folder 11	<b>B. Fuller [1 of 2] 1975</b> <b>Scope and Contents note</b> Various Fuller maps and related items
box 34, folder 12 box 34, folder 13	<b>B. Fuller [2 of 2] 1980</b> <b>Harvard - Computer Graphics Lab 1978</b> <b>Scope and Contents note</b> Newsletter, catalog, conference, symposium announcements, about Topological Data Structures for Geographic Information Systems
box 34, folder 14	<b>Portney's Maps 1975</b> <b>Scope and Contents note</b> Joe Portney: two calendars, 24 versions of the Earth: flat, dodecahedral, conical, sine-cosine, etc.

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**String**

**Physical Description:** 2 folder(s)



box 9, folder 13

**1962, December 1962-1997**

**Scope and Contents note**

3 photos of string figures, Yucan Territory

Notes on murder mystery: "Leopard Cat's Cradle", by Jerome Barry

String Releases (type of magic trick)

Correspondents:

Katz, Max

box 9, folder 14

**Aragon's Poem 1962-1963**

**Scope and Contents note**

Many answers

Christmas greetings

End of strings article

Correspondents:

Pauling, Linus

Burton, Dennis

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**Tangent Circles**

**Physical Description:** 10 folder(s)

box 47, folder 4

**1979, January 1978-1979**

**Scope and Contents note**

No article.

Correspondents:

Goldberg, Michael

Graham, Ron

box 47, folder 5

**Packing Circles, Touching Circles 1964-1978**

**Scope and Contents note**

Original article (complete)

Analysis by Philip Jackson, Donald Davies

Correspondents:

Jackson, Philip

Davies, Donald

Harris, John

Pedoe, Dan

box 47, folder 6

**Circles to Squares (& Rectangles) 1978**

**Scope and Contents note**

Correspondents:

Goldberg, Michael

box 47, folder 7

**Circles to Circles 1959-1990**

**Scope and Contents note**

Correspondents:

Rowe, R. Robinson

- box 47, folder 8      **Material from Schaer (Check for Book) 1978**  
    **Scope and Contents note**  
    Correspondents:  
    Schwartz, Benjamin  
    Schaer, J.  
    Jepsen, Charles
- box 47, folder 9      **Arbelos 1978**  
    **Scope and Contents note**  
    Correspondents:  
    Bankoff, Leon
- box 47, folder 10      **Golomb's Coins 1973-1979**  
    **Scope and Contents note**  
    [Perfect square of 21 smaller squares, in Golomb letter]  
    Correspondents:  
    Isaacs, Rufus  
    Golomb, Solomon  
    Pedoe, Dan
- box 47, folder 11      **From Ron G. 1978**  
    **Scope and Contents note**  
    2 articles by Ron Graham, & pages of article in German  
    Correspondents:  
    Graham, Ron
- box 47, folder 12      **Malgatti Problem 1967-1968**  
    **Scope and Contents note**  
    4 articles by Michael Goldberg
- box 47, folder 13      **Circles to Triangles 1979-1981**  
    **Scope and Contents note**  
    Correspondents:  
    Ammann, Robert  
    Hitotumatu, Sin

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**Tasks That End**

**Physical Description:** 5 folder(s)

- box 53, folder 10      **1983, April 1982-1983**  
    **Scope and Contents note**  
    No article.  
    Correspondance (with Scientific American) on MG plans.  
    Misc. articles & notes.  
    Correspondents:  
    Flanagan, Dennis

box 53, folder 11

**Hydra Problem 1982-1983**

**Scope and Contents note**

Lots of papers/articles.

Correspondents:

Graham, Ron

Dershowitz, Nachum

Manna, Zohar

box 53, folder 12

**Bulgarian Solitaire 1982-1984**

**Scope and Contents note**

Lots of MG notes.

Correspondents:

Knuth, Donald

Bressoad, David (to Knuth)

Nadvorney, Leo

Brandt, Jorgen

Bernhart, Frank

box 53, folder 13

**K (K-1) "Proofs" 1983-1984**

**Scope and Contents note**

Correspondents:

Weiss, Benjamin

Brenner, Charles

Lindsey II, John

Akin, Ethan

Burhart, Frank

Farjon, David

Knuth, Donald

Marshal, Ian

Butler, William

Iguca, Kiyoshi

box 53, folder 14

**18-Spot Problem (Graham & Berlekamp) 1976**

**Scope and Contents note**

Correspondents:

Nelson, Harry

Silverman, David

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**Taxicab Geometry**

**Physical Description:** 2 folder(s)

box 51, folder 15

**1980, November [ 1 of 2] 1980-1981**

**Scope and Contents note**

Lotes of short articles

Correspondents:

Krause, Eugene

Schwartz, Benjamin

Abbott, Ken

box 51, folder 16

**1980, November [ 2 of 2] undated**

**Scope and Contents note**

Complete answers to "Taxicab Geometry" book, by Eugene Krause.

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**Ternary System**

box 13, folder 2

**1964, May 1961-1964**

**Scope and Contents note**

Anagram Puzzle (Sprague's Switching Problem)

Correspondents:

Heyl, Edgar

Weiss, Mitchell

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**Tetraflexigons**

**Physical Description:** 3 folder(s)

box 3, folder 8

**1958, May 1958-1969**

**Scope and Contents note**

Ron Edward's "Monstrosity", a right-angle flexagon (model and instructions)

models intermixed with letters

Correspondents:

Greene, John

Platt, Charles

Deupree, Richard (systematic theory)

Conway, John

Pook, L.P. (with many models)

Holmes, Duane (Ring Structure)

Jones, P.H.

Dukich, Thomas

box 3, folder 9

**Tetraflexigons [2 of 2] 1972-1999**

**Scope and Contents note**

many articles, magic tricks and models intermixed

"Self-Designing Tetraflexagons", by Bob Neale

"What Comes First?", by Bob Neale (paperfold routine)

Flexicubes, in Pook letter.

Correspondents:

Pook, L.P.

Stover, Mel

Pedersen, Jean

**Subjects and Indexing Terms**

Flexicubes

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box 3, folder 10

**Flexitube 1955-1978**

**Scope and Contents note**

Correspondents:

Ming, Vong

Edwards, Ron

Legman, G.

Whitney, James

Wood, George

Becker, Joseph

Stone, A.H. (with analysis)

Swinford, Paul

Leech, John

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**Tetrahedron**

**Physical Description:** 4 folder(s)

box 14, folder 4

**1965, February 1965**

**Scope and Contents note**

"Three Structures by Buckminster Fuller in the Garden of the Museum of Modern Art, New York" (1959) (Poster/Booklet)

Correspondents:

Marengo, Norman

Trigg, Charles

box 14, folder 5

**Tetrahedra - Paper Models 1965**

**Scope and Contents note**

Correspondents:

Trigg, Charles

box 14, folder 6

**Alexander G. Bell 1964**

**Scope and Contents note**

Museum

box 14, folder 7

**Tetrahedron Magic Trick undated**

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**Tetrahexes & Tetraboloos**

**Physical Description:** 2 folder(s)

box 19, folder 3

**1967, June 1967**

**Scope and Contents note**

Article; see folders

box 19, folder 4

**Proofs of Tower Uniqueness 1967**

**Scope and Contents note**

Many (similar) proofs

Correspondents:

Klarner, David

Holt, Machael

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### **The 24 Color Triangles**

**Physical Description:** 2 folder(s)

box 20, folder 13

#### **1968, October 1961-1995**

##### **Scope and Contents note**

Many examples, theory.

Trimino, Trifolia, Multi-Match III instructions (from Kadon Ent.)

Contack (Parker Brothers game, in letter)

Correspondents:

Coster, Ora & Theo

Parker Brothers, Inc

Philpott, Wade

Jonas, E.C.

Harris, John

Jones, Kathy

Haubrich, Jacques

box 20, folder 14

#### **Conway's 27-cube Puzzles (& Trigg's) 1967-1968**

##### **Scope and Contents note**

Correspondents:

Trigg, Charles

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### **The Hypercube**

**Physical Description:** 5 folder(s)

box 17, folder 14

#### **1966, November 1966**

##### **Scope and Contents note**

just article (see 4D Geometry folder)

box 17, folder 15

#### **Unfolding the Hypercube 1961-1980**

##### **Scope and Contents note**

Correspondents:

Coxeter, H.S.M.

Levy-Leblond, J.M.

Schmidt, Eric

Nelson, Harry

Vidal, Claudio

box 17, folder 16

#### **Hypercube 1966-1974**

##### **Scope and Contents note**

"The Ifth of Oofth", by Walter Tevis (Sci. Fi. story from Galaxy Mag, Apr, 1957)

Ways to draw a hypercube

Correspondents:

Barton, Hiram

box 17, folder 17

**Correct Solution to Max. Cubes in Hypercube 1966-2000**

**Scope and Contents note**

"Partial Solution to the Largest m-Cube in an n-cube", by Kay DeVicci (typescript)

Other solutions in the various letters below, summary in Guy's letter.

Correspondents:

Pechenick, Kay

Baer, Hermann

De Jong, G. de Josselin

Bosch, Eugen

DeVicci, Kay

Guy, Richard

box 17, folder 18

**Prince Rupert's Hypercube Problem 1960-2000**

**Scope and Contents note**

Various solutions which disagree with each other

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**The Infinite Regress**

box 14, folder 12

**1965, April 1965**

**Scope and Contents note**

Correspondents:

Mullin, Albert

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**The Planiverse**

**Physical Description:** 5 folder(s)

box 51, folder 5

**1980, July [1 of 2] 1976-1996**

**Scope and Contents note**

Some "early" history & articles by Dewdney

Correspondents:

Dewdney, A.K.

Jackiw, Roman

box 51, folder 6

**1980, July [2 of 2] undated**

**Scope and Contents note**

Mostly articles, reviews, ads, ...

"Micro-Ecology in a Small Stream", by A.K. Dewdney (booklet) 1996

box 51, folder 7

**Planiverse Ideas from Readers 1980**

**Scope and Contents note**

Many ideas, designs, etc.

Correspondents:

Dewdney, A.K.

Harris, John

Engel, Douglas

Stewart, Ian

Knowlton, Kenneth

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box 51, folder 8

**Abbott's Flatland 1980-1983**

**Scope and Contents note**

Ads & pictures of Arion Press version of Flatland.

box 51, folder 9

**Henle's Linear Go (Pinch) (& Other Linear Games) 1971-1980**

**Scope and Contents note**

Linear Go (Henle), 1D Checkers (MG), 1D Chess

Correspondents:

Henle, James

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**The Supperellipse**

**Physical Description:** 4 folder(s)

box 15, folder 1

**1965, September 1965-1988**

**Scope and Contents note**

Magazine: "Dansk Kunsthaandvaerk 4", Aug. 1964 (Danish)

Magazine: "inspiration 68" (Danish/English) - filed elsewhere

"King of Supershape", by Anne Chamberlin (photocopy of Esquire article, Jan ?)

"close-up, Piet Hein Bestrides Art & Science, A Poet With a Slie Rule", by Jim Hicks (photocopy)

Correspondents:

Knuth, Donald

box 15, folder 2

**Furniture undated**

**Scope and Contents note**

Magazine articles, mostly Danish

box 15, folder 3

**On Center of Curve & Other New Properties 1965-1976**

**Scope and Contents note**

Correspondents:

Van Ammers, Anthony

Hogan, Bill

Hein, Piet

Cundy, Martyn

Black, Norton

box 15, folder 4

**Lame Curves (other exponents) 1965-1967**

**Scope and Contents note**

Correspondents:

Muses, Charles

Frey, harvey

Shelton, J. Paul

Hogan, Bill

Hall, David

Golomb, Solomon

Hein, Piet

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**Tictacktoe**

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box 1, folder 12

**1957, March 1957**

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**Tiling Plane with Polygons**

**Physical Description:** 6 folder(s)

box 33, folder 7

**1975, July [1 of 2] 1969-1977**

**Scope and Contents note**

3,4,5,6 sides

No article

Correspondents:

Smith, Cyril

Hitotumatu, Sin

Hirshhorn, Michael

Szekeros, George

Grunbaum, Branko

box 33, folder 8

**Tiling Plane with Polygons [2 of 2] 1976-1986**

**Scope and Contents note**

Correspondents:

Niven, Ivan

Schattschneider, Doris

Rice, Marjorie

box 33, folder 9

**Kershner - Papers, Letters 1975-1976**

**Scope and Contents note**

Information on how he did analysis on pentagonal tilings, where he made mistakes, and some suggestions on how it should be done

Correspondents:

Kershner, R.

box 33, folder 10

**James New Pentagon! 1975-1977**

**Scope and Contents note**

Analysis by Doris Schattschneider

Correspondents:

Bomford, Tony

James III, Richard E.

Kershner, R.

Coxeter, H.S.M.

box 33, folder 11

**Mrs. Rice's Patterns 1976-1978**

**Scope and Contents note**

Rice's original drawings

comparison (by Schattschneider) of Rice & Kershner, and much analysis (Note on Ammann's tiling in Schattschneider letter of 4 May, 1976)

Correspondents:

Schattschneider, Doris

Rice, Marjorie

box 33, folder 12

**Doris Schattschneider 1975-1979**

**Scope and Contents note**

Details of history of pentagonal tilings interspersed in correspondence. Also several of her papers on pentagonal tiling.

Correspondents:

Schattschneider, Doris

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**Tiling with Polyominoes, etc.**

**Physical Description:** 5 folder(s)

box 33, folder 13

**1975, August 1975-1978**

**Scope and Contents note**

No article

"Puzzles for Christmas", by L.S. Penrose & Roger Penrose (reprint)

Error in statement of Conway Criterion

A Robert Reid tiling (with septominoes)

box 33, folder 14

**Polyomino tiling 1965-1975**

**Scope and Contents note**

Lots of results and examples

Correspondents:

Klarnar, David

Philpott, Wade

Harris, John

Bishop, Gregory

Conway, John

Conlan, Jim

box 33, folder 15

**Alternate Square and "Bracket" Heptomino 1975**

**Scope and Contents note**

Lots of variations of tiling

"A Generalized Theory of Divisibility", by Solomon Golomb (preliminary typescript, 1980)

box 33, folder 16

**Polyiamond Tiling 1965-1996**

**Scope and Contents note**

Lots of examples & theorems on polyiamond tilings

Correspondents:

Harris, John

Bishop, Gregory

Wichman, Brian

box 33, folder 17

**Polyhex Tiling 1965**

**Scope and Contents note**

Just a letter and drawings of tilings through 5 (pentahexes?)

Correspondents:

Bishop, Gregory

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**Time Stopping**

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box 48, folder 2

**1979, March 1979-1988**

**Scope and Contents note**

"The Nature of Time", by Henry Lambert

"An Investigation of Hypertime Physics", by Frank Drummond (typescript)

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**Time Travel**

**Physical Description:** 5 folder(s)

box 29, folder 17

**1974, May 1974-1994**

**Scope and Contents note**

Notes & Short articles & adds for T.T. books (and limericks)

Audio tape: J. Richard Gott & Paul Nahin with Ira Flatow on "Talk of the Nation" (Science Friday), NPR program. (About 10 minutes of Car talk at beginning; Mathematics interview at end.)

Correspondents:

Sagan, Carl

Park, David

box 29, folder 18

**T.T. in Fiction, Drama 1974**

**Scope and Contents note**

Lots of references plus a few stories

"Who's Cribbing", by Jack Lewis

"The Killer", by J. T. Oliver

Correspondents:

Propp, James

box 29, folder 19

**Time Travel Articles [1 of 2] 1974-1975**

**Scope and Contents note**

Many articles, popular, philosophical, scientific (1953-1989)

Correspondents:

Horwich, Paul

Meiland, Jack

box 29, folder 20

**Time Travel Articles [2 of 2] 1974-1998**

**Scope and Contents note**

More articles (1974-2000)

Correspondents:

Weitzel, Donald

box 30, folder 1

**My Old Time Travel Story undated**

**Scope and Contents note**

Notes on time travel (by MG)

Story, with annotations: "Lost Blue Eyes", by MG (typescript)

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**Topological Models**

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box 2, folder 4

**1957, June 1957**

**Scope and Contents note**

Curious figures descended from the Moebius Band

Photos of wood models

Correspondents:

McClellan, John

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**Topological Recreations**

box 4, folder 7

**1958, October 1958**

**Scope and Contents note**

Gale (game)

Pencil Straw and Shoe String (Stewart Judah)

ring on Card puzzle

Network tracing puzzle

Ring Tie (Eddie Joseph)

Correspondents:

Grant, U.F.

Judah, Stewart

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**Topology**

**Physical Description:** 3 folder(s)

box 10, folder 10

**1963, July [1 of 2] 1953-1983**

**Scope and Contents note**

Many articles, some science fiction stories

Two "Trimobius" handkerchiefs, in separate envelope

Correspondents:

O'Beirne, Thomas

Tuckerman, L (from MG)

Encyclopedia Britannica

Leverett, Bill

Pitzel, Michael

box 10, folder 11

**Topology [2 of 2] 1992**

**Scope and Contents note**

Correspondents:

Marynov, Saken

box 10, folder 12

**Klein Bottle and Cross Cap 1963-1999**

**Scope and Contents note**

Notes on paper models

Correspondents:

Stoll, Cliff

Harrison, Kent

Chaplin, Albin

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## Trapdoor Ciphers

**Physical Description:** 15 folder(s)

- box 40, folder 15      **1977, August 1977-1988**  
**Scope and Contents note**  
Partial article  
Some articles from "Cryptologia" magazine on Poe's cipher  
Many readers solutions to Poe cipher  
Various newspaper & magazine articles on cryptography  
Correspondents:  
Rivest, Ronald  
Winkel, Brian
- box 40, folder 16      **Lattice Ciphers undated**  
**Scope and Contents note**  
Article: "Hiding in Lattices", by Ivars Peterson (Science News, Vo. 152, July 5, 1997
- box 40, folder 17      **Biham & Shamir (DEA - Defective Fault Analysis) undated**  
**Scope and Contents note**  
Photocopy of New Scientist article from 9 Nov, 1996, "'Unbreakable' Code Cracked Wide Open", by Robert Mathews
- box 40, folder 18      **Big Numbers 1992-1993**  
**Scope and Contents note**  
"Big Numbers & Little Secrets: Public Key Encryption For the Hobbyist", by T. Kaliszewski, 1982 (book with floppy disk)  
Correspondents:  
Kaliszewski, T.
- box 41, folder 1      **Articles [1 of 2] 1984**  
box 41, folder 2      **Articles [2 of 2] undated**  
box 41, folder 3      **News Reports 1982**  
box 41, folder 4      **Rivest, et. al. [1 of 2] 1977-1994**  
**Scope and Contents note**  
Much correspondence between MG & Rivest, along with several papers by Rivest & others.  
A packet of materials from RSA Data Security, Inc.  
Correspondents:  
Rivest, Ronald
- box 41, folder 5      **Rivest, et. al. [2 of 2] undated**  
**Scope and Contents note**  
More articles, papers, announcements, newsletters, etc, on RSA encryption
- box 41, folder 6      **Cracking SA Message RSA-129 undated**  
**Scope and Contents note**  
Mostly articles, from newspapers and magazines

box 41, folder 7	<b>Diffie &amp; Hillman 1977</b> <b>Scope and Contents note</b> Long articles & papers by and about Diffie-Hillman Correspondents: Weeks, Dennis
box 41, folder 8	<b>Merkle [1 of 2] 1977</b> <b>Scope and Contents note</b> Mostly version 8 of "Secure Communications over Insecure Channels", by Ralph Merkle, 28 pages (paper)
box 41, folder 9	<b>Merkle [2 of 2] 1979</b> <b>Scope and Contents note</b> Secrecy, Authentication, and Public Key Systems", by Ralph Charles Merkle, June, 1979, Technical Report No. 1979-1, I.F.S Stanford
box 41, folder 10	<b>Simmons 1977-1983</b> <b>Scope and Contents note</b> Correspondents: Simmons, Gustavus
box 41, folder 11	<b>Spinoffs 1978-1979</b> <b>Scope and Contents note</b> Tossing a coin by mail Dice by mail Poker by mail (inspired by dice) Zero knowledge proffs! Computer network security "Mental Poker", by Adi Shamir, Ronald Rivest, Leonard Adleman, 1978 (typescript) "The Albanian Generals Problem", by L. Lamport et.al., 1979 (SRI International Report CSL-97) Correspondents: Floyd, Robert Rivest, Ronald Lamport, Leslie

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### Tree Graphs

box 19, folder 23	<b>1968, February 1968</b> <b>Scope and Contents note</b> Correspondents: Knuth, Donald Kruskal, Joseph Prentiss, Thomas Asimov, Isaac
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### Tree-Plants (N in a Row)

**Physical Description:** 4 folder(s)

- box 37, folder 3      **1976, August [1 of 2] 1973-1976**  
    **Scope and Contents note**  
    No article.  
    Photocopies of puzzle from 1821 book by John Jackson  
    Correspondents:  
    Macmillan, R.H.  
    Grunbaum, Branko  
    Sloane, N.J.A.
- box 37, folder 4      **1976, August [2 of 2] 1976-2000**  
    **Scope and Contents note**  
    Correspondents:  
    Van Teeseling, Tom  
    Grunbaum, Branko  
    Farrell, Jeremiah
- box 37, folder 5      **Material Relating to Tree-Plant Patterns 1967-1976**  
    **Scope and Contents note**  
    Legard's game  
    Correspondents:  
    Trigg, Charles  
    Legard, A.R.
- box 37, folder 6      **History U.S. Flag 1976**  
    **Scope and Contents note**  
    Pictures of early flags.
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### **Triangle**

**Physical Description:** 3 folder(s)

- box 22, folder 24      **1970, June 1958-1970**  
    **Scope and Contents note**  
    Correspondents:  
    Charosh, Mannis  
    Trigg, Charles
- box 22, folder 25      **Five-con Triangle's ("Almost Congruent") undated**  
    **Scope and Contents note**  
    Articles
- box 22, folder 26      **Spot & Equilateral Triangle 1967-1986**  
    **Scope and Contents note**  
    "Circus Triangles", by Herbert Grimsey & Donald Entwisle (photocopy of typescript)  
    Correspondents:  
    Waldvogel, Jorg  
    Grimsey, A.H.R.
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### **Trisection**

**Physical Description:** 3 folder(s)

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box 16, folder 14  
box 16, folder 15

**1966, June [1 of 2] 1966**  
**Trisection [2 of 2] 1970-1977**  
**Scope and Contents note**  
Correspondents:  
Keeler, Donald

box 16, folder 16

**Crank Trisection 1974-1987**  
**Scope and Contents note**  
Correspondents:  
Dudley, Underwood

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**Trivalent Graphs**

**Physical Description:** 8 folder(s)

box 36, folder 4

**1976, April 1996**  
**Scope and Contents note**  
Incomplete column

box 36, folder 5

**Published Papers on Snarks [1 of 2] 1976-1980**  
**Scope and Contents note**  
Many papers, offprints, typescripts, etc.  
Correspondents:  
Beraha, Sami  
Secrest, Don

box 36, folder 6

**Published Papers on Snarks [2 of 2] 1976-1996**  
**Scope and Contents note**  
More articles, etc

box 36, folder 7

**The Graph "Super Task" 1976**  
**Scope and Contents note**  
Correspondents:  
Kaufman, richard

box 36, folder 8

**Isaacs' Letters 1975-1978**  
**Scope and Contents note**  
Rufus Isaacs  
Rufus' correspondence with various letter writers, on Snarks

box 36, folder 9

**Corrections (Federico) undated**  
**Scope and Contents note**  
Photocopy of (original S.A.) article  
Several (old) articles, referenced in Federico letter  
Correspondents:  
Federico, P.J.



box 36, folder 10

**REader Response on Snarks 1976-1979**

**Scope and Contents note**

Correspondents:

Wilson, Robin

Harary, Frank

Thomas, J.M.

box 36, folder 11

**The Hamiltonian Path, etc. 1976**

**Scope and Contents note**

Correspondents:

Isaacs, Rufus

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**TTT**

box 24, folder 1

**1971, August undated**

**Scope and Contents note**

Ticktacktoe (see separate TTT folder)

Just the article (not complete)

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**Turing Machines & Game**

box 23, folder 22

**1971, June 1991**

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**Unit Fractions (Reciprocals) (Egyptian)**

**Physical Description:** 3 folder(s)

box 46, folder 1

**1978, October [1 of 3] 1980**

**Scope and Contents note**

Incomplete article.

Many articles on unit fractions

"Egyptian Fractions", by Nicola Franceschine, III, Thisis (Sonoma State) 1978

Correspondents:

Wells, David

Hitotumatu, Sin

box 46, folder 2

**1978, October [2 of 3] 1978-1979**

**Scope and Contents note**

Many readers letters with examples.

MG notes.

Correspondents:

Hitotumatu, Sin

box 46, folder 3

**1978, October [3 of 3] 1980-1993**

**Scope and Contents note**

Correspondents:

Hitotumatu, Sin

Guy, Richard

Graham, Ron

Bleicher, Michael

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**Unsolved Problems**

**Physical Description:** 3 folder(s)

box 25, folder 8

**1972, June - Chromatic No. of Plane 1966-1972**

**Scope and Contents note**

Incomplete article

Correspondents:

Golomb, Solomon

Ulam, Stanislav

Smith, David

box 25, folder 9

**Slither (Standard) 1971-1974**

**Scope and Contents note**

Analyses

Correspondents:

Miller, George

Read, Ronald

Beeler, Michael

Silverman, David

Anderson, L. William, Jr.

box 25, folder 10

**Slither (Misere) 1972-1997**

**Scope and Contents note**

Correspondents:

Beeler, Michael

Selfridge, Oliver

Santos, Bernardo

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**Walk With Dr. Matrix**

box 21, folder 1

**1969, January 1968-1969**

**Scope and Contents note**

Correspondents:

Cheney, Fitch

Abramson, Harvey

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**Waring Problem (& "Easier" problem)**

**Physical Description:** 4 folder(s)

box 28, folder 1

**1973, December 1973**

**Scope and Contents note**

No article.

MG notes.

Articles, bibliographies

Correspondents:

Shanks, Daniel

Tuckerman, Bryant

Meally, Victor

Klarner, David

Sluizer, Allan

box 28, folder 2

**Easier Waring's Problem [1 of 3] 1973-1974**

**Scope and Contents note**

"Tables of Solutions of the Diophantine Equation  $x^3 + y^3 = z^3 - d$ ", by V.L. Gardiner, R.B. Lazarus, & P.R. Stein, LA-5463-MS, Nov, 1973

Correspondents:

Stein, Paul R.

box 28, folder 3

**Easier Waring's Problem [2 of 3] 1973-1974**

**Scope and Contents note**

MG notes.

Correspondents:

Fuchs, Wolfgang

Wright, Edward M.

O'Shaughnessy, P.S.

box 28, folder 4

**Easier Waring's Problem [3 of 3] 1973-1985**

**Scope and Contents note**

Correspondents:

Shombert, George

Card, L.E.

Hansen, Wilfred

Berenson, R.S.

Cordray, R.E.

Stein, Paul R.

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**Wheel**

**Physical Description:** 4 folder(s)

box 23, folder 1

**1970, September 1960-1992**

**Scope and Contents note**

No article

Mostly articles & clippings on wheel

Correspondents:

Gutgasz, Hiram Fuller

box 23, folder 2

**Wankel Engine 1967-1977**

**Scope and Contents note**

Clippings and articles.

box 23, folder 3

**Epi- & Hypo-Cycloids 1976**

**Scope and Contents note**

Analysis of Hypocycloid of Three Cusps(Gutgasz letter)

Correspondents:

Gutgasz, Hiram Fuller

box 23, folder 4

**Cardoid & Nephroid undated**

**Scope and Contents note**

Pictures, problems, articles, model

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**Word Play**

**Physical Description:** 2 folder(s)

box 13, folder 11

**1964, September 1964**

**Scope and Contents note**

Correspondents:

Borgmann, Dmitri

Bird, Byron

box 13, folder 12

**Anagrams of LBJ & BMG 1964**

**Scope and Contents note**

Lyndon Baines Johnson and Barry Morris Goldwater

Correspondents:

Owens, David

Robinson, Raphael

Borgmann, Dmitri

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**Worm Paths**

**Physical Description:** 5 folder(s)

box 27, folder 13

**1973, November 1973-1985**

**Scope and Contents note**

No article

Correspondents:

Wyvill, Geoff

Beeler, Michael

Tenney, Bob

Bell, John

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box 27, folder 14

**Spirolaterals 1971**

**Scope and Contents note**

Correspondents:

Odds, Frank

Beeler, Michael

Thompson, Hugh

Thomas, James

Wolfram, Steven

Foxwell, Harry

box 27, folder 15

**Mike Beeler [1 of 3] 1973**

**Scope and Contents note**

"Patterson's Worm", by Michael Beeler (Artificial Intelligence Memo No. 290, June 1973, MIT A.I. Laboratory)

box 27, folder 16

**Mike Beeler [2 of 3] 1973**

**Scope and Contents note**

Continuation of Beeler paper

box 27, folder 17

**Mike Beeler [3 of 3] 1973**

**Scope and Contents note**

End of paper, also microfiche of the paper, notes and correspondence about the paper

Correspondents:

Beeler, Michael

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**Wythoff's Game & Fib. Nos.**

**Physical Description:** 4 folder(s)

box 39, folder 13

**1977, March 1977-1988**

**Scope and Contents note**

"A Generalization of Wythoff's Game", by M. E. Hoggatt, Jr, et. al. (photocopy of typescript)

Correspondents:

Hitotumatu, Sin

box 39, folder 14

**Silber's Papers 1976-1977**

**Scope and Contents note**

Reprints of Silber's articles in Fibonacci Quarterly

Correspondents:

Silber, Robert

box 39, folder 15

**Beatty Sequences 1976-1978**

**Scope and Contents note**

Some articles by Ron Graham, by Kenneth Stolarsky, Solomon Golomb, and E.N. Gilbert

Correspondents:

Stolarsky, Kenneth

Hoggatt, Vernon

box 39, folder 16

**Fraenkel Papers on Beatty Sequences 1977-1988**

**Scope and Contents note**

Description of Tsianshidsi, a generalization of Wythoff's Game

Correspondents:

Fraenkel, Aviezri

**Subject files Series 2**

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**3 Dimensional Objects**

**Physical Description:** 29 folder(s)

box 73, folder 1

**From Box 10, Folder 4: Plane Dissections**

**Scope and Contents note**

1. 8 piece dissection of square or rhombus, from Bill Gosper
2. 10 piece pentagram dissection and 5 piece pentagon dissection, from Gwen Roberts
3. Tetrods, by Alex Randolph, from Ed Pegg, Jr
4. Pentagonia (1 pentagon to 5 pentagons), from Stan Isaacs
5. Word Pack (pack letters into rectangle), from Peter Winkler

box 73, folder 2

**From Box 10, Folder 4: Plane Dissections**

**Scope and Contents note**

1. 8 piece dissection of square or rhombus, from Bill Gosper
2. Trigram Set "Exploring Trigonometry with Dr. Super's Trigrams", Product # 462, Stokes Publishing Company
3. 2D Geometric Put-Together Puzzles, from Tom McElhany
  - a. Model G2 - latin cross to square Set 1G
  - Model G6 - 6 point star to hexagon "
  - b. Model G2 (as above)
  - Model SQ2.2 - 4 piece square, 5 piece square
  - c. Model G9 - square to swastika

box 73, folder 3

**From Box 13, Folder 5: Curves & Art (Equations Graphed)**

**Scope and Contents note**

Set of postcards "Pictorial Mathematics", Series B, Nos. 1-32 (not complete)

box 73, folder 4

**From Box 14, Folder 7: Tesselations (Mosaics) [3 of 3]**

**Scope and Contents note**

Plastic tiles, 2 pentagonal shapes, from Ed Pegg, Jr.

box 73, folder 5

**From Box 15, Folder 9: Tesselations**

**Scope and Contents note**

Plastic shpaes from tesselations, 10 shapes, 2 of each, colored.

box 73, folder 6

**From Box 15, Folder 12: Solid Geometry**

**Scope and Contents note**

Cardboard model of dodecahedron, advertising "The Restless Earth" television show, 10 faces with photos

box 73, folder 7

**From Box 17, Folder 1: Rotating Tetrahedral Rings**

**Scope and Contents note**

IsoAxis - Cardboard sheet that folds to IsoAxis model

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box 73, folder 8	<b>From Box 17, Folder 1: Rotating Tetrahedral Rings</b> <b>Scope and Contents note</b> Tumbli - sheet of 32 triangles (plus tabs) that folds to a ring of 8 tetrahedra that rotates
box 73, folder 9	<b>From Box 24, Folder 10: Weighing Problems</b> <b>Scope and Contents note</b> 2 calculators for 3 false-coin puzzles, from Emmet J. Duffy
box 73, folder 10	<b>From Box 25, Folder 10: Weighing Problems</b> <b>Scope and Contents note</b> 15 pennies for sliding-coin puzzles, by Erik & Martin Demaine
box 73, folder 11	<b>From Box 27, Folder 3: Macmahon's Color Hexagons</b> <b>Scope and Contents note</b> 4 sets of Voz Tiles (7 hexagons, each of 6 out of 7 colors)
box 73, folder 12	<b>From Box 29, Folder 7: Necktie Paradox &amp; Variants</b> <b>Scope and Contents note</b> Cassette tape - radio interview with Nathan Davinsky (mathematician & chess player), including in the first section the Necktie Paradox (as: Should we exchange envelopes with money.)
box 73, folder 13	<b>From Box 30, Folder 3: Dice Probability Problems</b> <b>Scope and Contents note</b> Set of 3 Magic Dice (non-transitive dice)
box 73, folder 14	<b>From Box 33, Folder 8: Hexagonal Tessellation Games</b> <b>Scope and Contents note</b> Hexcheckers Game (gameboard, counters, instructions)
box 73, folder 15	<b>From Box 47, Folder 9: Kohl, Herb</b> <b>Scope and Contents note</b> 5 inch floppy disk with polyomino demo
box 73, folder 16	<b>From Box 51, Folder 4: Fondos' Red/Green Device</b> <b>Scope and Contents note</b> Mechanical model of device
box 74, folder 1	<b>From Box 51, Folder 13: Logic Cards</b> <b>Scope and Contents note</b> <ol style="list-style-type: none"><li>Logic cards (3 kinds: Jevons' system; Red&amp;Blue squares in square windows; circle windows)</li><li>First set of T-Value cards</li><li>Cards for determining all valid conclusions of any two premises</li><li>Syllogis machine, by C.C. Foster</li></ol>
box 74, folder 2	<b>From Box 53, Folder 7: Pentominoes (Misc)</b> <b>Scope and Contents note</b> Modest Polyominoes Problem Book, by Dick Hess, 1997 Modest Hexominoes Puzzle, by Dick Hess, 1997 Fill-Agree - A punctured polyomino puzzle, by Kate Jones

box 74, folder 3	<b>From Box 53, Folder 13: Hexominoes</b> <b>Scope and Contents note</b> Complete set of green pentominoes & red hexominoes, in plastic, solved as a 15x18 rectangle
box 74, folder 4	<b>From Box 54, Folder 13: Polyaboloes</b> <b>Scope and Contents note</b> Cardboard cutouts of 14 tetraboloes
box 74, folder 5	<b>From Box 56, Folder 1: Polyhex</b> <b>Scope and Contents note</b> 1 cardboard set of tetra-hexes
box 74, folder 6	<b>From Box 56, Folder 10: Magic Square Magic Tricks</b> <b>Scope and Contents note</b> "The Ultimate Magic Square", deck of 16 cards (a number on each side) plus instructions (in German), by Christoph Wasshuber (Chris the Magician)
box 74, folder 7	<b>From Box 57, Folder 10: Magic Hexagons</b> <b>Scope and Contents note</b> Magic Hexagon Puzzle (magnetic), by Signal
box 74, folder 8	<b>From Box 60, Folder 4: Paper Folding[2 of 3]</b> <b>Scope and Contents note</b> Several "Rabbit in the Hat" examples
box 74, folder 9	<b>From Box 60, Folder 4: Paper Folding[2 of 3]</b> <b>Scope and Contents note</b> Wire portrait of Martin Gardner, mounted on cardboard
box 74, folder 10	<b>From Box 74, Folder 10: Paper Cutting &amp; Tearing</b> <b>Scope and Contents note</b> 3 folded papers, each to be cut (once) 2 results after cut Result seems to be several stars, strung together
box 74, folder 11	<b>From Box 60, Folder 7: Paper Cutting &amp; Tearing</b> <b>Scope and Contents note</b> Haskell's new paper cut (3 copies)
box 74, folder 12	<b>From Box 60, Folder 8: Math. Origami, History of</b> <b>Scope and Contents note</b> Package of paper for Origamics exercise
box 74, folder 13	<b>From Box 63, Folder 7: Japanese Puzzles</b> <b>Scope and Contents note</b> 1990 calendar from Puzzle City (Toyo Glass) 1992 calendar from Puzzle City (Toyo Glass)

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**666****Physical Description:** 13 folder(s)

- box 69, folder 7      **666-Main Properties 1978-2000**  
**Scope and Contents note**  
 Lots of notes, letters, articles, etc. with properties of 666  
 Magic trick: The Devil's Prare-Book, by Rhett Bryson
- box 69, folder 8      **666-History & Miscellaneous References [1of 2] 1966-1997**  
**Scope and Contents note**  
 Many notes, letters, articles, etc.
- box 69, folder 9      **666-History & Miscellaneous References [2of 2] 1953-2000**  
**Scope and Contents note**  
 "The super Deceiver of the World Horizon", by James C. Hollenbeck, 1953 (18th ed),  
 63pp (booklet)  
 "Christian Media", Vol. VII, Issue 1, 2000, 24pp (newspaper)
- box 69, folder 10      **666 and 777 1982-1997**  
**Scope and Contents note**  
 Computer program and output relating to Gardner articvla in Asimov magazine on  
 "The Number of the Beqast", July, 1983
- box 69, folder 11      **Proctor & Gamble Logo 1982-1997**  
**Scope and Contents note**  
 Charges that P&G logo was Satanic, & refutations
- box 69, folder 12      **666- SDA & Jehovah's Witnesses 1975-1976**  
**Scope and Contents note**  
 Seventh Day Adventists & Njehovah's Witnesses
- box 69, folder 13      **666- and Names 1960-1999**  
**Scope and Contents note**  
 Correspondents:  
 Hein, Piet (Hoebens)  
 Stueben, Michael
- box 69, folder 14      **The Second Coming [1 of 3] 1978-1999**  
**Scope and Contents note**  
 Many articles
- box 70, folder 1      **The Second Coming [2 of 3] 1985-1995**  
**Scope and Contents note**  
 More articles
- box 70, folder 2      **The Second Coming [3 of 3] 1953-2001**  
**Scope and Contents note**  
 More articles
- box 70, folder 3      **SDA Literature 1952-1993**  
**Scope and Contents note**  
 Mostly mail flyers, one article

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- |                  |  |
|------------------|--|
| box 70, folder 4 | <p><b>Whisenant's 88 Reasons - For 1988 1988-1989</b></p> <p><b>Scope and Contents note</b></p> <p>Articles about prophacy, not the actual reasons (about the second coming, End-of-the-World)</p> |
| box 70, folder 5 | <p><b>Recent Failed Prophecies 1989-2000</b></p> <p><b>Scope and Contents note</b></p> <p>Articles about End-Of-World (Second Coming) prophecies</p>   |
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### Algebra

**Physical Description:** 10 folder(s)

- |                  |   |
|------------------|---|
| box 8, folder 10 | <p><b>Algebra 1965-1995</b></p> <p><b>Scope and Contents note</b></p> <p>Several good algebra problems.</p>   |
| box 8, folder 11 | <p><b>Graphs 1977</b></p>   |
| box 8, folder 12 | <p><b>Clock Puzzles 1964-2000</b></p> <p><b>Scope and Contents note</b></p> <p>Correspondents:</p> <p>Spahn, Mark</p>   |
| box 8, folder 13 | <p><b>Speed, Distance 1959-1995</b></p>   |
| box 8, folder 14 | <p><b>Joint-Effort Prob's (work, grass, eating, etc) 1954-1966</b></p>  |
| box 8, folder 15 | <p><b>Linear Programming (Siimplex, &amp; Khachian) 1979-1990</b></p> <p><b>Scope and Contents note</b></p> <p>Reports on the Khachian "controversy."</p>   |
| box 8, folder 16 | <p><b>Karmarkar's Algorithm 1984-1989</b></p> <p><b>Scope and Contents note</b></p> <p>Linear Programming.</p>  |
| box 8, folder 17 | <p><b>Radon Transform (&amp; CAT) 1986-1988</b></p> <p><b>Scope and Contents note</b></p> <p>(Also Fermat's Lawst Theorem, and Yoichi Miyaoka's proof (not correct) of it.)</p> <p>Correspondents:</p> <p>Gleick, James</p> |
| box 8, folder 18 | <p><b>L. Carroll - On Determinants 1986-1996</b></p> <p><b>Scope and Contents note</b></p> <p>Abeles, Francine</p>  |
| box 8, folder 19 | <p><b>Matrix Theory 1992</b></p>  |
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### Arithmetic Numbers

**Physical Description:** 32 folder(s)

box 4, folder 1

**Numbers (Arith) [1 of 3] 1951-1976**

**Scope and Contents note**

"On Products of Factorials", by P. Erdos & R. Graham (typescript)

"Nonnegative Digit Sets in Positional Number Systems", by A.M. Odyszko (typescript)

Lots of problems involving integers.

Correspondents:

Nelson, Harry

Silverman, David

box 4, folder 2

**Numbers (Arith) [2 of 3] 1974-1990**

**Scope and Contents note**

"One Plus Two Equals Three", by William Blewett (typescript)

"A New Representation of the Rational Numbers for Fast Easy Arithmetic", by E. Hehner & R. Horspool (typescript)

Correspondents:

Oliver, Barney

Knuth, Donald

box 4, folder 3

**Numbers (Arith) [3 of 3] 1990-2002**

**Scope and Contents note**

Hiroimono, Ziggurats and many other integer problems.

"Strong Law of Small Numbers", by Richard Guy (reprint)

"Zifferntreue Vielfache", by Hans Determann, 1998 (in German)

Correspondents:

Vos Savant, Marilyn

Santora, Norman

Arisawa, Makoto

Knuth, Donald

Wainwright, Robert

box 4, folder 4

**Notation 1981-1982**

**Scope and Contents note**

2 articles, one on notation ambiguities & differences between authors and cultures, the other on Roman numerals.

box 4, folder 5

**Numbers With all 9 (or 10) Digits 1976-1985**

box 4, folder 6

**End Digit Transposals 1970-2000**

**Scope and Contents note**

Correspondents:

Card, L.E.

box 4, folder 7

**123456789 & 987654321 1961-2001**

**Scope and Contents note**

"Krypto" game.

Correspondents:

Angstrom, Knut

Patton, Robert

Brainerd, Walter

Hastings, Don

Hein, Piet

Knuth, Donald

box 4, folder 8

**Age Puzzles of all Types 1963-1991**

**Scope and Contents note**

(Originally "Ford" type, Ford is crossed out.)

"Ford" must be Lester Ford.

Correspondents:

Ford, Lester

Theimer, Ernst

box 4, folder 9

**The 4 No's (abs. Difs.) [Ducci] curiosity 1966-1992**

**Scope and Contents note**

Correspondents:

Meyers, Leroy

box 4, folder 10

**The Looping Formulas 1973-1991**

**Scope and Contents note**

"On Periodic Sequences Defined by Recurrences", by Conway & Graham (photocopy)

Correspondents:

Liu, Stanley Wu-Wei

Graham, Ron

Bosch, Warren

Conway, John

Eberhard, Steven

Lenard, Andrew

box 4, folder 11

**Josephus Problem 1960-1972**

**Scope and Contents note**

Correspondents:

Kaplansky, Irving

box 4, folder 12

**Rep-A Decimals 1961-1994**

**Scope and Contents note**

Recurring decimals?

Correspondents:

Spat, Melvin

Morris, Scot

box 4, folder 13

**Artih. Shortcuts 1956-1972**

**Scope and Contents note**

Many MG notes.

Correspondents:

Smith, Cedric

box 4, folder 14

**Cryptarithms 1959-1998**

**Scope and Contents note**

Lots of examples; variations, other bases, etc.

Correspondents:

Cheney, Fitch

Kruskal, Martin

Computer Art & Graphics [1 of 2], Don

Kahan, Steven

box 4, folder 15  
box 4, folder 16

**From Alan Wayne (Cryptarithms) 1975-1989**  
**Numbers as Words (Cryptarithms) 1968-1994**

**Scope and Contents note**

... and foreign language.

Correspondents:

Piel, Gerard

Yoshagihara, Nob

Gordon, Leonard

box 5, folder 1

**Skeleton Puzzles 1939-1994**

**Scope and Contents note**

Cryptarithms with all (or some) numbers starred.

Correspondents:

O'Beirne, Thomas

box 5, folder 2

**Fractions 1961-2000**

**Scope and Contents note**

"Numerous Numerals", by James Henly, NCTM, 1975 (pamphlet)

"Minimidy Modules", by Samuel Yates, 1978 (draft)

Correspondents:

Henle, James

box 5, folder 3

**Continued Fractions 1952-1996**

**Scope and Contents note**

Correspondents:

Gosper, Bill

Hill, F.S.

Allison, Marvin

box 5, folder 4

**Continued Square Roots 1995**

**Scope and Contents note**

Correspondents:

Clawson, Calvin

box 5, folder 5

**Binary System Items 1954-1993**

**Scope and Contents note**

Hugard's Magic Monthly, pp. 161-164 (July, 1954).

Digicomp (plastic toy digital computer) c1964.

Bar Codes article.

Lots of MG notes, many small items.

Correspondents:

Hansson, Sven-Ove

box 5, folder 6

**Duodecimal & Other Systems 1959-1971**

**Scope and Contents note**

Publications of the Duodecimal Society of America, including several Duodecimal Bulletins.

"Others" are a short article on Octal Number System, and one on Hexadecimal numbers.

box 5, folder 7

**Metric System 1972-1987**

**Scope and Contents note**

Several metric calculators.

Several articles on whether to switch or not.

"Metric Style Guide", Canada, 1975 (pamphlet).

Correspondents:

Knuth, Donald

box 5, folder 8

**Mixed Radix Notation 1975**

**Scope and Contents note**

"Variable Number Base", by Francis Miles (typescript with cover letter.)

box 5, folder 9

**Multiplication (Rapid) (& Napier's Bones) 1967-1975**

**Scope and Contents note**

MG notes.

Correspondents:

Healey, Tim

Flanagan, Dennis (to Knuth)

box 5, folder 10  
box 5, folder 11

**Euler's Gamma Constant (& Function) & Relation to Factorials 1959-1972  
Logarithms 1973-1978**

**Scope and Contents note**

"Logarithms", by N. David Mermin (typescript)

Correspondents:

Mermin, N.D.

Lanterman, W.F.

box 5, folder 12  
box 5, folder 13

**Tarry-Escott Problem 1937-1965**

**Moebius Strip Slide Rule for complex Numbers 1978**

**Scope and Contents note**

Correspondents:

Kofman, Gil

box 5, folder 14

**Numbers Without 1's Problem (Steve Kuhn) 1987**

**Scope and Contents note**

Correspondents:

Kuhn, Steven

box 5, folder 15  
box 5, folder 16

**Bar Codes 1991**

**Partition Theory 1959-1000**

**Scope and Contents note**

Many MG notes.

"The Division of a Number into Parts So That The Product ... Maximum", by Harry Lawther (manuscript photocopy)

Correspondents:

Andrews, George

Lawther, Harry

Halliburton, Jack

**Artificial Intelligence (AI)**

**Physical Description:** 13 folder(s)

- |                   |   |
|-------------------|---|
| box 45, folder 12 | <b>Recognizing Faces 1995</b><br><b>Scope and Contents note</b><br>1 article, from Discover   |
| box 45, folder 13 | <b>Art. Intell. (AI) 1960-1993</b><br><b>Scope and Contents note</b><br>Many articles, technical & popular, and references & notes on AI  |
| box 45, folder 14 | <b>Turing Machine 1967-1989</b><br><b>Scope and Contents note</b><br>Articles, mostly technical   |
| box 45, folder 15 | <b>Turing Game 1950-1973</b><br><b>Scope and Contents note</b><br>Turing Game is "imitation game" or "Turing Test"<br>Several technical articles<br>"Computing Machinery and Intelligence", by A.M. Turing, Mind, 1950  |
| box 45, folder 16 | <b>Can Computers "Think", be "Conscious" - etc (Searle, etc) 1971-1991</b><br><b>Scope and Contents note</b><br>Several articles, technical as well as popular, mostly philosophical<br>(Subject of June, 1971, Mathematical Games column)<br>Correspondents:<br>Sekal, Alan<br>Gunderson, Keith<br>Hawton, Michael |
| box 45, folder 17 | <b>M. Adler on Computers &amp; AI 1968</b><br><b>Scope and Contents note</b><br>Long typescript review by MG, of Mortimer Adler's work<br>MG notes<br>"New York Review" review of 2 Adler books (not by MG)   |
| box 45, folder 18 | <b>The Human Brain - Simulation of Life, etc 1955-1987</b><br><b>Scope and Contents note</b><br>Many articles, mostly popular, some technical<br>"Mathematical Models for the Living Brain", by N.G. de Bruijn, 22pp (typescript)   |
| box 45, folder 19 | <b>Pattern Recognition &amp; Perceptrons 1966-2002</b><br><b>Scope and Contents note</b><br>A few popular articles  |
| box 45, folder 20 | <b>Induction Programs 1981-1985</b><br><b>Scope and Contents note</b><br>... and Expert Systems<br>Several articles   |

- box 45, folder 21      **LISP 1983**  
                                 **Scope and Contents note**  
                                 3 S.A. articles (Hofstadter)
- box 45, folder 22      **Talking Computers 1972-1988**  
                                 **Scope and Contents note**  
                                 Several articles
- box 45, folder 23      **Translating Languages 1956-1989**  
                                 **Scope and Contents note**  
                                 Several articles
- box 45, folder 24      **Robotics 1951-2000**  
                                 **Scope and Contents note**  
                                 MG references and notes  
                                 Lots of articles  
                                 Correspondents:  
                                 Helmers, Carl
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**Bible**

**Physical Description:** 6 folder(s)

- box 69, folder 1      **Bible & Numerology 1954-1993**  
                                 **Scope and Contents note**  
                                 Correspondents:  
                                 Borgmann, Dmitri
- box 69, folder 2      **Gematria (Cabbala) & Medieval 1959-1997**  
box 69, folder 3      **Panin 1934-1983**  
                                 **Scope and Contents note**  
                                 Ivan Panin, a Russian fundamentalist & numerologist
- box 69, folder 4      **The 144,000 Saints 1975-1988**  
                                 **Scope and Contents note**  
                                 Seventh Day Adventist views  
                                 Jehovah's Witnesses views
- box 69, folder 5      **Elvin Lee 1982-1984**  
                                 **Scope and Contents note**  
                                 Correspondance with autobiographical information, mathematics problems & puzzles,  
                                 and biblical numerology  
                                 Amicable numbers
- box 69, folder 6      **Norman Bloom 1976**  
                                 **Scope and Contents note**  
                                 2 copies of "The New World", publication by Norman Bloom, from Aug. 8, 1976 and  
                                 Nov. 15, 1976
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**Board Games**

**Physical Description:** 27 folder(s)

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box 32, folder 10

**Board Games [1 of 2] 1961-1975**

**Scope and Contents note**

Many games described or analysed, including:

Jews & Arabs

Coprime Nim

Kercheck (Maxey Brooke) ("Retreat")

Switch

Games on Shogi board

Lines of Action

Tromino Go

Jungle

Null

Laska

Knight Chase

Fez

Towers

Correspondents:

Conway, John

Penszko, Marek

Abbott, Robert

Shepherd, Wilfred

Sackson, Sid

Thayer, John

Scott, Gini

Randlett, Samuel

Feather, Martin

box 32, folder 11

**Board Games [2 of 2] 1977-1996**

**Scope and Contents note**

Senet

Kensington

Square Off

Dodge

Terrorist Attach 101

Correspondents:

Shahshahani, S.

Walton, Dale

Abbott, Robert

Parkin, Robert

box 32, folder 12

**Solomon Game 1982-1992**

**Scope and Contents note**

Combinatorial board

A game by MG, subtitled "A Game of Peace"

"Solomon: The Game of Peace", by Martin Gardner, 26pp (typescript) - Description, history, strategy & variations for the game

Correspondents:

Schmittberger, Wayne

Jones, Kathy

box 32, folder 13

**Soloman Puzzles 1984**

**Scope and Contents note**

MG notes on puzzles from game of Solomon

box 33, folder 1

**Go 1970-1998**

**Scope and Contents note**

Correspondents:

Wells, David

Wynn, Stephen

box 33, folder 2

**Mastermind (& Bulls & Cows) 1966-1977**

**Scope and Contents note**

Several attempted analyses

Correspondents:

Rasper, John

Morgan, Dennis

Gittings, Thomas

box 33, folder 3

**Simple Games - Solution Known & Unknown 1956-1996**

**Scope and Contents note**

Tiger and Elephants

Winemanship

"Theorem on Certain Types of Games, with Applications", by Herbert Salzer (typescript); includes Nim, Kayles, Cornering the Pig

"Cheap, Middling, or Dear", by V. Chuatal (typescript)

"Silverman's Game on Intervals", by Ronald Evens (typescript)

Correspondents:

Silverman, David

Salzer, Herbert

Liu, Andy

box 33, folder 4

**Phutball 1974-1978**

**Scope and Contents note**

Correspondents:

Conway, John

Knuth, Donald

Atwater, Thomas

box 33, folder 5

**Mancala Games 1894-1978**

**Scope and Contents note**

Correspondents:

Abbott, Robert

Weinberg, Gerald

box 33, folder 6

**McCue's Automata (Tanks) Game 1974**

**Scope and Contents note**

Correspondents:

McCue, Brian

box 33, folder 7

**Logiquad (Marbles) 1974**

**Scope and Contents note**

Correspondents:

Pos, Norman

box 33, folder 8

**Hexagonal Tessellation Games (Chinese Checkers, etc.) 1964-1983**

**Scope and Contents note**

Hexcheckers (game in different folder)

Agon & Queens Guard

Hex-A-Board

Surround (Edward Weed)

Wargame simulations in John Koontz letter

Correspondents:

Koontz, John

Shepherd, Wilfred

box 33, folder 9

**Marek Penszko 1969-1983**

**Scope and Contents note**

Various games & puzzles, printed on card stock, including Mini Krzyzowki, Teczowy Kwiat, Waz, Wi Row Ka, Harcab, Kratkownica, & Nakrywanka

box 33, folder 10

**Triangular Bridg-it 1964**

**Scope and Contents note**

Correspondents:

Tripp, John

box 33, folder 11

**Twixt & Variants 1969-1978**

box 33, folder 12

**Rithmomachy 1946-1989**

**Scope and Contents note**

"Boissiere's Pythagorean Game", by John F.C. Richards, 1946 (pamphlet reprint)

box 33, folder 13

**Monopoly 1973-1996**

**Scope and Contents note**

Shortest Monopoly game

Many newspaper articles about history, lawsuits, and other related Monopoly happenings

Correspondents:

Cave, James

Hoffman, Paul

box 33, folder 14

**Laska 1980**

**Scope and Contents note**

Sixstaxs, a solitaire (peg jumping) puzzle from Laska

Correspondents:

Lushbaugh, Warren

box 33, folder 15

**Backgammon 1980-1981**

box 33, folder 16

**Nost 1967**

**Scope and Contents note**

Knights of the Square Table

box 33, folder 17

**Epaminodas (Abbott) 1974**

**Scope and Contents note**

Correspondents:

Abbott, Robert

box 33, folder 18

**Holt's "Mem" 1968**

box 33, folder 19

**Simulation Games 1971-1983**

**Scope and Contents note**

Many ads for various simulation games

box 34, folder 1

**War Games 1962-1982**

**Scope and Contents note**

Articles on war games and war gaming

Correspondents:

Schwartz, Benjamin

box 34, folder 2

**Chinese Checkers (Hist.) 1994**

**Scope and Contents note**

Issue of quarterly journal, Hedge Apple and Devil's Claw, Spring, 1994, by John Brewer. Contains several stories and articles by him, including his attempts to trace the history of Chinese Checkers.

box 34, folder 3

**Lewis Carroll Game 1990-1997**

**Scope and Contents note**

Word game by MG, based on an idea of Lewis Carroll, played on a chess board

Correspondents:

Jones, Kathy

Knuth, Donald

box 34, folder 4

**Dots & Squares 1958-2001**

**Scope and Contents note**

Analyses by B.B. Compton Crick, Robert Rubinstein, Newark State College, J.P. Ballantine, Greg Chaitin, Ronald Wiener, and more.

Also some variations: Cubes, Q-Bickles, Dots & Triangle's, & hexagons.

Correspondents:

Berlekamp, Elwyn

Crick, M.F.Compton

Chaitin, Greg

Wiener, Ronald

**Chess**

box 58, folder 1

**Bobby Fischer [1 of 2] 1958-1972**

**Scope and Contents note**

Many articles on Fischer, mostly newspaper, and mostly on the 1972 match with Boris Spassky

box 58, folder 2

**Bobby Fischer [2 of 2] 1972-1992**

**Scope and Contents note**

More articles

box 58, folder 3

**Polgar Sisters 1993-1994**

**Scope and Contents note**

2 popular articles

box 58, folder 4

**Checkerboard Puzzles (The board itself, no chess pieces) 1957-1982**

**Scope and Contents note**

Mostly checkerboard dissections. Much analysis, by MG & others.

Different board sizes, etc.

Impossibility proofs

2 or 4 congruent halves or quarters

Polyomino dissections

Cut & re-arrange

Correspondents:

Marlow, T.

Golomb, Solomon

Scott, Dana

Morris, Lockwood

box 58, folder 5

**Queen Tours - & Dot Problems (& King Tours) 1962-1999**

**Scope and Contents note**

Graphs on point lattices

"Minimum Segment Polygonal Paths on Point Lattices", by Solomon Golomb (typescript)

Many problems and solutions, and some analysis

Correspondents:

Golomb, Solomon

box 58, folder 6

**Superposable Queens 1962-1984**

**Scope and Contents note**

n sets of n queens on nxn board, each set one color, so no queen attacks another of the same color. Also "Pegboard Problem", and "Hoo-Doo"

MG idea for marketable version (order 7)

Impossibility proof of n=8

box 58, folder 7

**Queen Problems (Static) 1960-1998**

**Scope and Contents note**

Various queen problems, mostly attacking cells on chessboard

Queens on hexagonal board, on a cylinder, on a torus, etc.

"On the Queen Domination Problem", by Charles Grimstead, et.al. (typescript)

box 58, folder 8

**The Non-Attacking Queens (& 3-Spacde Cases) 1962-2001**

**Scope and Contents note**

"The Unexpected Two Dimensional Space-Group Containing Seven of the Twelve Basic Solutions to the 8 Queens Problem", by David Hollander, 1972 (typescript)

"A Linear Time Algorithm for Constructing a Solution to the N-Queens Problem", by Bruce Abramson & Mordechai Yung, 1984 (typescript)

"Queen Squares", by David Klarner, 1978 (report) - 3D cases

box 58, folder 9

**Clyde Minton - Queen Tasks, ETC. 2000**

**Scope and Contents note**

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"Generalizing a Classic Statical Chess Board Puzzle", by C.C. Minton, 91pp (typescript)

Correspondents:

Minton, Clyde

box 58, folder 10

**Misc. Chess Puzzles 1961-1998**

**Scope and Contents note**

Many chess problems and references

"Chess and Mathematics Bibliography", by Loren Larson, 1974 (mimeo)

Correspondents:

Harris, John

Charosh, Mannis

Stover, Mel

box 58, folder 11

**Nonattacking Rooks 1962-1996**

**Scope and Contents note**

Problems and formula for how many

Correspondents:

Larson, Loren

Golomb, Solomon

Chamley, Donald

box 58, folder 12

**Costas Arrays 1984**

**Scope and Contents note**

1 articles (by Solomon Golomb)

box 58, folder 13

**Rook, Bishop tours 1948-1999**

**Scope and Contents note**

MG notes

Several problems & analyses

Correspondents:

Austin, A.K.

Guertin, Richard

box 58, folder 14

**Rooks, Bishops, Kings (Static) 1971-1990**

**Scope and Contents note**

Problem of attacking all squares

Much MG analysis & notes

box 58, folder 15

**Kriegspiel 1962-1980**

**Scope and Contents note**

"Kriegspiel and Phantom Chess", by Robert Abbott (computer printout)

Also called "The Chess War Game"

Various descriptions & sets of rules

box 58, folder 16

**Max & Min. Chess Problems, The 8-Pieces (Feb/62) 1962-1989**

**Scope and Contents note**

Many reader solutions to 8 pieces attacking maximum or minimum number of squares

box 58, folder 17

**Smullyan - Chess Problems 1973-1978**

**Scope and Contents note**

Correspondance about Smullyans books on retrograde chess problems

Some Smullyan monochromatic-move problems

Correspondents:

Smullyan, Raymond

box 59, folder 1

**Knight Problems 1967-1999**

**Scope and Contents note**



"A Linear Algorithm For Computing the Knight's Domination Number of a KxN Chessboard", by E.O. Hare & S.T. Hedetniemi (typescript)

Correspondents:

Philpott, Wade

box 59, folder 2

**Knight Tours 1967-1999**

**Scope and Contents note**

Lots of MG notes

Knuth's typefont for knights tours

Correspondents:

Francis, Darryl

Knuth, Donald

Jelliss, G.P.

box 59, folder 3

**Fairy Piece Tours Undated**

**Scope and Contents note**

1 article, by Pickover

box 59, folder 4

**Curious "Mate in -" Problems 1965-1985**

**Scope and Contents note**

Many problems & notes of problems

Correspondents:

Moser, Leo

Charosh, Mannis

box 59, folder 5

**Minimal Mating Sets on Infinite Boards 1975**

**Scope and Contents note**

1 letter/analysis, by S.P. Gobel

box 59, folder 6

**Chess-Misc. (Fiction, Philos, Etc) 1954-1975**

**Scope and Contents note**

A couple of stories, several story references & discriptions

box 59, folder 7

**Is Chess NP-Complete 1981**

**Scope and Contents note**

One article , by Aviezri Fraenkel

box 59, folder 8

**Fairy Chess 1960-2002**

**Scope and Contents note**

Lots of discriptions of variant chess rules and variant pieces

Several "Stovers Side Show" columns

Correspondents:

Abbott, Robert

Boyer, Joseph

Pritchard, David

box 59, folder 9

**3-D Chess 1952-1994**

**Scope and Contents note**

Many discriptions of 3-D chess versions

Manuscript ofr book on 3-D chess, by Peter-Rene Tottger, ~44 pp, in German, many color pictures, 1994

box 59, folder 10

**Minimum Short Games 2000**

**Scope and Contents note**

1 page from Mario Velucchi

box 59, folder 11

**6-Tuplet & 7-Tuplet Pawns 1976-1977**

**Scope and Contents note**

Correspondents:

Nelson, Harry

Kirtley, Mark

Rubin, Sidney

box 59, folder 12

**Mathematics of the Chessboard 2002**

**Scope and Contents note**

Manuscript of book by John Watkins, 16pp, 12 figures, sent to MG for review (but he declined)

box 59, folder 13

**Computer Chess [1 of 3] 1950-1971**

**Scope and Contents note**

Many articles, mostly popular, on computer chess

Correspondents:

Moss, Moe

Lasker, Edward

box 59, folder 14

**Computer Chess [2 of 3] 1972-1978**

**Scope and Contents note**

"Computable Sub-Games of Chess", by Donald Michie, 1978 (draft)

Correspondents:

Michie, Donald

box 59, folder 15

**Computer Chess [3 of 3] 1979-1998**

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**Combinatorics**

**Physical Description:** 62 folder(s)

box 22, folder 16

**Combinatorics Problems [1 of 2] 1964-1987**

**Scope and Contents note**

Many problems, solutions, and analyses

Correspondents:

Feldman, Anatol

Knuth, Donald

Hein, Piet

Narayanan

box 22, folder 17

**Combinatorics Problems [2 of 2] 1973-1998**

**Scope and Contents note**

Correspondents:

Nelson, Harry

box 23, folder 1

**Misc. Refs, Jokes, etc 1965-2000**

**Scope and Contents note**

"Backtrack Programming Techniques", by James R. Bitner & Edward Reingold, 1974 (typescript)

"Theory of Combinatorial Arrangements(no author, no date), 10pp, (Photocopy)

box 23, folder 2

**NP-Complete [Complexity Theory] 1976-2000**

**Scope and Contents note**

Complexity Theory (outline by MG?) (typescript)

Many articles

box 23, folder 3

**Zero-Knowledge Proofs 1986-1996**

**Scope and Contents note**

(Public Key encryption?)

"Unconditionally Secure Protocols", (no author, no date), 6pp (typescript)

"Expected Value Payment Method ...", patent application by Michael Rossides, 1991 (draft typescript)

box 23, folder 4

**Traveling Salesman 1954-1995**

**Scope and Contents note**

Many articles

Correspondents:

Dwyer, David

box 23, folder 5

**Lin's Traveling Salesman Max 1985**

**Scope and Contents note**

Mostly articles, analyses, and results on best path between the 48 state capitals

Correspondents:

Lin, Shen

Padberg, Manfred

box 23, folder 6

**Knapsack Problems 1974-1991**

**Scope and Contents note**

Several MG suggestions of ways to present simple knapsack problems as puzzles.

Several articles with algorithms

Correspondents:

Johnson, David

box 23, folder 7

**Min. & Max. Adjacent Cells of Squares, N-cubes, Torus, etc 1964-1985**

**Scope and Contents note**

MG notes on various problems

"On Mappings from 2 to 1 Dimensions which Minimize the Separation of Images of Adjacent Points", by Graeme Mitchenson & Richard Durbin (typescript)

Correspondents:

Liu, Andy

Trigg, Charles

Golomb, Solomon

box 23, folder 8

**Combinatorial Card Problems 1970-1999**

**Scope and Contents note**

Game analyses (Concentration; Red or Black; Mind Poker, etc)

Many MG problems, analyses, suggestions

"Ten Card Poker Deal", by Jon Racherbaumer

Poker tricks, ESP tricks

Correspondents:

Avallone, Robert

Hein, Piet

Diaconis, Persi

Harkleroad, Leon

box 23, folder 9

**The 31 Card Game (also Die) 1974-1985**

**Scope and Contents note**

Variations & analyses of summing numbers from 1-6, to make 31

Booklets on the game (and variations)

Correspondents:

Van Note, Peter

box 23, folder 10

**Non-Messing-Up Theorem 1971**

**Scope and Contents note**

Booklet by David Gale & Richard Karp, 1971

Correspondents:

Gale, David

box 23, folder 11

**Young Tableaux & Non-Mess Theorem; Ferrer's Graph 1976-1995**

**Scope and Contents note**

MG notes

"Young Tableaux", by Richard Stanley (27 pp) (typescript)

Correspondents:

Wilf, Herbert

Schensted, Craige

box 24, folder 1

**Card Sorting 1978-1995**

**Scope and Contents note**

Several different sorting problems, and several different algorithms to solve them.

"Nontrivial Improvements to the Hwan-Lin Merging Algorithm", by Glenn Manacher (typescript)

"Choosing Fair Teams", by Larry Carter & John Gill (typescript)

Correspondents:

Manacher, Glenn

Jackson, Bradley

box 24, folder 2

**Generalized Tower of Hanoi 1972-1991**

**Scope and Contents note**

Discussions & results on this (still unproved) problem.

"The Towers and Triangles of Professor Claus", by David Poole (typescript)

Correspondents:

Manacher, Glenn

Maurer, Stephen

Rivest, Ronald

Poole, David

box 24, folder 3

**Panex Puzzle 1983**

**Scope and Contents note**

Notes from the manufacturer

"Some Results on the Panex Puzzle", by Mark Manasse, Danny Sleator, Victor Wei (typescript)

Correspondents:

Hess, Richard

Nokihara, Hiroshi

Graham, Ron

box 24, folder 4

**Voting - Tournaments, Committees, Seatings, Walks, Etc. [1 of 2] 1963-1983**

**Scope and Contents note**

Photocopies of Lewis Carroll letters to St.-James Gazette, on Lawn Tennis Tournaments (6 letters, all 1883).

Many articles.

"Quasigroups and Tactical Systems", by Ronald Baker, 1995 (typescript)

"Tournament Configuration and Weighted Voting", by B.E. Wynne & T.V. Narayama (typescript)

"Regular Tournament Design", by E. Mendlesohn, 1977 (typescript)

Correspondents:

Assmus, Ed

Penrose, Roger

Mendelsohn, Eric

box 24, folder 5

**Voting - Tournaments, Committees, Seatings, Walks, Etc. [2 of 2] 1984-1998**

**Scope and Contents note**

Many articles, several on voting paradoxes.

"Some Unsolved Problems", by David Singmaster (typescript)

box 24, folder 6

**Spouse-Free Tennis Tournament 1960-1975**

**Scope and Contents note**

Equivalent to Self-orthogonal Latin squares.

Correspondents:

Wilson, Richard

box 24, folder 7

**Comb. Die Problems [1 of 2] 1966-1985**

**Scope and Contents note**

31 game.

Dice problems based on structure of faces.

Dice Rolling [to?s]

"A Mathematical Analysis of the Game of Thirty-One", by Richard Steinberg (typescript)

Oriental Dice

Correspondents:

Diaconis, Persi

Celko, Joe

Steinberg, Richard

Towler, Don

Kobon

Friedland, Aaron

box 24, folder 8

**Comb. Die Problems [2 of 2] 1969-1999**

**Scope and Contents note**

Correspondents:

Cammann, Schuyler

Thorp, Edward

Epstein, Richard

Maven, Max

box 24, folder 9

**Petals Around Rose 1976-1989**

**Scope and Contents note**

Also "Roots", and "Missed the Boat"

Roll dice, figure number they represent

box 24, folder 10

**Bingo 1963-1973**

**Scope and Contents note**

Correspondents:

Knuth, Donald

Lessing, Ronald

Lansing, Cornelius

box 24, folder 11

**Weighing Problems [1 of 2] 1963-1984**

**Scope and Contents note**

Many different weighing problems, including many false-coin problems, and mathematical analysis of problems.

2 false coin puzzles from Emmet Duffy, along with cardboard calculators for each (and the original 12-coin problem) & instructions for use. (Calculators in separate folder.)

Correspondents:

Duffy, Emmet

Tanner, Leslie

- box 24, folder 12      **Comb. Die Problems [2 of 2] 1963-1997**  
    **Scope and Contents note**  
    "The False-Coin Problem - a Colorful Approach", by Uri Leron, Technion Preprint MT443, 1979
- box 24, folder 13      **12 Coins 1955-2001**  
    **Scope and Contents note**  
    Variations, references.  
    Solutions using words (12 different letters).  
    Correspondents:  
    Card, L.E.  
    O'Beirne, Thomas  
    Cheney, Fitch  
    Riecker, Carl Jr.  
    Wiley, Roland
- box 25, folder 1      **Median Algebra (& Cards) (Craig Schensted) 1978**  
    **Scope and Contents note**  
    Long letter from Schensted that develops a Algebra of Medians, discusses its relationship to Boolean Algebra & Calculus of Propostions, and gives a couple of card tricks based on it.  
    Correspondents:  
    Schensted, Craig
- box 25, folder 2      **Stable Marriage, & College Admissions Problem 1962**  
    **Scope and Contents note**  
    Original article (by Gale & Shapley), plus MG notes from Gilman's lecture.
- box 25, folder 3      **The 21 "IDOO" Problem 1972-1975**  
    **Scope and Contents note**  
    IDOO = Isolated Diamonds, Order One (in MacMahon Squares.)  
    Correspondents:  
    Fink, Federico  
    Harris, John
- box 25, folder 4      **The 9-Piece Subset of MacMahon 3-Color Squares (Torus) 1974-1975**  
    **Scope and Contents note**  
    Using the 9 MacMahon pieces that show all 3 colors, match all edges toroidally.  
    Analysis of puzzle and game.  
    Correspondents:  
    Nelson, Harry  
    Philpott, Wade
- box 25, folder 5      **Finite Projective Planes 1961-1962**  
    **Scope and Contents note**  
    2 articles, MG notes.



box 25, folder 6

**Empirical Formulas to which Calc. Finite Difs May be Applies 1961-1991**

**Scope and Contents note**

3-color cubes

Coloring of sides, faces of figures.

Tetrahedra.

Paths in Square City Blocks.

Intersecting lines.

Dissecting lines with points, plane with lines, etc.

"Region Count for Straight Line Cutting of Flat Figures", by W. Funkenbusch & R. Odendahl (typescript)

Mostly MG notes and calculations, plus some articles.

box 25, folder 7

**Pell Equation undated**

**Scope and Contents note**

"Pell's Equation - A Tool For the Puazole Smith", by Mogens Esron Larsen (typescript)

box 25, folder 8

**Counters (Place or Move) (Cards, Etc.) [1 of 2] 1959-1985**

**Scope and Contents note**

Slide & Jump puzzle (Leap Frog)

Some peg jumping games.

"Pegboard Games", by D. G. Tabta, Mathematical Teaching Pamphlet No. 13, 1967

Hanky Panky (Forming piles).

Color exchanges on 2-D boards

... and many more similar puzzles & games

Correspondents:

Kaplan, Philip

box 25, folder 9

**Comb. Die Problems [2 of 2] 1961-2002**

**Scope and Contents note**

Penny-dime problems (permuting the order)

Correspondents:

Gombert, Jan Martin

McNear, John

box 25, folder 10

**Sliding Penny Puzzles 1995-2002**

box 25, folder 11

**Alternating Coins OoOoOo & Variants 1960-1998**

**Scope and Contents note**

Paper on Penny-dime probmes, by Gombert(typescript)

Analysis, articles, MG notes.

Correspondents:

Liu, Stanley Wu-Wei

Gombert, Jan Martin

Hitotumatu, Sin

Bergerson, Howard

box 25, folder 12

**The Russian Pebble Problem 1992-2000**

**Scope and Contents note**

Correspondents:

Liu, Andy

Murray, Jason

- box 25, folder 13      **Dividing the Cake [1 of 2] 1967-1992**  
    **Scope and Contents note**  
    MG notes, references.  
    Many algorithms for fair division, both in letters and articles.  
    Correspondents:  
    Brams, Steven  
    Saemundsson, Th.  
    Balinski, M.L.  
    Cottingham, Charles
- box 25, folder 14      **Dividing the Cake [2 of 2] 1992-2002**  
    **Scope and Contents note**  
    Many more articles and algorithms.
- box 25, folder 15      **Switching Puzzles 1987-1989**  
    **Scope and Contents note**  
    2 articles: reversing trains, and Dewdney article.
- box 26, folder 1      **Firing Squad Problem 1965-1972**  
    **Scope and Contents note**  
    Synchronization problem with finite state machines.  
    "The Firing Squad Problem", by W.F. Lunnon, 1970 (typescript)
- box 26, folder 2      **Busy Beaver Problems 1981-1989**  
    **Scope and Contents note**  
    5-state Turing machine to print maximal no. of 1's.  
    Correspondents:  
    Gallimore, Nicholas
- box 26, folder 3      **Postage Stamp Problem 1978-2000**  
    **Scope and Contents note**  
    Least amount that cannot be made with at most t stamps, each one valued at one of k denominations.  
    Correspondents:  
    Rogers, Douglas  
    Guy, Richard
- box 26, folder 4      **Pantactic 1965-1993**  
    **Scope and Contents note**  
    "Phagic Squares", by Ian Stewart, ~1972 (typescript).  
    "Pseudo-Random Sequences and Arrays", by F.J. MacWilliams and N.J.A. Sloane (typescript).  
    MG notes.  
    Correspondents:  
    Stewart, Ian  
    Aste, Brian
- box 26, folder 5      **Ising Problem 1971**  
    **Scope and Contents note**  
    1 article (by Harary) + 1 page MG notes.
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box 26, folder 6

**The Circular Ruler 1973-1982**

**Scope and Contents note**

"On the Set of Distances Determined by the Union of Arithmetic Progressions", by F.R.K. Chung & R.L. Graham (typescript).

MG notes.

Correspondents:

Grimsey, A.H.R.

James, David

box 26, folder 7

**Checkers & Go are P Space Hard (& Chess results) 1978-1981**

**Scope and Contents note**

Various articles.

Correspondents:

Johnson, David

Fraenkel, Aviezri

box 26, folder 8

**Costas Arrays (2D "Rulers"), Golomb & Taylor 1982-1983**

**Scope and Contents note**

2 Golomb articles (one with Taylor)

box 26, folder 9

**The Condom Problem 1977-1989**

**Scope and Contents note**

Correspondents:

Vardi, Ilan

Lipton, Richard

Ghijsen, Jacques

box 26, folder 10

**Ferry (Crossing) Problems 1961-1997**

**Scope and Contents note**

Many rivere crossing problems, analysis, MG notes, etc.

box 26, folder 11

**Error Correcting Codes [1 of 2] 1950-1976**

**Scope and Contents note**

Many articles, preprints, reprints, etc.

box 26, folder 12

**Error Correcting Codes [2 of 2] 1976-1999**

box 26, folder 13

**Guess A Number Game 1972-1990**

**Scope and Contents note**

Mediocrity

Bulls & Cows (numeric Mastermind) (Moo)

Silverman's Game

Guess a Number - With Lying

Toetjes Problem

Correspondents:

Hofstadter, Douglas

Eachus, Joseph

Hawkins, David

box 26, folder 14

**Ulam's Guess a Number with Lies 1974-2001**

**Scope and Contents note**

Correspondents:

Hawkins, David

box 26, folder 15

**Point-Set Coloring 1993**

box 26, folder 16

**Self Avoiding Walks 1992-1994**

box 26, folder 17

**Bay Restaurant 1974**

box 26, folder 18

**Jeep Problem 1995**

box 26, folder 19

**Pancake Problem 1995**

**Scope and Contents note**

Analysis by Leslie Upton

Correspondents:

Upton, Leslie

box 26, folder 20

**Paper Fold (Andy Liu) 1999**

**Scope and Contents note**

"Group Folding and Groups Unfolded", by Andy Liu (typescript)

box 26, folder 21

**Rolling Cubes undated**

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**Computers**

**Physical Description:** 43 folder(s)

box 43, folder 1

**Computer vs Hand Proofs (Experimental Math) 1978-1994**

**Scope and Contents note**

Several articles discussing computer proofs, especially in reference to 4-color theorem, mostly from a philosophic perspective

Correspondents:

Tymoczko, Thomas

Swart, Edward

Boas, R.P.

box 43, folder 2

**History - Electronic Calculators 1964-1995**

**Scope and Contents note**

Mostly newspaper & popular science magazines

box 43, folder 3

**Influence on Math 1977-1989**

**Scope and Contents note**

Discrete Mathematics, algorithms

box 43, folder 4

**Early Mechanical Devices (& New Hardware) 1973-1993**

**Scope and Contents note**

Napiers Bones, Babbage, Adding machines, etc.

Package (but not item) of "Consul", the Educated Monkey, a calculator

Correspondents:

Williams, Michael

Luebbert, William

Harary, Frank

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box 43, folder 5	<b>Fluidics 1960-1998</b> <b>Scope and Contents note</b> Some articles (SA & others)
box 43, folder 6	<b>Automation, Cybernetics [1 of 2] 1948-1965</b> <b>Scope and Contents note</b> Many articles (newspaper, popular science) on automation, its' advantages & its' dangers
box 43, folder 7	<b>Automation, Cybernetics [2 of 2] 1938-1993</b> <b>Scope and Contents note</b> Collection of 1952 SA articles on automatic control, because the book based on them cut the articles and the pictures
box 43, folder 8	<b>Analog Devices 1984-1985</b> <b>Scope and Contents note</b> 2 SA articles by Dewdney
box 43, folder 9	<b>Teaching Machines 1960-1963</b> <b>Scope and Contents note</b> Articles
box 43, folder 10	<b>Computer &amp; Video Games 1974-1994</b> <b>Scope and Contents note</b> Several (mostly popular) articles
box 43, folder 11	<b>Pocket Calculators 1972-1981</b> <b>Scope and Contents note</b> Several articles, popular & technical
box 43, folder 12	<b>Pocket Calculator Problems 1965-1980</b> <b>Scope and Contents note</b> Various ideas for calculator problems, many by MG Calculation a square root
box 43, folder 13	<b>Inverted Words 1974-1979</b> <b>Scope and Contents note</b> ... on a calculator "Dictionary and Games For Pocket Calculators", by David, Sarah, & C. Peter Rosenbaum, 1975, 22p (typescript) Lots of examples Correspondents: Knuth, Donald

box 43, folder 14

**Calculator Tricks & Stunts 1973-1983**

**Scope and Contents note**

Chinese Remainder Theorem

ABCABC

Many calculator magic tricks

Correspondents:

Lyons, L. Vosburgh

Hudson, Charles

Stover, Mel

Altman, David

Neale, Bob

Golomb, Solomon

box 44, folder 1

**Pocket Calculator Games 1975-1976**

**Scope and Contents note**

Set of problems from the HP-65 Users Club (1975)

Subtraction game from Lynn Yarbrough

Correspondents:

Yarbrough, Lynn

box 44, folder 2

**Endpaper (NYT) (Pocket Calculator 1975-1976**

**Scope and Contents note**

Notes & suggestions fro "Endpaper" column for the New York Times

Correspondents:

Collins, Glenn

box 44, folder 3

**Dynamic Programming (Bellman) undated**

**Scope and Contents note**

SA article on Control Theory, by Richard Bellman

box 44, folder 4

**The L.E.D. & L.C.D. Readouts 1969-1976**

**Scope and Contents note**

Various ways to write numerals and letters in grids

box 44, folder 5

**Computer Poetry (& Relation to Literature, etc.) 1971-1983**

**Scope and Contents note**

3 articles on computer verse

box 44, folder 6

**Supercomputers (nonorganic) 1958-2000**

**Scope and Contents note**

Various articles, mostly popular science magazines & newspapers, on progress in supercomputing design & types of supercomputers

"The Cosmological Limits on Computation", by Frank Tipler, 85pp (typescript)

box 44, folder 7

**Parallel Processing & Coming Supercomputers 1983-1996**

**Scope and Contents note**

Articles, mostly popular

Also "Fifth Generation"

- box 44, folder 8                   **Information Retrieval -- HGW's World Brain 1960-1998**  
  **Scope and Contents note**  
  H.G. Wells  
  Many articles, technical and popular
- box 44, folder 9                   **Computer Art & Graphics [1 of 2] 1966-1996**  
  **Scope and Contents note**  
  Including various artists, and Tex  
  Correspondents:  
  Lurker, Ernst  
  Geckeler, Siegfried  
  Badler, Norman  
  O'Brien, James  
  Lambert, Frank
- box 44, folder 10                 **Computer Art & Graphics [2 of 2] 1980**  
  **Scope and Contents note**  
  Folder & press release on artist Enrique Castro-Cid, and exhibition at Lowe Art  
  Museum
- box 44, folder 11                 **Word Processors 1981-1985**  
  **Scope and Contents note**  
  3 articles, 2 on authors switching to word processors, one on loss of corrected  
  manuscripts to history
- box 44, folder 12                 **Molecular Computers (Nanotechnology) 1982-2001**  
  **Scope and Contents note**  
  Lots of articles, technical & popular  
  Correspondents:  
  Regis, Ed
- box 44, folder 13                 **Neural Net Approach (Connectionism) 1987-1996**  
  **Scope and Contents note**  
  Many articles
- box 44, folder 14                 **Game Programs (General) 1998**  
  **Scope and Contents note**  
  Just 1 page, pointer to SA special on mind
- box 44, folder 15                 **Bridge Program undated**  
  **Scope and Contents note**  
  1 photocopy of bridge article, that computer programs can't play bridge well
- box 44, folder 16                 **Computer Simulations 1989**  
  **Scope and Contents note**  
  1 article, from Discover magazine, Oct. 1989
- box 44, folder 17                 **Computer Crime (& Sabatage) 1976-1999**  
  **Scope and Contents note**  
  Lots of articles, on crime, viruses, worms, etc.

box 44, folder 18	<b>Optical Computers 1989-1998</b> <b>Scope and Contents note</b> Several articles
box 45, folder 1	<b>"Virtual Reality" - Cyberspace 1989-1993</b> <b>Scope and Contents note</b> Lots of popular articles, about virtual reality, art, Jaron Lanier, "Neuromancer", etc
box 45, folder 2	<b>Hypertext 1992-1993</b> <b>Scope and Contents note</b> Several newspaper articles
box 45, folder 3	<b>DNA Computing 1995-1996</b> <b>Scope and Contents note</b> Popular articles
box 45, folder 4	<b>Genetic Algorithms, Artificial Life 1989-2000</b> <b>Scope and Contents note</b> Mostly articles Correspondents: Sallows, Lee
box 45, folder 5	<b>Digital Libraries 1995-2000</b> <b>Scope and Contents note</b> 2 articles (Lipkin, Science News, & NYT Magazine, Burdick)
box 45, folder 6	<b>Email &amp; Publishing 1993</b> <b>Scope and Contents note</b> 2 articles, C&EN and TIME
box 45, folder 7	<b>Java Language 1997</b> <b>Scope and Contents note</b> 1 article, American Scientist, by Brian Hayes
box 45, folder 8	<b>Computer Proofs 1996-1997</b> <b>Scope and Contents note</b> 2 newspaper articles & 2 magazine articles (Nature, Science News)
box 45, folder 9	<b>Reverse Computing 1999</b> <b>Scope and Contents note</b> 1 newspaper article
box 45, folder 10	<b>Grading Machine! 1999</b> <b>Scope and Contents note</b> 1 article "New Word Order", by Clive Thompson, Lingua Franca, about software that could grade essays
box 45, folder 11	<b>Quantum Computers! (&amp; Code Cracking) 1992-2001</b> <b>Scope and Contents note</b> Many articles on quantum computers and quantum cryptology

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**Diophantine**

**Physical Description:** 13 folder(s)

box 9, folder 1

**Diophantine Prob's [1 of 2] 1960-1987**

**Scope and Contents note**

Many MG notes.

"Diophantine Equations and Electronic Calculators", by Rufus Isaacs, 46pp (typescript)

box 9, folder 2

**Diophantine Prob's [2 of 2] 1976-2000**

**Scope and Contents note**

"Tiling the Square With Rational Triangles", by Richard Guy, 1988, 57pp (typescript)

"Faltings Plus Epsilon, Wiles Plus Epsilon, and the Generalized Fermat Equation", by H. Darman, 1999, 16pp (typescript)

Correspondents:

Schoeder, Manfred

Guy, Richard

box 9, folder 3

**Heron Triangles 1971-1999**

box 9, folder 4

**Integral Tetrahedron & Hexahedra 1986-1997**

**Scope and Contents note**

Correspondents:

Baker, Gerald

Coxeter, H.S.M.

Leech, John

box 9, folder 5

**Helbert's 10th 1970-1973**

**Scope and Contents note**

Correspondents:

Sacerdote, George

box 9, folder 6

**Mordell's Conjecture 1983-1986**

box 9, folder 7

**Euler's Conjecture - & Counter-example 1966-1993**

**Scope and Contents note**

Correspondents:

Leech, John

box 9, folder 8

**Rectangle-with-border Problem in 2 & 3 Space 1970**

**Scope and Contents note**

Correspondents:

Sleator, Daniel

Rowe, R.Robinson

box 9, folder 9

**The "Integral" Brick 1970-2001**

**Scope and Contents note**

Correspondents:

Leech, John

Morris, David

Hess, Richard

Rathbun, Randall

box 9, folder 10

**Archimedes Cattle Problem 1965-1998**

box 9, folder 11

**The Rational 7 (was 6) Points (unsolved Problem) 1970-1985**

**Scope and Contents note**

Correspondents:

Guy, Richard

Coxeter, H.S.M.

Diaconis, Persi

Honsberger, Ross

Liu, Andy

box 9, folder 12

**The 6 Problems Involving Pairs of Figurate Numbers 1984**

**Scope and Contents note**

"On Some Diophantine Equations{" , by Saburo Uchiyama, 1984 (Lecture Notes)

box 9, folder 13

**Crossed Ladders 1962-1999**

**Scope and Contents note**

Correspondents:

ApSimon, H.G.

Harris, John

Hunter, J.A.H.

O'Beirne, Thomas

O'Shea, Owen

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**Dr. Matrix**

**Physical Description:** 15 folder(s)

box 67, folder 11

**Mozart 1992-1995**

**Scope and Contents note**

"Counting the Notes: Numerology in the Works of Mozart, Especially Die Zauberflote",  
by I. Grattan-Guinness, 1991, 31pp (photocopy)

Correspondents:

Karhausen, L.R.

box 67, folder 12

**On "23" 1993**

**Scope and Contents note**

"On the Synchronicities of the Number 23", by Loren Goldner, 1993 (typescript)

box 67, folder 13

**Numberology - Misc. 1961-1997**

**Scope and Contents note**

Lots of articles (newspaper and other) on numerology

Many notes for columns

box 67, folder 14

**1/137 Fine Structure Constant 1972-1998**

**Scope and Contents note**

"A Quantal Hypothesis for Hadrons and the Judging of Physical Numerology", by I.J.  
Good, 1989, 55pp, Tech. Rep. No. 89-13, V.P.I.

Correspondents:

Clark, Arthur C.

box 68, folder 1

**Numerology & Individual Numbers [1 of 2] 1963-1998**

**Scope and Contents note**

Lots of notes of individual number curiosities (mostly numbers 1-14)

box 68, folder 2

**Numerology & Individual Numbers [2 of 2] 1975-2002**

**Scope and Contents note**

15 and miscellaneous larger numbers

Correspondents:

Dickson, Paul

box 68, folder 3

**Numerology of Constants (Pi, e, Phi, Euler, etc.) 1959-2001**

box 68, folder 4

**Word Play Items 1970-1994**

**Scope and Contents note**

Many of the items are biblical

Correspondents:

Sallows, Lee

Farrell, Jeremiah

box 68, folder 5

**The Canadian Code Nickel 1946-1977**

**Scope and Contents note**

"Victory" five cent Canadian coin, 1943 & 1944, with a message in International Morse Code around the edge

Correspondents:

Keeler, Donald

box 68, folder 6

**Ideas For Future Matrix Columns 1976-1997**

**Scope and Contents note**

Republican presidents are prime

Artificial language

Computers

Math art (Dr. M in SoHo)

Creative Adventure - randomness, coincidences, etc

Nuclear physicist - arrows of time

Chess (& Fibonacci)

St. Louis & catenary arch

Gambling casino (with bar bets)

Occult, Uri Gellar, EST, etc

Thoughts on Matrix novel

... & misc. notes & articles, etc.

Correspondents:

Hitotumatu, Sin

Stover, Mel

Sallows, Lee

box 68, folder 7

**Dr. Matrix on - Math & Theology 1960-1982**

**Scope and Contents note**

Various MG notes on theology, etc, for Matrix column

"Godel and God", by Andrew Riley, 11pp, 1978 (typescript)

Correspondents:

Meally, Victor

box 68, folder 8

**Presidential Elections 1959-2000**

**Scope and Contents note**

Notes, letters, articles, etc. on President facts

"History Computed", by Arthur Finnessey, 1983, 24pp, 3 1/2 x 5 1/2 inches (pamphlet)

Correspondents:

Kruskal, William

Lindon, J.A.

Card, L.E.

Borgmann, Dmitri

box 68, folder 9

**Matrix Release - on Garrison 1967-1971**

**Scope and Contents note**

Jim Garrison's numerology on Kennedy's assassination

box 68, folder 10

**Press REleases on Dr. Matrix - Presidential Cand. Names 1967-1968**

**Scope and Contents note**

Mostly press release on 1968 presidential candidates - Rockefeller, Romney, Reagan, Buckley, Shirley Temple (several copies), and comments on it

Correspondents:

Asimov, Isaac

Lindon, J.A.

box 68, folder 11

**Numbers (Misc) 1963-2002**

**Scope and Contents note**

Notes & articles on numbers

Book project on "gosh" numbers

Correspondents:

Gilbert, Edgar

Pohl, Frederick

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**Fermat's Last Theorem**

**Physical Description:** 7 folder(s)

box 9, folder 14

**Fermat's Last Theorem 1938-2000**

**Scope and Contents note**

Much history.

"On the Bounds of  $l$  in Fermat's Last Theorem", by Guy A.R. Guillothe, 1972 (typescript of lecture)

"The Ripple in the Carpet, Fermat's Last Theorem, and Kasner's Kindergarden", by Herbert E. Salzer (typescript)

box 9, folder 15

**Crank Proofs 1980-1997**

**Scope and Contents note**

Several "proofs", two as booklets, and some letters claiming proofs.

Correspondents:

Dudley, Underwood

box 9, folder 16

**The Flawed 1988 Proof of Fermat's Last 1987-1993**

**Scope and Contents note**

Yoichi Miyaoka's

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box 9, folder 17

**Wile's Proof 1993-1998**

**Scope and Contents note**

Many articles, mostly popular, on Wile's proof, then the gap, and finally the fix; also history of FLT.

Some explanatory articles.

Correspondents:

Thurston, William

Hayes, Brian

box 10, folder 1

**Vos Savant Flap 1993-1997**

**Scope and Contents note**

Much correspondence about MG endorsement of Vos Savant book, and MG embarrassment over it.

Also reviews and discussion of the book itself and the Parade column.

Correspondents:

Vos Savant, Marilyn

Gillman, Leonard

Goldberg, Steven

Huges, Brian

Asimov, Dan

Mazur, Barry

box 10, folder 2

**Beal's Problem 1998**

**Scope and Contents note**

$x^m + y^n = z^r$  has no whole number solutions where  $x, y, z$  have no common factor &  $m, n, r$  are greater than 2.

Single article (from Math Horizons) by Keith Devlin

Correspondents:

Beal, Andrew

box 10, folder 3

**E-Mail on FLT 1993**

**Scope and Contents note**

Much e-mail on vos Savant plus a couple of other photocopies, collected and sent to MG by Jerry Farrell.

Correspondents:

Farrell, Jeremiah

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**Fractals & Chaos**

**Physical Description:** 14 folder(s)

box 27, folder 5

**Fractals - & Mandelbrot [1 of 3] 1979-1995**

**Scope and Contents note**

Many articles from popular science magazines.

Correspondents:

Mandelbrot, Benoit

- box 27, folder 6      **Fractals - & Mandelbrot [2 of 3] 1967-1990**  
    **Scope and Contents note**  
    More articles and reviews.  
    Selected bibliography (1988)  
    Correspondents:  
    Mandelbrot, Benoit  
    Gosper, Bill
- box 27, folder 7      **Fractals - & Mandelbrot [3 of 3] 1988-2000**  
    **Scope and Contents note**  
    Correspondents:  
    Eaton, Leonard
- box 27, folder 8      **"Eternity Patterns" (Infinite Regress) 1973-2000**  
    **Scope and Contents note**  
    "Criss-Cross Communications", Number One, 1974 (magazine) with tipped-in photos & silkscreens.  
    Correspondents:  
    Yanoff, Michael
- box 27, folder 9      **Snow Crystals 1973-1987**  
box 27, folder 10      **Chaos Theory [1 of 3] 1975-1987**  
    **Scope and Contents note**  
    Many articles, popular & technical.  
    Correspondents:  
    Chaitin, Greg
- box 28, folder 1      **Chaos Theory [2 of 3] 1987-1993**  
    **Scope and Contents note**  
    More articles.  
    Journal of Chaos and Graphics, Vol. 2, Aug, 1987, Ed. by Clifford Pickover.
- box 28, folder 2      **Chaos Theory [3 of 3] 1987-1998**  
    **Scope and Contents note**  
    More articles.
- box 28, folder 3      **Amygdala [1 or 2] 1987-1990**  
    **Scope and Contents note**  
    Issues 1-19  
    Correspondents:  
    Silver, Roland
- box 28, folder 4      **Amygdala [2 or 2] 1987-1990**  
    **Scope and Contents note**  
    Slides from Amygdals issues (incomplete).

- box 28, folder 5      **Fractal Rep-Tiles (Ammann) 1976-1979**  
    **Scope and Contents note**  
    16 Examples.  
    Correspondents:  
    Ammann, Robert  
    Giles, Jack
- box 28, folder 6      **Pickover's Work (Chaos) 1987-1992**  
    **Scope and Contents note**  
    Correspondents:  
    Pickover, Clifford
- box 28, folder 7      **Mandelbrot Set 1985-1999**  
    **Scope and Contents note**  
    Many articles and ads  
    "Six Worlds" (in Turbo Pascal): Dysan 5 inch floppy disk  
    Correspondents:  
    Dewdney, A.K.
- box 28, folder 8      **Quasi-Fractals (TTT & Sheffer Stroke) 2000**  
    **Scope and Contents note**  
    1 article, by Ian Stewart, from S.A. Aug, 2000.

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**Game Problems**

**Physical Description:** 9 folder(s)

- box 32, folder 1      **Shannon Switches 1996**  
    **Scope and Contents note**  
    1 article (by Mansfield)
- box 32, folder 2      **Klemperer's Games (Chess Tracks) 1948-1983**  
    **Scope and Contents note**  
    Correspondents:  
    Klemperer, Wolfgang  
    Bynum, Jim  
    Bolbus, Leonard
- box 32, folder 3      **Glass's Toroidal TTT (& Peak, Pass, Deep Theorem) 11972-1973**  
    **Scope and Contents note**  
    "A Combinatorial Analogue of the Poincare Index Theorem", by Leon Glass, 1973  
    (typescript)  
    Correspondents:  
    Glass, Leon
- box 32, folder 4      **Near-Sighted Hunter 1979**  
    **Scope and Contents note**  
    Correspondents:  
    Reynolds, Robert  
    Harris, John

- box 32, folder 5      **Conway's "Silver Coinage" Game 1966-1987**  
    **Scope and Contents note**  
    Correspondents:  
    Conway, John  
    Guy, Richard  
    Silber, Robert
- box 32, folder 6      **Beanstalk & Conway's Beans-Don't-Talk 1986**  
    **Scope and Contents note**  
    Article by Guy
- box 32, folder 7      **Take-Away (Nim-like) Games [1 of 3] 1955-1976**  
    **Scope and Contents note**  
    Many examples, much analysis  
    Correspondents:  
    McAllister, Stephen  
    Filman, Robert  
    Cook, R.S.  
    Mertz, Robert  
    Silverman, David  
    Parkin, Robert  
    Hein, Piet
- box 32, folder 8      **Take-Away (Nim-like) Games [2 of 3] 1967-1986**  
    **Scope and Contents note**  
    Correspondents:  
    Melf, Frank  
    Isaacs, Rufus  
    Hoggatt, Vernon  
    Lenstra, H.W.  
    Sibert, William  
    Fulves, Karl  
    Guy, Richard
- box 32, folder 9      **Take-Away (Nim-like) Games [3 of 3] 1982-2000**  
    **Scope and Contents note**  
    Correspondents:  
    Fraenkel, Aviezri

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**Game Theory**

**Physical Description:** 8 folder(s)

- box 31, folder 8      **Parrando's Paradox 1980?**  
    **Scope and Contents note**  
    Single newspaper article



box 31, folder 9

**Prisoner's Dilemma 1967-2000**

**Scope and Contents note**

Many articles

Correspondents:

Verhoeff, Tom

box 31, folder 10

**Game Theory 1955-2000**

**Scope and Contents note**

Many articles

Correspondents:

Fraenkel, Aviezri

box 31, folder 11

**Simple Games To Which Game Theory Applies 1959-1995**

**Scope and Contents note**

Correspondents:

Riker, William

Becker, Joseph

box 31, folder 12

**Game Theory Applications in S.S. & Ethics 1954-1982**

**Scope and Contents note**

(S.S. = Social Sciences)

box 31, folder 13

**Games & Anthropology 1959-1970**

**Scope and Contents note**

Correspondents:

Roberts, John

box 31, folder 14

**Decision Theory 1953-2000**

**Scope and Contents note**

Dollar auction

Supermarket paradox

Prisoners Dilemma

4 papers by Maya Bar-Hillel & Ruma Falk (1978-1980)

Correspondents:

Gale, David

Trigg, Charles

Brams, Steven

Woods, Donald

Lyons

box 31, folder 15

**Penny Pinch Paradox 1991**

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**Graphs**

**Physical Description:** 26 folder(s)

box 21, folder 1

**Digraphs (Directed) 1959-1992**

**Scope and Contents note**

Directed graphs - MG notes.

"Equivalence of Topological Markov Shifts", by Ray Adlar et.al. (typescript).

"Networks of Sounds: Graph Theory Applied to Studying Rhymes", by James Joyce (typescript)

"Oedipus Loves His Mother", by Frank Harary, 1979 (typescript)

Correspondents:

Conway, John

Adler, Ray

Harary, Frank

box 21, folder 2

**Parallel Climbers 1995**

**Scope and Contents note**

Single article by Alan Tucker

box 21, folder 3

**Graphs 1935-2002**

**Scope and Contents note**

"One Dimensional Analysis Situs", by James Singer, Galois Lecture, 1935 (copy)

Many articles, notes, problems, etc.

"A Telephone Dialing Question", by Benjamin Schwartz, 1992 (typescript)

Correspondents:

Ragland, Earl

box 21, folder 4

**Path Tracing Puzzles 1961-1999**

**Scope and Contents note**

Many puzzles.

Sam Loy's Chines Puzzles (Sam Loyd?) - from newspaper.

Correspondents:

Kim, Scott

box 21, folder 5

**Hamiltonian Paths & Circuits 1960-1991**

**Scope and Contents note**

Mostly MG notes.

Correspondents:

Mullin, Ronald

box 21, folder 6

**My Hypercube Hamiltonian Path Puzzle 1985**

**Scope and Contents note**

"The Spelling Superbee"

box 21, folder 7

**Graph Induction Program 1983**

**Scope and Contents note**

INGRID: A Software Tool for Extremal Graph Theory; Research by Ronald Dutton & Robert Brigham (Primer and Users manual, and a compilation of results from the program.)

- box 21, folder 8      **Utilities Problem 1975-1979**  
    **Scope and Contents note**  
    Water, Gas, and Electricity problem (K3,3).  
    Mostly trying to track down the history of this problem.  
    Correspondents:  
    Federico, P.J.
- box 21, folder 9      **Signed & Marked Graphs & Nets 1977-1983**  
    **Scope and Contents note**  
    3 articles & pre-prints, by Frank Harary & others.
- box 21, folder 10     **Perfect Tree Problem (Leech) 1974-1978**  
    **Scope and Contents note**  
    Correspondents:  
    Leech, John  
    Taylor, Herbert  
    Hitotumatu, Sin
- box 21, folder 11     **Packing Trees in Complete Graphs undated**  
    **Scope and Contents note**  
    Single typescript about packing sequential stars & paths into a complete graph, by Honsberger.
- box 21, folder 12     **Left-Right Paths 1973-1977**  
    **Scope and Contents note**  
    Analysis by Joseph Malkevitch, and another by H. Shank  
    Correspondents:  
    Malkevitch, Joseph
- box 21, folder 13     **Map Coloring of Independent Notes (or edges) 1962-1997**  
    **Scope and Contents note**  
    Much Minty correspondence and papers, and some of his comments on other graph theorists.  
    Correspondents:  
    Minty, George
- box 21, folder 14     **Graph Coloring 1961-1996**  
    **Scope and Contents note**  
    3 papes (preprints) form Academy of Science of USSR, Siberian Branch, Institute of Mathematics, 1976: GT-5, GT-6, GT-7.  
    Game of Exchange.  
    Correspondents:  
    Golomb, Solomon  
    White, Neil
- box 21, folder 15     **Reconstruction Conjecture undated**  
    **Scope and Contents note**  
    1 jpage MG notes.

- box 21, folder 16      **Fraenkel's Directed Graph Games [1 of 2] 1974-1977**  
    **Scope and Contents note**  
    Many papers by Aviezri Fraenkel, on games and their analysis.  
    Traffic Jam Games.  
    Correspondents:  
    Fraenkel, Aviezri
- box 21, folder 17      **Fraenkel's Directed Graph Games [2 of 2] 1974-1984**  
    **Scope and Contents note**  
    More papers.  
    Cannibals  
    Arrows  
    The Particles & Antiparticles Game
- box 22, folder 1      **Rectangular Maps 1993**  
    **Scope and Contents note**  
    1 article, by Colin Bell
- box 22, folder 2      **Blanche Descartes 1978-1979**  
    **Scope and Contents note**  
    Bibliography of her work  
    "The Twelve Coin Problem", a poem  
    Correspondents:  
    Steinberg, Richard
- box 22, folder 3      **Harmonious Graphs 1980**  
    **Scope and Contents note**  
    1 article, by Ron Graham & Neil Sloane
- box 22, folder 4      **Slope Problems (Rob Jameson, Clemson) 1983-1984**  
    **Scope and Contents note**  
    Correspondents:  
    Jamison, Robert  
    Trigg, Charles
- box 22, folder 5      **Random Graphs 1990-2000**  
    **Scope and Contents note**  
    Articles, by Joyce Justicz, Edward Scheinerman & Peter Winkler; by Fan Chung; by Brian Hayes
- box 22, folder 6      **Kuratowski's Theorem Generalized 1984-1987**  
box 22, folder 7      **Toothpick Problems 1986-1987**  
box 22, folder 8      **Orthogonal Trees 1991**  
    **Scope and Contents note**  
    1 article, by Coxeter
- box 22, folder 9      **Engel's "Spin Curves" 1993**  
    **Scope and Contents note**  
    Correspondents:  
    Engel, Douglas
-

**Higher Dimensions**

**Physical Description:** 9 folder(s)

box 18, folder 1

**Fourth & Higher Dimensions 1956-1997**

**Scope and Contents note**

Lots of MG notes and references.

"Escaping Three Dimensional Thinking: Explorations in the Fourth Dimension", by Steve Johnson, Ben Shneiderman, Richard Steele, 1976 (typescript)

"The Rise of Higher Space", by Robert Muir Wood (synopsis & outline)

"Pebbling in Hypercubes", by Fan Chung (typescript)

Correspondents:

Shneiderman, Ben

Wood, Robert

Rucker, Rudy

box 18, folder 2

**4-Space in Theology & Occultism 1961-1974**

**Scope and Contents note**

Lots of MG notes & references

"4D & Theology", MG summary of various 4D explanations

box 18, folder 3

**Computer Displays 1974-1986**

**Scope and Contents note**

Several images of and articles about Tom Banchoff

Correspondents:

Schenck,, Hilbert

box 18, folder 4

**TTT Problem (Scott Kim) 1976**

**Scope and Contents note**

About anti-tic-tac-toe (analysis by Scott Kim)

box 18, folder 5

**4-D in Physics 1946-1967**

**Scope and Contents note**

Correspondents:

Bork, Alfred

box 18, folder 6

**The "Fake R-4" 1982**

**Scope and Contents note**

An alternative 4-space discovered, and its relationship to space-time (Michael Freedman's work)

Correspondents:

Renz, Peter

Stewart, Ian

box 18, folder 7

**Phase Spaces & Use Of 1995**

**Scope and Contents note**

One article, from New Scientist (by Ian Stewart) (photocopy)

box 18, folder 8

**Hypersolids (Regular & Otherwise) 1961-2000**

**Scope and Contents note**

Note from Leo Moser (on 1-D lengths in n-D cube)

Coxeter's classification of Zonahedra

Floppy Disk: 4D version 4.2, Rotations of 4D objects in 3 space, by Peter Turney

Correspondents:

Knuth, Donald

Olshersky, George

Robertson, Douglas

box 18, folder 9

**Dean Zimmerman on 4-D 1997**

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**Knots, Links**

**Physical Description:** 24 folder(s)

box 19, folder 2

**References 1988-2001**

**Scope and Contents note**

Lots of references (MG and others), as well as some articles and pamphlets about knots

Correspondents:

Hayes, Brian

box 19, folder 3

**Knots - General [1 of 2] 1978-1995**

**Scope and Contents note**

Correspondents:

Prat, Randall

box 19, folder 4

**Knots - General [2 of 2] 1960-1997**

**Scope and Contents note**

Moebius strip turks-head knot (letter and model)

MG notes

Correspondents:

Brown, Ronald

Goetsch, Tim

Rolfsen, Dale

box 19, folder 5

**Knot Theory & Q.M. 1977-1997**

**Scope and Contents note**

Few short articles on physics, quantum mechanics, etc, and knot theory

box 19, folder 6

**Borromean Rings undated**

**Scope and Contents note**

MG "simpler presentation" of Borromean magic trick, along with original effect "Blink", by Terri Rogers

box 19, folder 7

**Knot Puzzles 1981-1999**

**Scope and Contents note**

Dai Vernon "Rope Puzzle" magic trick

Correspondents:

Matsuyama, Mitsunobu

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- box 19, folder 8      **Ring & Rope Tricks [1 of 2] 1975-1976**  
    **Scope and Contents note**  
    Clifton's Ring Move (pamphlet)  
    OffeRing, by Ron Vergilio (pamphlet)  
    "The Ring & Rope Book", by Philip Reed Willmarth (large booklet)  
    MG notes on tricks
- box 19, folder 9      **Ring & Rope Tricks [2 of 2] 1952-1996**  
    **Scope and Contents note**  
    MG notes on tricks  
    Many tricks  
    "Melt-Thru" by Harvey Rosenthal (booklet)
- box 19, folder 10     **Knot & Link Magic Tricks [1 of 2] 1977-1996**  
    **Scope and Contents note**  
    Correspondents:  
    Futagawa, Shigeo  
    Matsuyama, Mitsunobu
- box 19, folder 11     **Knot & Link Magic Tricks [2 of 2] 1987-1999**  
    **Scope and Contents note**  
    "Knots on the Square", by Joseph Schmidt (booklet)
- box 20, folder 1      **Louis Kauffman [1 of 3] 1995-1997**  
    **Scope and Contents note**  
    Several articles by Kauffman  
    Correspondents:  
    Kauffman, Louis
- box 20, folder 2      **Louis Kauffman [2 of 3] 1996-1998**  
    **Scope and Contents note**  
    Knot tricks - handwritten & drawn by Kauffman  
    More Kauffman articles and notes  
    Correspondents:  
    Kauffman, Louis
- box 20, folder 3      **Louis Kauffman [3 of 3] 1995-1999**  
    **Scope and Contents note**  
    Reprints of various Kauffman articles
- box 20, folder 4      **Knots (L. Kauffman, Conway) 1979-1998**  
    **Scope and Contents note**  
    "Weaving Patterns and Polynomials", by Louis Kauffman (typescript)  
    Kauffman notes and typescripts, plus some articles, generally dealing with Conway's polynomial  
    Correspondents:  
    Kauffman, Louis

box 20, folder 5

**Noninvertible Knots 1983**

**Scope and Contents note**

Correspondents:

Trotter, Hale

box 20, folder 6

**Classification by Crossings 1961-1998**

**Scope and Contents note**

Some popular articles on knots.

Some technical articles on knot classification.

Typescripts of discussions of 10- and 11-crossing knots.

Correspondents:

Perko, Kenneth

Crowell, Richard

Fox, Ralph

box 20, folder 7

**Shoelaces & Neckties 1996-2000**

**Scope and Contents note**

Minimum length of shoelace with different patterns.

Mathematical study of ways to tie a necktie.

box 20, folder 8

**Testing Equivalence 1938-1979**

**Scope and Contents note**

"Knots", by James Singer, 1938: A lecture given at the Galois Institute of Mathematics, 18pp (typescript)

"Knot coding and Analysis", by D.R. Phillips (typescript)

MG notes on the 3-color test.

box 20, folder 9

**Knots in N-spaces 1906-1995**

**Scope and Contents note**

Correspondence on possibility of a knot in spaces of even dimension.

Correspondents:

Rolfsen, Dale

Coxeter, H.S.M.

box 20, folder 10

**Trivial Knot Problem 1972-1982**

**Scope and Contents note**

Is a given knot trivial (ie, unknot)?

Generalized Chefole Knot trick, by Matsuyama.

"A Link Criterion for the Trivial Knot", by John Stillwell (typescript)

"The Compound Crossing Number of a Knot", by John Stillwell (typescript)

Correspondents:

Perko, Kenneth

Matsuyama, Mitsunobu

Poston, Tim

Stillwell, John

box 20, folder 11

**Animals & Knots 1962-1968**

**Scope and Contents note**

Hagfish, *Levcothrix Mucor* (bacterium)

Also, linked molecules (catenane)



box 20, folder 12

**Links 1958-1997****Scope and Contents note**

Several puzzles &amp; magic tricks.

Several articles &amp; tricks involving Borromean rings and generalizations.

Some correspondence without names, or only first name.

"Borromean Baffler", by Bob Neale (magic trick)

Correspondents:

Levinson, H.

Neale, Robert

Ransom, Tom

box 20, folder 13

**Ring & 2 Knots Puzzle 1982****Scope and Contents note**

Correspondents:

Hegde, Manjunath

box 20, folder 14

**Sliding Knots 1982****Scope and Contents note**

Magic tricks.

Curry letter about sliding knot effect, and "Touch".

Correspondents:

Curry, Paul

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**Life****Physical Description:** 36 folder(s)

box 35, folder 11

**Refs. on Cellular Automata 1964-2001****Scope and Contents note**

Many articles

Stochastic Growth &amp; Form

Kinematic &amp; Tessellation Automata

Cellular Automata

Self-Replicating Systems

Correspondents:

Ulam, Stanislaw

Wolfram, Stephen

box 35, folder 12

**Virtual Ants 1973-1995****Scope and Contents note**

Tur-mites

box 35, folder 13

**R. Rucker's (CA) [1 of 2] 1989****Scope and Contents note**

CA-Lab (Cellular Automata) instructions

Correspondents:

Rucker, Rudy

box 35, folder 14

**R. Rucker's (CA) [2 of 2] 1989****Scope and Contents note**

2 floppy disks for CA-Lab from Autodesk, Inc (1 5-inch floppy &amp; 1 3 1/2 inch floppy)

box 35, folder 15

**Waterloo Group 1977**

**Scope and Contents note**

Correspondents:  
Raynham, Peter

box 35, folder 16

**Linear Life 1978-1988**

**Scope and Contents note**

HP-65 program & instructions  
Some articles  
Correspondents:  
Havermann, Hans  
Schwartz, Mordecai

box 35, folder 17

**3D Life 1987-1991**

box 35, folder 18

**Variants j- & Compet. Games 1970-1992**

**Scope and Contents note**

Evolution: A Game (by Vernon Nemitz)  
Creation (Paul Axel)  
Life91

box 35, folder 19

**Life & Fractals 1982**

**Scope and Contents note**

3 papers by Wolfram on life and fractals

box 35, folder 20

**Conway Correspondence on Life 1970**

**Scope and Contents note**

Many letters, mostly undated  
Correspondents:  
Conway, John

box 36, folder 1

**Bob Wainwright 1970-1982**

**Scope and Contents note**

Correspondence from Wainwright and MG to various publishers about a projected book (by Wainwright) about the game of Life, along with drafts, contents, etc.  
Correspondence from Wainwright to Conway, about projected "Life" newsletter "Lifeline".  
Correspondents:  
Wainwright, Robert

box 36, folder 2

**Practical Uses for Life 1974-1991**

**Scope and Contents note**

Peter Albin - Economic systems (book request)  
Art Appel - Computer algorithm for hidden line removal  
2 popular science magazine articles (Science Digest, Scientific American)

box 36, folder 3

**Logical & Philos. Aspects 1973-1978**

**Scope and Contents note**

"Can computer Design Illuminate Spacetime Physics?", by John A. Wheeler, 1978 (typescript)

MG notes & quotes about Life

Correspondents:

Conway, John

box 36, folder 4

**Life Universal 1970**

**Scope and Contents note**

Correspondents:

Smith, Alvy Ray

box 36, folder 5

**Fuses & Wicks 1970-1971**

**Scope and Contents note**

Correspondents:

Tower, Steve

Hoel, Jeffrey

Wainwright, Robert

Beeler, Michael

box 36, folder 6

**Gliders & Ships, Generators, Guns, & Collisions 1970-1990**

**Scope and Contents note**

Many examples, with diagrams, computer printouts, photos, etc

Correspondents:

Gosper, Bill

McClelland, Keith

Collins, George

Woods, Donald

box 36, folder 7

**Misc. Life Forms 1972**

box 36, folder 8

**Methuselahs 1985-1990**

**Scope and Contents note**

Correspondents:

Trevorrow, Andrew

box 36, folder 9

**Gardens of Eden 1964-1970**

**Scope and Contents note**

Correspondents:

Smith, Alvy Ray

box 36, folder 10

**R-Pentomino 1970-1971**

**Scope and Contents note**

Many responses, most with computer printouts

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box 36, folder 11	<p><b>Rows 1970</b></p> <p><b>Scope and Contents note</b> Correspondents: Woods, Donald Taber, Arthur Friedman, George Goodman, Gary</p>
box 36, folder 12 box 36, folder 13	<p><b>5-5-5-5-5-5 1970</b></p> <p><b>Stretchers 1993</b></p> <p><b>Scope and Contents note</b> Photocopies of printouts from Life mailing list</p>
box 36, folder 14	<p><b>Oscillators (&amp; Flip-Flops) 1972</b></p> <p><b>Scope and Contents note</b> Correspondents: Hickerson, Dean</p>
box 36, folder 15	<p><b>Still Lives 1970</b></p> <p><b>Scope and Contents note</b> Correspondents: Read, Ronald</p>
box 36, folder 16	<p><b>Fredkin Rule 1970-1975</b></p> <p><b>Scope and Contents note</b> "A Simple Algorithm for Self-Replication", by Terry Winograd, 1970, MIT AI-Memo #197 (typescript)</p>
box 36, folder 17	<p><b>E. Roger Banks 1971</b></p> <p><b>Scope and Contents note</b> "Information Processing and Transmission in Cellular Automata", by Edwin Roger Banks, 1971 (typescript): PhD Thesis "Cellular Automata", by Edwin Roger Banks, MIT-AI Memo 198, 1970, First Draft (typescript) Correspondents: Banks, Roger</p>
box 37, folder 1	<p><b>Articles on Life 1972-1997</b></p> <p><b>Scope and Contents note</b> Lots of articles, technical &amp; popular "Statistical Mechanics of a Dynamical System Based on Conway's Game of Life", by L.S. Schulman &amp; P.E. Seiden (typescript) Preliminary outline and preface for "The Book of Life", by Anthony Barcellow &amp; Dean Hickerson, 1983</p>
box 37, folder 2	<p><b>Computer Programs [1 of 2] f1976-1999</b></p> <p><b>Scope and Contents note</b> Life on a chip, from CMU, Carl Ebeling &amp; Edward Frank, 1981 Beyond Life Game, by Brian Silverman, 1985 Color Life game, by Michael Day, 1988 (Floppy included, next folder) Life, by Justin White, 1992 (floppies included, next folder)</p>

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- box 37, folder 3                    **Computer Programs [2 of 2] 1986-1992**  
   **Scope and Contents note**  
   5 1/2 floppy disks:  
   V2080 CPeMulator version 3.21 & Color Life, Michael Day  
   LIFE, 1992, Justin White  
   Big-Calc Version 2.00, 1992, Justin White
- box 37, folder 4                    **LifeLines 1971-1980**  
   **Scope and Contents note**  
   Complete run of LIFELINE newsletter (1-11) plus re-activated LIFELINE (#12)  
   Correspondents:  
   Webb, William
- box 37, folder 5                    **Jim Jackson's IBM Disk 1985**  
   **Scope and Contents note**  
   About Jackson's disk (not disk itself), which contains Life & Relatives, FRED, GLife, &  
   ZLIFE. Also "users manual" for programs  
   Correspondents:  
   Jackson, James
- box 37, folder 6                    **Poundstone's Book 1983-1984**  
box 37, folder 7                    **Byte Articles 1975-1992**  
   **Scope and Contents note**  
   Series of "Life Line" articles, 1-4, plus other articles (some photocopies) from Byte  
   Correspondents:  
   Helmers, Carl
- box 37, folder 8                    **Gosper's New Glider Gun & his Hashlife 1987-1988**  
   **Scope and Contents note**  
   Long reports by Gosper on some of his research
- box 37, folder 9                    **Dean Hickerson 1989**  
   **Scope and Contents note**  
   Copies of correspondence between Dean Hickerson and others
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**Logic**

**Physical Description:** 18 folder(s)

- box 48, folder 1                    **Logic 1960-2000**  
   **Scope and Contents note**  
   Many logic problems, from MG and from readers
- box 48, folder 2                    **Automath Language (De Bruijn) 1971-1974**  
   **Scope and Contents note**  
   "The AUTOMATH Mathematics Checking Project", by N.G. de Bruijn (11pp) (typescript)  
   "AUTOMATH, a language for mathematics", lectures by N.G. de Bruijn, notes by Barry  
   Fawcett (60pp)
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box 48, folder 3

**Who Owns Zebra? 1965-1978**

**Scope and Contents note**

The problem, from several sources. Also some variations, and solutions. No original source mentioned.

box 48, folder 4

**Smith, Jones, Rob - Problems 1964-1983**

**Scope and Contents note**

Inferential problems (reasoning problems)

article on solving these with a matrix

box 48, folder 5

**WFF'N PROOF 1961-1969**

**Scope and Contents note**

Reports on and ads for the ALL Project (Accelerated Learning of Logic), and their WFF'N Proof games

Correspondents:

Allen, Layman

box 48, folder 6

**What's On My Head? 1964**

**Scope and Contents note**

What's That on my Head? game, and an idea (by MG) for What's That on my Head Poker?

Correspondents:

Abbott, Robert

box 48, folder 7

**Multi-Valued Logic & Other Wierd Logics 1953-1996**

**Scope and Contents note**

Short MG article on nonsense of "non-Aristotelion" logic (draft)

Several science fiction stories and SF magazine articles involving multi-valued logics

Some articles explaining multi-valued logics, and MG notes on articles

box 48, folder 8

**Doubleday Book - Plagiarism 1975**

**Scope and Contents note**

Excerpts from "Vicious Circles & Infinity", with sources from which they have been taken without quotes or references

box 48, folder 9

**Lorenzen's Logic as Game 1965-1966**

**Scope and Contents note**

"Logic as a Dialogical Game", by Paul Lorenzen & Frederick Binford, 1965, Tech. Rep. No. 87, Stanford (booklet)

"The Logic of Dialogues", by Paul Lorenzen, 1965 (mimeo)

box 48, folder 10

**Color Mixing - and Boolean Algebra (& Groups) 1976**

**Scope and Contents note**

Article from Math. Teacher, by William Orton

box 48, folder 11

**Bertrand Russell Paradox 1971-1976**

**Scope and Contents note**

Bertrand Russell's Paradox of set of all sets

MG notes on paradox

Set of letters between Paul Shildneck & others, on paradox

Some articles on paradox

Variations, from Mel Stover

Correspondents:

Shildneck, Paul

Quine, W.V.

Salmon, Wesley

Shildneck, Keith

box 48, folder 12

**Symbolic Logic Proofs of God 1958-1963**

**Scope and Contents note**

Several "proofs", with some analysis

box 48, folder 13

**Brown's Laws of Form [1 of 2] 1972-1986**

**Scope and Contents note**

Several reviews and articles, and much material pro & con: people bringing "Laws of Form" to MG attention, & MG's skeptical replies. MG compares it to Carnap's "Aufbau", & Boolean algebra.

"Balance and Self Reference", by Louis H. Kauffman (29pp)(typescript)

Correspondents:

Suppes, Patrick

Heath, Peter

Kauffman, Louis

Church, Alonzo

box 48, folder 14

**Brown's Laws of Form [2 of 2] 1977-1978**

**Scope and Contents note**

"Logical Form", newsletter devoted to "Laws of Form", 5 issues, edited by Daniel Rohrlich

box 48, folder 15

**Logic Paradoxes 1961-1987**

**Scope and Contents note**

Several articles

MG references

MG summary of 2 Lewis Carroll paradoxes (2 barbars; tortoise & Achilles)

box 49, folder 1

**The Liar & Variants 1961-2001**

**Scope and Contents note**

Correspondents:

Quine, W.V.

Clark, Arthur C.

box 49, folder 2

**Self Reference 1964-1998**

**Scope and Contents note**

Many articles

box 49, folder 3

**Cube Model of Syllogisms (Alex Mebane) 1992-1995**

**Scope and Contents note**

Graphic models for simple logic

Lewis Carroll references

"The Complete 'Theory of the Syllogism' as Made Self-evident by a sSimple 3-Dimensional Model", by Alexander Mebane, 1992, 8pp (typescript)

Correspondents:

Mebane, Alexander

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**Logic Machines and Diagrams**

**Physical Description:** 55 folder(s)

box 49, folder 4

**U. of C. Reprint 1967-1990**

**Scope and Contents note**

... of "Logic Machines and Diagrams", by University of Chicago Press

Correspondence about the reprint, both of the contract for it and the contents of it

Some royalty reports

box 49, folder 5

**U. of C. Corrections, Revisions 1986**

box 49, folder 6

**Chapter Revisions 1981-1998**

box 49, folder 7

**Chapter 8 - Early Elect. Mach's 1981-1982**

box 49, folder 8

**9. Artificial Intelligence undated**

**Scope and Contents note**

Early draft of new chapter 9, on Machine INtellegence

box 49, folder 9

**Appendix 1981**

**Scope and Contents note**

Draft of new appendix

"Testrolog Program", a relay circuit to demonstrate the difference between combinatorial and sequential circuits, from Starro Fooundus

box 49, folder 10

**Michie Letters (& Papers) 1981-1982**

**Scope and Contents note**

Correspondence with Michie about chapter (& forward)

2 papers by Michie

The forward, and chapter 9 with corrections from Michie

Correspondents:

Michie, Donald

box 49, folder 11

**Reviews 1959-1983**

**Scope and Contents note**

Mostly of 1958 edition

box 49, folder 12

**Royalty Statements (U.S.) (& Contract) 1956-1974**

box 49, folder 13

**Foreign Editions 1964-1983**

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box 49, folder 14	<p><b>Log. Mach. &amp; Diag. 1951-1983</b></p> <p><b>Scope and Contents note</b></p> <p>Early correspondence with publisher, sample chapter with comments</p> <p>Correspondents:</p> <p>Church, Alonzo</p> <p>Burkhart, William</p> <p>Carnap, Rudolf</p>
box 49, folder 15	<p><b>Dover Edition 1967</b></p> <p><b>Scope and Contents note</b></p> <p>Correspondence with Dover, contract, new preface, corrections</p>
box 49, folder 16	<p><b>Original Art (Orig. MSS Given - 1966 - to Robert Lund) undated</b></p> <p><b>Scope and Contents note</b></p> <p>Originals of the art work for Logic Machines and Diagrams book, plus original photo (of "An Electronic Logic Machine")</p>
box 49, folder 17	<p><b>Hilton's Plagiarism 1964-1965</b></p> <p><b>Scope and Contents note</b></p> <p>Correspondence about Alice Mary Hilton's plagiarism of Logic Machines &amp; Diagrams" in her "Logic, Computing Machines and Automation"</p>
box 49, folder 18	<p><b>Advertising 1958-1960</b></p> <p><b>Scope and Contents note</b></p> <p>Press releases, book club announcements, etc</p>
box 49, folder 19	<p><b>Sc. Amer. Article - Logic Machines 1952</b></p> <p><b>Scope and Contents note</b></p> <p>The article itself "Logic Machines", plus notes and early draft</p>
box 49, folder 20	<p><b>Entry on Lull (For Sebeok Dict.) 1982</b></p> <p><b>Scope and Contents note</b></p> <p>Typescript of article on Lull, for "Encyclopedic Dictionary of Semiotics"</p> <p>Correspondents:</p> <p>Sebeok, Thomas</p>
box 50, folder 1	<p><b>Modern Revival of Lull 1956-1975</b></p> <p><b>Scope and Contents note</b></p> <p>Think Tank, Synectics, DeBono and other modern methods for creative thinking</p> <p>"Ars Magica Inventorium", rotating disks model, probably MG (1956)</p> <p>Zwick's "Morphological" Method</p> <p>Correspondents:</p> <p>deBono, Edward</p> <p>Newell, Allen</p>

box 50, folder 2

**Lull 1957-1995**

**Scope and Contents note**

Articles & notes about Raymund Lull (Raimundi Lulli?)

Photostats of some of his work (in Ars Magna)

Correspondents:

Roberts, Don

Goldstein, Henry

Odier, Marc

Walker, John Powell

box 50, folder 3

**For Revision 1958-1985**

**Scope and Contents note**

Corrections to Logic Machines and Diagrams, and correspondence with publishers about some corrections

Some articles (Plochmann, Ketner) relating to subjects of book

Correspondents:

Ketner, Ken

Plochmann, George Kimball

Mays, Wolfe

box 50, folder 4

**Logic Diagrams 1960-1981**

**Scope and Contents note**

Various diagrammatic methods:

Cross-marks and dots method

Worlds-diagrams for propositional logics

Two-dimensional writing scheme

... and more

Correspondents:

Swartz, Norman

Lazier, Morley

Denberg, Robert

Zellweger, Shea

box 50, folder 5

**Encyclopedia Articles 1961-1967**

**Scope and Contents note**

2 articles, "Logic Diagrams", and "Logic Machines", which MG wrote for "The Encyclopedia of Philosophy", edited by Baul Edwards.

Drafts, corrections, correspondence about the articles, and several copies of the articles themselves.

box 50, folder 6

**L. Carroll's Method 1963-1966**

**Scope and Contents note**

His (Lewis Carroll's) diagrams, from "The Game of Logic", and some examples applied to MG book.

box 50, folder 7

**Stuermann 1957-1961**

**Scope and Contents note**

"A Graphical Method for Simplifying Truth Functions", by Walter E. Stuermann, 1957 (mimeographed booklet)

Other articles by Stuermann, on the Boole table

Correspondents:

Stuermann, Walter

box 50, folder 8

**Dohmann 1958-1962**

**Scope and Contents note**

2 articles (in German), by Dohmann

Correspondents:

Dohmann, Karl

box 50, folder 9

**Pierce 1955-1992**

**Scope and Contents note**

Pierce's logic diagrams & MG's search for them

Correspondents:

Roberts, Don

Williams, Thyllis

Burks, Arthur

box 50, folder 10

**Dr. Caesar's Method 1965-1967**

**Scope and Contents note**

Diagrammatic interpretation fo Quine's "Methods of Logic", by G. J. Caesar (photocopy in English, booklet, & typescript in German)

Correspondents:

Caesar, Gunter

box 50, folder 11

**Engelbretsen's Linear Diagrams 1992**

**Scope and Contents note**

Article reprint, from NOtre Dame Journal of Formal Logic

box 50, folder 12

**Network Method 1951-1960**

**Scope and Contents note**

Diagrams for Truth-Function logic, developed by MG

Rejection letters & referee's reports about article "Network Diagrams for Symbolic Logic", by MG, on his diagrams

Correspondents:

Sacksteder, William

box 50, folder 13

**G.M. Mes (S. Africa) 1960-1981**

**Scope and Contents note**

Early correspondance with Dr. Mes, about his logic machine (with photo's), and his article on logic with diagrams.

Later correspondance with Mrs. Mes and T. Blakeley, about publishing Dr. Mes's books and papers

Correspondents:

Blakeley, Thomas

Mes, Marie

Mes, Gerrit

box 51, folder 1

**On Venn Diagrams [1 of 2] 1952-1992**

**Scope and Contents note**

Many papers, articles & notes on Venn diagrams of various types

"Connected Logic Diagrams", by nSolomon Golomb, 1966 (typescript)

Correspondents:

Dyregrov, David

Myers, Steve

Kaphan, Shel

box 51, folder 2

**On Venn Diagrams [2 of 2] 1984-2002**

**Scope and Contents note**

More articles

Correspondents:

Edwards, A.F.

Hu, Stephen

box 51, folder 3

**Edwards - On Venn 1988-1993**

**Scope and Contents note**

"Ven Diagrams for Arbitrary Numbers of Sets", by A.W.F. Edwards (typescript)

Correspondents:

Edwards, A.W.F.

box 51, folder 4

**Foundos' Red/Grreen Device [1 of 2] 1980-1981**

**Scope and Contents note**

Logic device & method by Stavros Foundos, called "Testrologic" (or "Testrolog"), he applies to making decisions in business ventures (using decision tree diagrams) - with patent (actual device in 3-D box)

Correspondents:

Foundos, Stavros

box 51, folder 5

**Foundos' Red/Grreen Device [2 of 2] 1980-1981**

box 51, folder 6

**Joe Celko 1964-1965**

**Scope and Contents note**

Much correspondance between MG & Joe Celko, about Celko's diagrams and physical abacus "SLABACUS", to solve logic problems. Also his National Science Fair paper "A Matrix Diagram For Symbolic Logic"

Correspondents:

Celko, Joe

box 51, folder 7

**Strict Implication 1951-1957**

**Scope and Contents note**

MG notes (typed) about Strict Implication, mostly based on Lewis and Langford, and Carnap

Correspondents:

Lewis, C.I.

box 51, folder 8	<b>Stanhope 1952</b> <b>Scope and Contents note</b> Photostat of article from Mind, 4/122, April 1879, on The Stanhope Demonstrator Correspondents: Carnap, Rudolf Russell, Edward
box 51, folder 9	<b>Jevons 1951-1973</b> <b>Scope and Contents note</b> Notes & articles about Jevons logic machine Correspondents: Mays, D.
box 51, folder 10	<b>Marquand 1953-1984</b> <b>Scope and Contents note</b> MG notes on Allan Marquand Photostats of "A New Logical Machine", by Allan Marquand, 1885, and other articles
box 51, folder 11	<b>Macaulay 1913</b> <b>Scope and Contents note</b> Patent for logic machine
box 51, folder 12	<b>Pastore 1907-1951</b> <b>Scope and Contents note</b> Notes & articles on Annibale Pastore Correspondents: Williams, Donald
box 51, folder 13	<b>Logic Cards 1951-1968</b> <b>Scope and Contents note</b> Lots of versions of cards for proving logic syllogisms, many by MG, and notes on others Many examples (some in 3-D file) Correspondents: Cundy, Martyn Moser, Leo
box 52, folder 1	<b>Syllogism Program "Lewis Carroll" 1979</b> <b>Scope and Contents note</b> Article by Orlove
box 52, folder 2	<b>Electronic Syllogism Machines 1949-1976</b> <b>Scope and Contents note</b> Article by Benjamin Burack, and some notes about an Electrical Logic Machine
box 52, folder 3	<b>Electric Logic Machines 1950-1975</b> <b>Scope and Contents note</b> Many articles on various early logic machines

- box 52, folder 4      **Kalin-Burkhart Machine 1956-1976**  
    **Scope and Contents note**  
    MG notes on Kalin-Burkhart Logical-Truth Calculator, & pictures, & correspondence  
    Correspondents:  
    Burkhart, William  
    Kalin, Ted
- box 52, folder 5      **Burroughs 1957**  
    **Scope and Contents note**  
    Correspondance to get photos of the Burroughs Truth Function Evaluator (which uses Lukasiewicz' (Polish) notation)
- box 52, folder 6      **Maron's Machine (1953 - not in book) 1953-1958**  
    **Scope and Contents note**  
    3 articles by M.E. Maron on his machine for Sentential Calculus  
    Correspondents:  
    Maron, M.E.
- box 52, folder 7      **Many-Valued Machines 1963-1974**  
    **Scope and Contents note**  
    2 papers on models of multi-valued logic  
    Ads for 5th International Symposium on Multiple-Valued Logic, 1975
- box 52, folder 8      **Minimizing Methods & Machines 1957-1977**  
    **Scope and Contents note**  
    Minimizing Problem - to minimize Boolean functions, and therefor the number of relays in circuits  
    Veitsch Chart  
    Loomis' Grid  
    Flow Diagrams  
    Decision-accounts Table  
    Correspondents:  
    Nadler, Morton  
    Loomis, Lynn  
    Darwood, N.
- box 52, folder 9      **Toy Computers (Cardboard, Think-A-Dot, Etc.) 1966-1994**  
    **Scope and Contents note**  
    Mostly articles analyzing Think-A-Dot  
    Correspondents:  
    O'Beirne, Thomas
- box 52, folder 10      **Martha Bertman's Cubes & Balls 1975-1981**  
    **Scope and Contents note**  
    Cubes to simulate Boolean operations

box 52, folder 11

**Burk's History of Switches 1987**

**Scope and Contents note**

"The History of Early Computer Switching", by Arthur W. Burks and Alice R. Burks, 42pp (typescript)

Correspondents:

Burks, Arthur

box 52, folder 12

**Mebane's 64 Syllogisms 1999-2000**

**Scope and Contents note**

Articles on Christine Ladd-Franklin and her work on syllogistic logic, by I. Susan Russinoff

A syllogism chart, showing 64 possible syllogisms, 48 possibly valid, 24 actually valid, 12 "traditional", by Alexander Mebane

Correspondents:

Mebane, Alexander

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**Macmahon's Color Polygons**

**Physical Description:** 4 folder(s)

box 27, folder 1

**Corner-Color Squares (Nitty-Gritty, Odier, etc) 1970-1984**

**Scope and Contents note**

Duodomino, Nitty Gritty

Correspondents:

Philpott, Wade

Zimmerman, J.J.

Westerink, G.J.

Fink, Federico

Odier, Marc

box 27, folder 2

**Corner-Color Trangles (Odier) 1959-1975**

**Scope and Contents note**

La Trioker

Patent applications for Marc Odier games.

Also various other related patents.

Correspondents:

Harris, John

Odier, Marc

box 27, folder 3

**Macmahon Color Hexagons 1971-1978**

**Scope and Contents note**

Sets of hexagons to make edge-matched shapes, by L. Vossburgh Lyons, by Leslie Shader (XIX & CXX), and "Drive You Nuts".

Notes on Voz (L. Vosburgh Lyons) after his death.

Correspondents:

Prichodjko, Alexander

Philpott, Wade

Lyons, L. Vossburgh (Voz)

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box 27, folder 4

**3D Forms undated**

**Scope and Contents note**

Several edge matching 3D puzzles.

Correspondents:

Shader, Leslie

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**Magic Squares, Etc.**

**Physical Description:** 23 folder(s)

box 56, folder 4

**Magic Squares - History and General [1 of 2] 1953-1976**

**Scope and Contents note**

MG notes

"Fantasies in Figures, Mathematic Mysteries and Magic Squares", in Treasury of Folklore, by "Meloc" (Stanley Jackson Coleman), 1956 (mimeograph booklet)

"Report on Considerations Concerning Magic Squares and Their Use in Digital Design", by J.H. White, 38pp (mimeo, stapled)

Correspondents:

Laposky, Ben

Helbing, Edgar

box 56, folder 5

**Magic Squares - History and General [2 of 2] 1983-2000**

**Scope and Contents note**

More notes, letters and articles on magic squares

box 56, folder 6

**Order-3 Square 1958-2001**

**Scope and Contents note**

MG notes

Puzzles based on order-3 squares

Articles, analyses, etc

Correspondents:

Trigg, Charles

box 56, folder 7

**Anti-Magic Squares 1965-1971**

**Scope and Contents note**

MG notes

Articles

Correspondents:

Mercer, Leigh

box 56, folder 8

**Order-4 Square (Diabolic) 1938-1998**

**Scope and Contents note**

MG notes

Articles

Pandiagonal magic squares (by Ollerenshaw)

Correspondents:

Walker, Robert

Sallows, Lee

Ollerenshaw, Kathleen

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box 56, folder 9	<b>Durer's Melancholia undated</b> <b>Scope and Contents note</b> MG notes
box 56, folder 10	<b>Magic Square Magic Tricks 1942-1997</b> <b>Scope and Contents note</b> MG notes The Magic Square, Bert Allerton (simplified version, 1942) The Magic Square, Phil Burns, 1956 Birthday Magic Squares, Max Katz, 1962 Patterns of Perfection, Sam Dalal, 1993 Some Stewart James predictions The Ultimate Magic Square, by Christoph Wasshuber (Chris the Magician)
box 56, folder 11	<b>The Order-5 Square 1962-1975</b> <b>Scope and Contents note</b> Program for counting order 5 magic squares: Bill Gosper, Richard Schroeppel, Michael Beeler, 1973
box 57, folder 1	<b>Orders &gt; 5 (Squares) 1963-1997</b> <b>Scope and Contents note</b> Franklin's Square Pandiagonal Magic Squares of the Seventh Order (mimeo) Other algorithms Correspondents: Ollerenshaw, Kathleen
box 57, folder 2	<b>The 32x32 Trimagic Square 1973-1976</b> <b>Scope and Contents note</b> Material on it by William H. Benson Correspondents: Benson, William Madachy, Joseph Coxeter, H.S.M. Klarner, David
box 57, folder 3	<b>Magic Stellated Dodecahedron 1976</b> <b>Scope and Contents note</b> "Whitchcraft, or Perfect Magic Icosapentacles", by Bayard Wynne, 19pp (typescript) Wynne calls the small stellated dodecahedron "Icosapentacles"
box 57, folder 4	<b>Magic Graphs 1964-1980</b> <b>Scope and Contents note</b> Magic Octagons (French) Various shapes and structures Correspondents: O'Beirne, Thomas Trigg, Charles

- box 57, folder 5      **Antimagic Triangles & Other Forms 1980-1981**  
    **Scope and Contents note**  
    MG notes  
    3 articles by Charles Trigg (typescript)  
    Correspondents:  
    Trigg, Charles
- box 57, folder 6      **Enumeration of 6, 7, & 8 1966-1988**  
    **Scope and Contents note**  
    Correspondents:  
    Domergue, A.  
    Moldon, Alan  
    Montgomery, Coralie  
    Ulrich, E.J.  
    Roubicek, Juan  
    Seare, S.A.
- box 57, folder 7      **Sallows' Complex 3x3 Squares 1996-1997**  
    **Scope and Contents note**  
    Correspondents:  
    Sallows, Lee
- box 57, folder 8      **Magic Triangles 1957-1992**  
    **Scope and Contents note**  
    Correspondents:  
    Piersel, W.Guthrie  
    Trigg, Charles
- box 57, folder 9      **Alphamagic (Lee Sallows) 1986-1997**  
    **Scope and Contents note**  
    Correspondents:  
    Sallows, Lee
- box 57, folder 10     **Magic Hexagons (Aug/63) 1924-1992**  
    **Scope and Contents note**  
    MG notes  
    Much reader correspondance  
    Only 3rd order magic hexagons exist: proof  
    Magic Hexagon Puzzle - (in 3D box)  
    Correspondents:  
    Tapson, Frank  
    Adams, Clifford  
    Fabel, Karl  
    Trigg, Charles  
    Lindgren, Harry

box 57, folder 11

**Magic Rectangles 1998-2000**

**Scope and Contents note**

2 articles by Hadedorn (typescript)  
Summary & chapters from book by Gil Lamb  
Couple of other articles  
Correspondents:  
Hadedorn, Thomas  
Lamb, Gil

box 57, folder 12

**Other Types 1966-1994**

**Scope and Contents note**

Magic Circles  
The Missing Fifth (magic trick)  
Correspondents:  
Lyons, Vosburgh (VOZ)

box 57, folder 13

**Multiplying Squares 1963-1997**

**Scope and Contents note**

Correspondents:  
Golomb, Solomon  
McKay, Angus

box 57, folder 14

**Magic Stars 1964-2002**

**Scope and Contents note**

MG notes  
Correspondents:  
Graham, Arthur  
Chadosch, Robert  
Lindgren, Harry

box 57, folder 15

**Venn Diagrams 2000**

**Scope and Contents note**

Bernardo Recaman on Magic Venn Diagrams  
Correspondents:  
Recaman, Bernardo

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**Maps**

**Physical Description:** 7 folder(s)

box 40, folder 1

**4 Color Conjecture & Equivalents [1 of 2] 1959-1973**

**Scope and Contents note**

References  
Many articles  
"Remarks on the Four Color Problem", by Morris E. Rill, 1969, U. of OK. Preprint 94  
Correspondents:  
Bernhart, Frank

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box 40, folder 2

**4 Color Conjecture & Equivalents [2 of 2] 1957-1999**

**Scope and Contents note**

More articles

Bibliography (from mid-1970's) by Bernhart

"Origins of Graph Theory - A History to 1900", by P.J. Federico, sections 20-25 (photocopies)

2 letters to 4-color proovers (that their proofs had mistakes)

Correspondents:

Mendelsohn, Nathan

box 40, folder 3

**Map & Set Coloring (Misc) 1957-1996**

**Scope and Contents note**

Various articles on coloring maps, 2, 3, & 5 color theorems, etc.

MG list of map coloring puzzles & games

Correspondents:

Gunlock, Howard

Gale, David

box 40, folder 4

**Heawood's Conjecture 1890-1970**

**Scope and Contents note**

"Soluotion of the Heawood Map-Coloring Problem", by Gerhard Ringel and J.N.T. Youngs, 1968 (typescript)

box 40, folder 5

**Spenser-Brown's 4-color "Proof" 1977-1978**

**Scope and Contents note**

Work of G. Spenser-Brown

Some Comments on Alleged Proof by G. Spenser-Brown, by Frank Bernhart

Scott Kim - analysis of the proof

David Singmaster letter about Spenser-Brown lecture on his proof

Correspondents:

Knuth, Donald

Wilson, Robin

Bernhart, Frank

Spenser-Brown, G.

box 40, folder 6

**Appel-Haken 1976 Proof of 4-Color Theorem 1976-1986**

**Scope and Contents note**

Several popular and semi-technical articles and announcements about the proof

Correspondents:

Appel, Ken

Wilson, Robin

box 40, folder 7

**3-Color Map Problem 1992-1993**

**Scope and Contents note**

Photo of Nat Friedman sculpture with trefoil knot hole

"The State of the Three Color Problem", by Richard Steinberg, 1992 (typescript)

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**Mathematicians (Alphabetical)**

**Physical Description:** 71 folder(s)

box 37, folder 10	<b>Adelman, Leonard 1994</b> <b>Scope and Contents note</b> 1 article
box 37, folder 11 box 37, folder 12	<b>Bankoff, Leon 1992</b> <b>Ball, W.R.R. undated</b> <b>Scope and Contents note</b> Biography & bibliography, by David Singmasster (typescript)
box 37, folder 13	<b>Bell, E.T. 1992-1993</b> <b>Scope and Contents note</b> Outline, first page, and intro matter of poem "The Scarlet Night" Correspondents: Reid, Constance
box 37, folder 14 box 37, folder 15	<b>Berlekamp 1994</b> <b>Bennett, Chas. 1987-1992</b> <b>Scope and Contents note</b> Various articles by Bannett, on Maxwell's Demon, Complexity, etc.
box 37, folder 16	<b>Bernoullis 1992</b> <b>Scope and Contents note</b> Article, book revies on Bernoulli brothers
box 37, folder 17	<b>Bourbaki 1957-1976</b> <b>Scope and Contents note</b> Several articles about Bourbaki Some references (MG)
box 37, folder 18	<b>Cantor, G. 1988-1995</b> <b>Scope and Contents note</b> Several articles on Cantor
box 37, folder 19	<b>Chung, Fan undated</b> <b>Scope and Contents note</b> 1 article
box 37, folder 20	<b>Cipra, Barry 1997</b> <b>Scope and Contents note</b> 1 short newspaper article Correspondents: Cipra, Barry
box 37, folder 21	<b>Benjamin, Arthur 1998</b> <b>Scope and Contents note</b> 1 article
box 37, folder 22	<b>Cartwright, Mary 1999</b> <b>Scope and Contents note</b> 1 article

- box 37, folder 23      **Clifford undated**  
    **Scope and Contents note**  
    W.K. Clifford: Life and Philosophy, about 52 pages (typescript), ND, no author  
    "The Ethics of Belief", by W.K. Clifford, 5pp (photocopy)
- box 37, folder 24      **Conway 1970-2001**  
    **Scope and Contents note**  
    Many magazine and newspaper articles on Conway  
    2 long letters from Conway to MG  
    Correspondents:  
    Conway, John
- box 38, folder 1      **Coxeter 1985-2001**  
    **Scope and Contents note**  
    Several articles
- box 38, folder 2      **Danzig, George 1994**  
    **Scope and Contents note**  
    1 article
- box 38, folder 3      **De Bruijn undated**  
    **Scope and Contents note**  
    1 photo
- box 38, folder 4      **Dewdney, Kee 1986-1987**  
    **Scope and Contents note**  
    2 articles
- box 38, folder 5      **Diaconis, Persi 1977-1990**  
    **Scope and Contents note**  
    Many articles
- box 38, folder 6      **Elkies, Noam 1997-1998**  
    **Scope and Contents note**  
    2 articles
- box 38, folder 7      **Erdos 1969-2000**  
    **Scope and Contents note**  
    Many interviews with and articles about Erdos  
    Reviews of books about Erdos  
    Discussions of Erdos number
- box 38, folder 8      **Euler undated**  
    **Scope and Contents note**  
    Excerpt from book "Euler, The Master of us All", and article by Harary
- box 38, folder 9      **Fisher, Irving undated**  
    **Scope and Contents note**  
    1 article (book review of his biography, by Robert Allen)

- box 38, folder 10      **Godel [1 of 3] 1962-2000**  
    **Scope and Contents note**  
    References  
    Rotating Universe & Time Travel  
    Photocopy of "Godel Meets Einstein", by Palle Yourgrau, Open Court Press, 1999 (252 pages)  
    Some articles on Godels incompleteness theorem
- box 38, folder 11      **Godel [2 of 3] 1954-1996**  
    **Scope and Contents note**  
    Articles on Godel's incompleteness theorem  
    MG notes on Godel's proof  
    Some biographical articles  
    Correspondents:  
    Chaitin, Greg  
    Rucker, Rudy
- box 38, folder 12      **Godel [3 of 3] 1964-2000**  
    **Scope and Contents note**  
    Several articles by Has Wang (a friend of Godel) on Godel  
    Several biographical articles  
    Articles about ideas stemming from Godel, and the Foundations of Mathematics  
    Correspondents:  
    Ulam, Stanislav
- box 38, folder 13      **Goldberg, Michael 1990**  
    **Scope and Contents note**  
    Letter from his son, Jefemy, plus short biography
- box 38, folder 14      **Golomb 1996-2000**  
    **Scope and Contents note**  
    Solomon golomb  
    USC article on Golomb's appointment of Viterbi Chair in Communications  
    Golomb articles on Mathematics 40 years after Sputnik  
    Correspondents:  
    Golomb, Beatrice
- box 38, folder 15      **Gosper 1995**  
    **Scope and Contents note**  
    William Gosper  
    Letter from MG recommending Gosper for MacArthur Fellowship
- box 38, folder 16      **Ron & NFan Graham 1981-1997**  
    **Scope and Contents note**  
    Several articles on Ron Graham, one on Fan Chung Graham
- box 38, folder 17      **Guy, Berlekamp, Selfridge 1993**  
    **Scope and Contents note**  
    2 photos of the 3 of them, plus interview with Guy
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- box 38, folder 18      **Halmos 1980-1985**  
    **Scope and Contents note**  
    "Applied Mathematics is Bad Mathematics", by Paul Halmos (typescript draft)  
    Interview  
    Correspondents:  
    Halmos, Paul
- box 38, folder 19      **Harary 1993**  
    **Scope and Contents note**  
    Extensive bibliography & Curriculum Vitae of Harary  
    Correspondents:  
    Harary, Frank
- box 38, folder 20      **Huffman, David 1991**  
    **Scope and Contents note**  
    1 profile (SA)
- box 38, folder 21      **Kaczynski (Unibomber) undated**  
    **Scope and Contents note**  
    List of 10 mathematical papers by Caczynski
- box 38, folder 22      **Don Knuth 1960-2001**  
    **Scope and Contents note**  
    Interview and many articles  
    Many Xmas cards  
    Potrzebie system  
    Many recreational mathematics references in letters  
    Correspondents:  
    Knuth, Donald
- box 39, folder 1      **Kraitchik 1957**  
    **Scope and Contents note**  
    Obituary (in French)  
    Correspondents:  
    Kraitchic, Maurice
- box 39, folder 2      **Kruskal, Martin 1993-1994**  
    **Scope and Contents note**  
    2 short articles.
- box 39, folder 3      **Lehrer, Tom 1997**  
    **Scope and Contents note**  
    1 article (Math Horizens) with "That's Mathematics" words and music
- box 39, folder 4      **Littlewood 1978-1996**  
    **Scope and Contents note**  
    John E. Littlewood  
    Several articles & reviews (of "Littlewood's Miscellany")



- box 39, folder 5      **Liberi's Course in RM (& Others) 1974-1984**  
    **Scope and Contents note**  
    Several outlines for a course in recreational mathematics taught by Albert Liberi in New York  
    Correspondents:  
    Moore, Charles  
    Liberi, Albert
- box 39, folder 6      **Scott Morris 1987**  
    **Scope and Contents note**  
    1 newspaper article
- box 39, folder 7      **Leo Moser 1959-1972**  
    **Scope and Contents note**  
    Correspondence & notes about a proposed book by Moser and MG on mathematical humor.  
    Reprints of various Moser problems  
    Correspondents:  
    Moser, William  
    Moser, Leo  
    Stover, Mel
- box 39, folder 8      **John Nash 1994-2001**  
    **Scope and Contents note**  
    Several newspaper & magazine articles on Nash, about his Nobel Prize and the book about him.  
    (Also Kaczynski, the Unibomber, & Erdos books)
- box 39, folder 9      **Pedoe, Dan 1998**  
    **Scope and Contents note**  
    1 article (autobiography from College Mathematics Journal)
- box 39, folder 10      **Wade Philpott 1985**  
    **Scope and Contents note**  
    2 letters, about his death
- box 39, folder 11      **Pickover, Cliff 1991-1999**  
    **Scope and Contents note**  
    Much correspondence between MG and Pickover, about his books & blurbs for them.  
    Several book reviews.  
    Correspondents:  
    Pickover, Clifford
- box 39, folder 12      **Poincare 1999**  
    **Scope and Contents note**  
    2 book reviews ("Poincare and the Three Body Problem")  
    1 biography, photocopied from "Golden Age of Science"
- box 39, folder 13      **Richards, Dana 1986-1989**  
    **Scope and Contents note**  
    Curriculum Vita, letter of recommendation (by MG)  
    Various articles by Richards
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- box 39, folder 14      **Robinson, Julia & Constance Reid 1992-1996**  
                                 **Scope and Contents note**  
                                 2 articles
- box 39, folder 15      **Rogers, Douglas 1998**  
                                 **Scope and Contents note**  
                                 2 letters from Rogers to MG, & 1 reply  
                                 Correspondents:  
                                 Rogers, Douglas
- box 39, folder 16      **Rota 1997**  
                                 **Scope and Contents note**  
                                 1 article
- box 39, folder 17      **Rucker, Rudy 1982-1999**  
                                 **Scope and Contents note**  
                                 Much correspondence  
                                 Correspondents:  
                                 Rucker, Rudy
- box 39, folder 18      **Doris Schattschneider 1990**  
                                 **Scope and Contents note**  
                                 1 picture & short biography
- box 39, folder 19      **Sloane, Neil 1990**  
                                 **Scope and Contents note**  
                                 2 articles & picture
- box 39, folder 20      **Smale 1984-1999**  
                                 **Scope and Contents note**  
                                 2 articles & book review
- box 39, folder 21      **Smullyan, Raymond 1978-1994**  
                                 **Scope and Contents note**  
                                 1 article (Smithsonian) & a little correspondence  
                                 Correspondents:  
                                 Smullyan, Raymond
- box 39, folder 22      **Steuben, Mike 1984**  
                                 **Scope and Contents note**  
                                 1 short article (Discover)
- box 39, folder 23      **Ian Stewart 1992**  
                                 **Scope and Contents note**  
                                 Stewart's preface to one of his books, and MG introduction
- box 39, folder 24      **Sylvester 1987-1997**  
                                 **Scope and Contents note**  
                                 3 articles (technical)  
                                 "The Laws of Verse, or Principles of Versification", by J.J.Sylvester, 1870(152  
                                 photocopied pages)

- box 39, folder 25      **Tarski, Alfred 1991-1999**  
                                 **Scope and Contents note**  
                                 Photocopy frm "From Dedekind to Godel" on Tarski  
                                 2 articles (M. INtellegencer)
- box 39, folder 26      **Tukey, John Wilder 2002**  
                                 **Scope and Contents note**  
                                 1 article (Notices of AMS)
- box 39, folder 27      **Ulam 1981-1990**  
                                 **Scope and Contents note**  
                                 Interview (2-year CMJ)  
                                 Long biography by Gian-Carlo Rota (1987)  
                                 Couple of articles
- box 39, folder 28      **Van der Waerden 1997**  
                                 **Scope and Contents note**  
                                 1 article, Notices of AMS
- box 39, folder 29      **Von Neumann 1964-1998**  
                                 **Scope and Contents note**  
                                 Many articles  
                                 "The Legend of John Von Neumann", by P.R. Halmos, 1973 (reprint)  
                                 Photocopy of "Procedings of Symposia in Pure Mathematics, Vol. 50" on The ILegacy of  
                                 John von Neumann, 1990 (10 articles)
- box 39, folder 30      **Wang, Hao 1996**  
                                 **Scope and Contents note**  
                                 1 article, form "Godel '96"
- box 39, folder 31      **Weil, Andre 1998-1999**  
                                 **Scope and Contents note**  
                                 Obituary  
                                 1 short article
- box 39, folder 32      **Wiener, Norbert 1995**  
                                 **Scope and Contents note**  
                                 Several articles
- box 39, folder 33      **Wolfram, Stephen undated**  
                                 **Scope and Contents note**  
                                 Several newspaper articles
- box 39, folder 34      **Women 1965-1996**  
                                 **Scope and Contents note**  
                                 Several articles on women in mathematics in general  
                                 Some articles on gender in math  
                                 Sophie Germain article (form Sci. Am.)  
                                 Ruth Lawrence (short, from Time)
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**Mazes**

**Physical Description:** 6 folder(s)

box 22, folder 10

**Adrian Fisher Mazes 1986-1999**

**Scope and Contents note**

Many articles by and about Adrian Fisher, including several copies of his "Maze News"  
MG introduction for Fisher's book (typescript)

box 22, folder 11

**Maze Solving Techniques 1957-1997**

**Scope and Contents note**

Chemical method (Science News article)  
Several articles of mathematical methods (2 in French)  
Correspondents:  
Lee, C.Y.  
Abbott, Robert

box 22, folder 12

**Maze Books 1970-1989**

**Scope and Contents note**

MG report on out-of-print maze books (for Dover)  
Many book reviews and newspaper articles  
Correspondents:  
Brightfield, Rick  
Ransom, Tom

box 22, folder 13

**Mazes 1962-2001**

**Scope and Contents note**

Lots of mazes!  
MG letter (to Judy-Lynn del Rey) with detailed 3-D maze suggestion  
Correspondents:  
Friedman (Efjif, Inc)  
Eliot, William  
Pegg, Ed Jr.

box 22, folder 14

**Outdoor Mazes 1981-1994**

**Scope and Contents note**

Articles, pictures, a little history

box 22, folder 15

**Bob Abbott 1988-1995**

**Scope and Contents note**

Manuscripts & original drawings of some of Abbott's mazes  
Correspondents:  
Abbott, Robert

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**Mechanical Puzzles**

**Physical Description:** 23 folder(s)

box 62, folder 1

**Mechanical Puzzles [1 of 3] 1900-1990**

**Scope and Contents note**

Many descriptions of mechanical puzzles, mostly in catalogs, and a few magazine articles

"The Ego Activation Method", by Melvin Weiner, 1980 (reprint), using puzzles as part of psychotherapy

Strand Magazine article(1900) on "Chinese Puzzles, Tricks, and Traps, by James Scott Yashimoto Cube, Nos. 1,2,3 (descriptions, 1971)

Polygonzo, 1990 (Howard Jay Fleischer)

Puzzle World #3, by Dale Overy

Puzzletts

Correspondents:

Golomb, Solomon

Overy, Dale

Dalgety, James

Van Delft, Pieter

Coffin, Stewart

Singmaster, David

box 62, folder 2

**Mechanical Puzzles [2 of 3] 1990-1995**

**Scope and Contents note**

More puzzle descriptions, in catalogs and articles

IDI (I.Q. Development Institute, Ewe Meffert, 1990

Interlocking Puzzles

World Puzzle Congress (Zagreb, 1991) announcement & program

Bill Cutler

Magic Cubes 1991, Christoph Bandelow

Gantt's Wood Things

Ishi Press

General Symmetrics, Inc (Doug Engel)

box 62, folder 3

**Mechanical Puzzles [3 of 3] 1994-2002**

**Scope and Contents note**

Tim's Toy Report, Nos. 2,3,4, 2994

Various catalogs

Short articles on: Spinout, Double Dovetail, Japanese Secret Box, Frank Armbruster, Panex Puzzle, Reversible Nesting Box

"Ruan Liuqi, The Ingenious Puzzle Craftsman of Suzhou", by Wei Zhang & Peter Rasmussen, 1998, 9pp (booklet)

box 62, folder 4

**Stewart Coffin [1 of 2] 1970-1977**

**Scope and Contents note**

Puzzle News: 1979

Catalog sheets & Brochures: 1972, 1971, 1977

Puzzle descriptions: Nova, Seven Woods, Spider Slider, Star, Cuckoo Nest, Locked Nest (with pictureA), Pin Hole

Puzzle Craft: Vol 1, No. 1; No 2; No 3; No 4; No 5; No 6

box 62, folder 5

**Stewart Coffin [2 of 2] 1978-1991**

**Scope and Contents note**

Puzzle Craft (combined reprint) (1978) ; also 1981, parts I, II, and Supplement, 1985  
2 fine Woodworking articles (1979, 1984)

Puzzle descriptions: Six-Piece Burr, Burr #305, Cornucopia

Catalog sheets: 1981

"Puzzling World of Polyhedral Dissection", by Stewart Coffin (Rough draft, 1986)

Correspondents:

Coffin, Stewart

box 62, folder 6

**Jerry Slocum 1955-1995**

**Scope and Contents note**

Article from Jeux & Strategie (in French) (photocopy) - about Jerry Slocum

"Making and Solving Puzzles, by Jerry Slocum, 1955

Article from Science & Mechanics Magazine

Compendium of Mechanical Puzzles From Catalogs, by Jerry Slocum, 1977 (Just the intro and references)

Several diagrams of various burr puzzles

Correspondents:

Slocum, Jerry

Duffy, Mike

box 62, folder 7

**The LA Puzzle Exhibit 1984-1986**

**Scope and Contents note**

"Puzzles Old and New", at the Craft and Folk Art Museum, 1986-1987

Printout of orientation panels

NEH application for grant

box 62, folder 8

**Rubik's Cube & Other Rubik Items 1986-1995**

**Scope and Contents note**

2 articles on solving (cube and clock)

Some ads for other items

box 62, folder 9

**Pyraminx 1981**

**Scope and Contents note**

MG notes on solutions of various patterns

A 14 page analysis of Pyraminx, nd, possible by Turner-Smith

Disclosure document to patent office, for Impossible Polyhedron, an invention by James Pearce, with photographs. (Seems to be an Impossiball.)

box 63, folder 1

**Pentangle Line 1972-1988**

**Scope and Contents note**

A few Pentangle catalogs & sales sheets

Correspondents:

Dalgety, James

box 63, folder 2

**Orb-It 1981-1982**

**Scope and Contents note**

MG intro to Warnecks book on Orb-It (photocopy)

Correspondents:

Werneck, Tom

- box 63, folder 3      **Tom Ransom Project 1977-1978**  
    **Scope and Contents note**  
    Correspondance about possible book  
    Correspondents:  
    Ransom, Tom
- box 63, folder 4      **T.Q. Rowett 1984-1998**  
    **Scope and Contents note**  
    Correspondents:  
    Rowett, Timothy
- box 63, folder 5      **Phoney Baloney 1970-1971**  
    **Scope and Contents note**  
    Correspondents:  
    O'Beirne, Thomas  
    Bernhart, Frank
- box 63, folder 6      **NYC Rec. Math Shop (?) 1939-1980**  
    **Scope and Contents note**  
    Math-E-Magics - the store where Math is Fun
- box 63, folder 7      **Japanese Puzzles 1990-1993**  
    **Scope and Contents note**  
    2 Toyo Glass calendars  
    Puzzletopia No. 11 (from Nob Yoshigahara)  
    Catalogs from Puzzland, Kikimi, Toyo Glass, Matsuya Ginza, Ishi Press  
    Some interviews with Nob Yoshigahara
- box 63, folder 8      **Joel Langer's Wire Knots 1981-1983**  
    **Scope and Contents note**  
    Why Knots  
    Correspondents:  
    Langer, Joel
- box 63, folder 9      **Sam Cornwall 1994**  
    **Scope and Contents note**  
    Photos & stories of his puzzles  
    Correspondents:  
    Cornwall, Sam
- box 63, folder 10     **Bill Cutler 1994-1995**  
    **Scope and Contents note**  
    Some puzzle designs, and some catalogs  
    Correspondents:  
    Cutler, William
- box 63, folder 11     **Puzzle Cards undated**  
    **Scope and Contents note**  
    Photocopies

box 63, folder 12

**Poly-Spheres - Tut's Tomb - Anagog undated**

**Scope and Contents note**

MG notes of Tut's Tomb (Mag-Nif)

Instructions & solutions (photocopy) of Anagog (by Piet Hein)

box 63, folder 13

**Wire Puzzles 1991-1993**

**Scope and Contents note**

"Analysis of ring Puzzles", by Richard Hess, 4"x5", bound, 1993

Perry Horton catlog (with drawings), 1991

Tavern Puzzles

Photocopy of other mwire puzzles (Richard Hess?)

box 63, folder 14

**Loony Loop 1968-1993**

**Scope and Contents note**

Puzzle history, and some photocopies of old catalogs with it

Controversy over who invented it

Correspondents:

Knuth, Donald

Swinford, Paul

James, Stewart

Sutton, C.R.

Armbruster, Frank

Neale, Robert

Conway, John

Dyckman, Howard

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**Misc. Math**

**Physical Description:** 12 folder(s)

box 66, folder 10

**Math Bibliography for NYR 1987-1990**

**Scope and Contents note**

Various versions of bibliography for mathematics books, as wwell as one for computers and artificial intelligence books

Correspondents:

Schaaf, William

box 66, folder 11

**The "New Math" 1958-1984**

**Scope and Contents note**

Lots of articles about the New Math, for and against

Correspondents:

Page, David



box 67, folder 1	<b>Strens Collection 1983-1986</b> <b>Scope and Contents note</b> (Sallows letters: see Pangram folder, 2/65/7) Correspondents: Strens, Pascal Sallows, Lee Knuth, Donald Guy, Richard
box 67, folder 2	<b>Sets, Metamath, Etc. 1958-1968</b> <b>Scope and Contents note</b> Several articles about mathematics itself, and how to organize its parts Set theory
box 67, folder 3	<b>Foundations (Schools) [1of2] 1961-1989</b> <b>Scope and Contents note</b> Many technical papers and articles on foundations of mathematics, particularly constructionist (intuitionism), axiomatics (formalism), logicism, etc.
box 67, folder 4	<b>Foundations (Schools) [2of2] 1988-1998</b> <b>Scope and Contents note</b> More articles "Randomness in Arithmetic and the Decline and Fall of Reductionism in Pure Mathematics", by G.J. Chaitin, 1992 (lecture transcript)
box 67, folder 5	<b>Nomograms &amp; Triangle-Square Dissection 1943-1965</b> <b>Scope and Contents note</b> Some articles on nomograms and nomograms Dudeney's triangle to square dissection
box 67, folder 6	<b>Operations Research 1957-1971</b> <b>Scope and Contents note</b> Articles, mostly popular
box 67, folder 7	<b>Baywood Series 1978</b> <b>Scope and Contents note</b> Preliminary plans for books based on Journal of Recreational Mathematics Correspondents: Schwartz, Benjamin
box 67, folder 8	<b>Math &amp; Postage Stamps 1963-1982</b> <b>Scope and Contents note</b> Some articles, some pictures, some stamps (with mathematical content) Also a couple of articles on stamp errors
box 67, folder 9	<b>How to Catch a Lion 1968-1973</b> <b>Scope and Contents note</b> 2 articles on mathematical methods of big game hunting

box 67, folder 10

**Pure vs. Applied 1997**

**Scope and Contents note**

Typescript of Golomb's talk "Mathematics Forty Years After Sputnik"

Correspondents:

Golomb, Solomon

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**Misc. Problems**

**Physical Description:** 35 folder(s)

box 40, folder 8

**Words & Letters 1974-1998**

**Scope and Contents note**

Kangaroo Words

Strike-Outs

Much from Word Ways magazine, and from Games Magazine

Lots of small word puzzles and games

Correspondents:

Woods, Donald

Browne, Owens Hand

Swinford, Paul

box 40, folder 9

**Quickies [1 of 2] 1964-1983**

**Scope and Contents note**

Many short problems, from various sources and correspondence.

3 sets of problems, from Hollard T. Croft: "Problems" (Mostly Geometrical )(1964),

"Research Problems" (1967), and "Addenda" (1969)

Correspondents:

Lindberg, Gene

Ransom, Tom

box 40, folder 10

**Quickies [2 of 2] 1972-1983**

**Scope and Contents note**

More short problems.

box 41, folder 1

**Omitted From Sterling Bk 1994**

**Scope and Contents note**

Proposal for a math puzzle book for children, 5-10 years old. Puzzles all answered by numbers (which would be the next page to read.) Lots of such problems. (Possible title: A Mathematical & Magical Puzzle Story.)

box 41, folder 2

**XEROR - 51 Puzzle Slides 1974**

**Scope and Contents note**

Numbered, not in order

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box 41, folder 3

**Number Items (Dr. Matrix) [1 of 2] 1965-1982**

**Scope and Contents note**

Many short number puzzles, problems, and oddities, many used in Dr. Matrix columns  
Nuclear numbers (number of electrons in each shell)

Correspondents:

Anastaplo, George

Dudley, Underwood

Halstead, Tom

Nagaraj, S.T.

box 41, folder 4

**Number Items (Dr. Matrix) [2 of 2] 1971-1994**

**Scope and Contents note**

Math. Curiosities: Algebraic, Numeric, Oddest odd number (153), squares & cubes,  
upside down magic squares, cannonball number, etc.

"The Bard And The Bible", by Allan Slaight, 1966 (typescript)

Correspondents:

Stueben, Michael

Bergerson, Howard

Morris, Scot

box 41, folder 5

**My Favorite Funny Quickies (For 4-Star Puzzler) 1982-1983**

**Scope and Contents note**

Several issues of "The 4-Star Puzzles", including one with MG article

box 41, folder 6

**Quickies From Martin Gardner undated**

**Scope and Contents note**

"108 Quickies From Martin Gardner", edited by Andy Liu (from S.A., 1963-1971)  
(spiral bound booklet)

box 41, folder 7

**Task Problems 1968-1998**

**Scope and Contents note**

Many ideas fro a task puzzle (story to be written)

Many task problems.

Task problem: do some task using unlikely objects

Correspondents:

Gillman, Leonard

box 41, folder 8

**Wordles 1952-1999**

**Scope and Contents note**

Word arrangement representing a phrase. Also: "Wacky Wordies", "Word Play",  
"Phrenetic Phrases", and more.

Lists of phrases, titles, etc. to be made as wordles.

Many examples

Correspondents:

Halmos, Paul

box 41, folder 9

**MatheMADics (Wordles) 1967-1999**

**Scope and Contents note**

(Wordles of mathematics terms.)

Correspondents:

Bankoff, Leon

- box 41, folder 10      **Fallacies (All Types) 1958-1996**  
    **Scope and Contents note**  
    Correspondents:  
    Knapp, Merville  
    Dante, William Michael
- box 41, folder 11      **Day PUNCH (Tony Wightman) 1989**  
    **Scope and Contents note**  
    Information about Dayunch Punchboard Calendars.
- box 41, folder 12      **Match (Toothpick) Items 1977-2001**  
    **Scope and Contents note**  
    Correspondents:  
    Stover, Mel  
    Royce, James
- box 41, folder 13      **Riddles 1918-1993**  
    **Scope and Contents note**  
    Many riddles, old and new.  
    "Riddles for the Nursery", Second Series, No. 3, N.Y., Kiggins & Kellogg, 16pp, 2 1/4" x 3 3/4", booklet (ND)  
    "How Many 3-Cent Stamps in a Dozen", by Herman Hover, Price/Stern/Sloan, 1976, 5"x6" (booklet)
- box 41, folder 14      **How Come? Project 1960-2002**  
    **Scope and Contents note**  
    Funny quickies, brain teasers  
    Correspondence (with Bob Singler about MG-supplied "How Comes".)  
    "Play How Come!", by Robert Singer, 1985 (booklet)  
    "How Come - Again?", by Agnes rogers & Richard Sheehan, 1960, 71pp (bound photocopy)  
    "Quisters", by John Zax, 1994, 55pp (photocopy)  
    Correspondents:  
    Singer, Robert
- box 42, folder 1      **Misc (Adults Mainly) 1971-1997**  
    **Scope and Contents note**  
    Various puzzles from various magazines, including Games Magazine, Omni, discover, etc.  
    MG notes for puzzles
- box 42, folder 2      **Opticla, Rotate, Etc. (For Kids) 1976-1996**  
    **Scope and Contents note**  
    Both pictures and words.  
    Correspondents:  
    Sakane, F.
- box 42, folder 3      **MAD Puzzle Spoofs 1966-1995**  
    **Scope and Contents note**  
    And a few others
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- box 42, folder 4      **Blue Math Humor 1992-1993**  
    **Scope and Contents note**  
    "Mathematical Atrocities & Other Cool Stuff", by Michael Steuben, 8pp, 1992 (3 copies)
- box 42, folder 5      **America Illustrated Puzzles 1972-1973**  
    **Scope and Contents note**  
    Correspondence with America Illustrated magazine about supplying 10 (or 12) puzzles. Not the puzzles themselves.
- box 42, folder 6      **Geography, Maps 1975-1988**  
    **Scope and Contents note**  
    Geographic puzzles  
    Correspondents:  
    McCarthy, John  
    Roosevelt, Cornelius Van S.
- box 42, folder 7      **Typewriter 1962-1994**  
    **Scope and Contents note**  
    4 "Typewri-Toons", from Mad Magazine  
    Pictures with typewriter letters  
    Emoticon-like combinations  
    And a few more typewriter items
- box 42, folder 8      **Playing Cards 1994**  
box 42, folder 9      **Catches 1966-1995**  
    **Scope and Contents note**  
    Questions with tricky or surprising answers, bar bets
- box 42, folder 10      **Blue Brain Teasers, etc. 1957-1958**  
box 42, folder 11      **S.W. Brain Teasers 1958-1960**  
    **Scope and Contents note**  
    For Science World  
    About 75 (numbers, some may be left out) from Science World column, possibly somewhat classified (not in numeric order.)  
    Some miscellaneous other short problems
- box 42, folder 12      **CD (Children's Digest) - Brain Teasers 1951-1965**  
    **Scope and Contents note**  
    Many short brain teasers, catches, etc.  
    Large number cut from Children's Digest between 1951 & 1960
- box 42, folder 13      **JPictographic Words 1967-1983**  
    **Scope and Contents note**  
    Also words within words, self-descriptive words  
    Many from Mad Magazine
- box 42, folder 14      **15 Favorites (97) 1997**  
    **Scope and Contents note**  
    Puzzles for Games Magazine (and published article)  
    Also, 20 "How Comes" (undated)
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- box 42, folder 15      **10 Favorite B. Teasers 1977-1984**  
                                 **Scope and Contents note**  
                                 Contribution for article in Games Magazine, and the article itself (with reprint correspondence)
- box 42, folder 16      **Quiz Show Ideas 1985**  
                                 **Scope and Contents note**  
                                 Various short task problems, including some mathc and coin problems
- box 42, folder 17      **10 B. Teasers #2 1978**  
                                 **Scope and Contents note**  
                                 Correspondence and article
- box 42, folder 18      **Unsolved Probs 1970-1979**  
                                 **Scope and Contents note**  
                                 "Problems in Discrete Geometry", w. Moser, 4th ed, 1979 (photocopy) - 28 problems  
                                 Some lists of unsolved problems.
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**Music**

**Physical Description:** 7 folder(s)

- box 71, folder 13      **Music & Math [1 of 2] 1968-1985**  
                                 **Scope and Contents note**  
                                 Many articles, both technical & popular, on boht the mathematics of music and the relationship of music ot mathematics  
                                 Digital recording methods
- box 71, folder 14      **Music & Math [2 of 2] 1968-1999**  
                                 **Scope and Contents note**  
                                 More articles about relationships between music and mathematics
- box 71, folder 15      **Bell Ringing 1972-1987**  
                                 **Scope and Contents note**  
                                 Several articles on bell ringing  
                                 "The Algebra of m-Tone Rows", by James Fill & Alan Izenman, Tech Report No. 41, U. of C., 1977 (typescript), on twelve-tone rows and bell ringing
- box 71, folder 16      **Curious Music Instruments 1975**  
                                 **Scope and Contents note**  
                                 The Pyrophone (1 article, by M. Dunant), the Theramin (MG note)
- box 71, folder 17      **Cage & Others 1958-1993**  
                                 **Scope and Contents note**  
                                 Lots of articles about John Cage and his music, mostly from newspapers  
                                 Also a little on George Crumb
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box 72, folder 1

**Computers & Music 1956-1993**

**Scope and Contents note**

Newspaper & popular science articles  
Information theory  
Computer-generated music  
Computers playing music, electronic music  
John Mehagan music  
Iannis Xenakis music

box 72, folder 2

**Auditory Illusions 1973-1985**

**Scope and Contents note**

Sound of 1 hand clapping  
Ever-Accelerating rhythm (Knowlton)  
Endless octave  
Fractal waveform auditory paradox  
Correspondents:  
Knowlton, Kenneth  
Dalal, Sam  
Kim, Scott

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**Origami**

**Physical Description:** 11 folder(s)

box 60, folder 1

**Paper Fold Kit ~1952**

**Scope and Contents note**

Several simple origami folds, notated by MG, originals from some childrens magazines (Children's Digest, more) & Family Fun section of another magazine, etc, seemingly examples for a proposed box of paper folds, for "Fun With Paper Folding" (or another name.)

box 60, folder 2

**Paper Folds & Cutting 1971-1983**

**Scope and Contents note**

Many MG notes  
Many models  
Correspondents:  
Barr, Steven  
Neale, Robert  
Legman, Gershon  
Randlett, Samuel  
Oppenheimer, Lillian  
Frydendahl, Bo

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box 60, folder 3

**Paper Folding [1 of 3] 1952-1959**

**Scope and Contents note**

"Bibliography of Paper-Folding", by G. Legamn, 1952 (preprint)

"Paperfolding in Japan, by David Lister, 1968 (draft of article)

MG intro to Samuel Randlett's "Best of Origami" (draft)

Some magic articles & tricks

Correspondents:

Legman, Gershon

Lister, David

Oppenheimer, Lillian

Andrus, Jerry

Marshell, Jay

box 60, folder 4

**Paper Folding [2 of 3] 1959-1969**

**Scope and Contents note**

Correspondents:

O'Beirne, Thomas

Erlich, Frederic

Randlett, Samuel

Oppenheimer, Lillian

box 60, folder 5

**Paper Folding [3 of 3] 1967-2002**

**Scope and Contents note**

"The Nature of Paper Folding", by J.S. Smith, 27pp (draft)

box 60, folder 6

**EB Article on Paper Folding 1959-1967**

**Scope and Contents note**

Correspondents:

Encyclopaedia Britannica,

Legman, Gershon

box 60, folder 7

**Paper Cutting & Tearing 1954-1974**

**Scope and Contents note**

Various tricks with paper that involve folding and then cutting or tearing

Stars

Cubes

Haskell paper cut

Hugard

Bowell's "Squircle"

many more

Various examples from "Made With Paper" exhibit

Correspondents:

Engel, Peter

box 60, folder 8

**Mathematical Origami - History of 1971-2002**

**Scope and Contents note**

Early articles on history of origami papplied ot mathematics, in Italian with translations, by F.J. Jacobs (1871), GTiovanni Vacca (1930), Dionysius Lordnan (1840), and others (photocopies of articles, typescript of translations)

"Brief Introduction to Origamics", by Naoki Takashima, 21002, 2003 (photocopies)



box 60, folder 9

**Folding Regular Polygons of Maximum Size from a Square (Pentagon, Hexagon, etc.) 1979-1995**

**Scope and Contents note**

Correspondents:

Morassi, Robert

box 60, folder 10

**Paper Airplanes 1965-1988**

**Scope and Contents note**

"Flypaper - The Journal of Paper Flight", Vol 1, No. 1 - Vol 2, No. 4 (7 issues)

Correspondents:

Peck, Charles

box 60, folder 11

**Dollar Bill Folds 1984-1990**

**Scope and Contents note**

Correspondents:

Duncan, Fred

**Oversize**

box 75, folder 1

**From Series 1, Box 15, Folder 1: The Superellipse**

**Scope and Contents note**

Magazine: "Inspiration 68", Fritzhaner-Furniture (oversize)

box 75, folder 2

**From Series 1 Box 34, Folder 10: On Harrison**

**Scope and Contents note**

1. Perspective maps
2. "This Troubled World" (color maps from newspaper)

box 75, folder 3

**From Series 2 Box 14, Folder 3: Designs by Paulus**

**Scope and Contents note**

"Symblocks" puzzle: Alphabet "jigsaw" puzzle, cut from cardboard and painted. 14 1/2 x 11 1/2 inches.

box 75, folder 4

**From Series 2, Box 27, Folder 2: Corner Color Triangles**

**Scope and Contents note**

Gameboard for Triokeeper game - Hexagonal shapes with 52 + 21 triangles.

box 75, folder 5

**From Series 2, Box 65, Folder 3: Knock Knock**

**Scope and Contents note**

Sheet music: "Knock, Knock - Who's There?", words by Jimmy Tyson & Bill Davies, Music by Vincent Lopez & Johnny Morris, pub: Leo Feist, Inc., N.Y., 1936

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**Perfect, Amicable & Sociable**

**Physical Description:** 9 folder(s)

box 3, folder 3

**Perfect 1953-1997**

**Scope and Contents note**

"Perfect Numbers", by Richard W. Shoemaker, NCTM pamphlet, 1973

Correspondents:

Fogel, Joshua

box 3, folder 4

**Proberties of Odd Perfects (if exist!) 1957-1997**

**Scope and Contents note**

"Odd-Perfect-Number Tree to 1036 ...", by Bryant Tuckerman, IBM Research Report RC4695, 1974

box 3, folder 5

**Variants on Perfects 1966-1989**

**Scope and Contents note**

Almost perfects, perfects  $\pm 1$ , Abundant, Wierd, ...

"Primitive Abundant Numbers", by B.L. Schwartz, typescript

Correspondents:

Schwartz, Benjamin

box 3, folder 6

**Amicables [1 of 3] 1975-1997**

**Scope and Contents note**

Much material on large amicable numbers, by Elvin Lee

Correspondents:

Lee, Elvin

box 3, folder 7

**Amicables [2 of 3] 1969-1989**

**Scope and Contents note**

This is the first part of Amicables box, not in folders.

List of 1039 amicable pairs of numbers in numerical order, factored, and referenced, compiled & edited by Elvin Lee, put in numerical order by Joseph Madachy (photocopy).

Also (long) computer printout of 977 pairs of Amicable numbers, by Elvin Lee, 1969

Correspondents:

Lee, Elvin

Madachy, Joseph

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box 3, folder 8

**Amicables [3 of 3] 1913-1987**

**Scope and Contents note**

This is the second part of Amicables box, not in folders. Various articles, old & new.

Correspondents:

Lee, Elvin

Madachy, Joseph

Borho, Walter

box 3, folder 9

**Edinburgh Computer Work on Amicables (McKay & Bartley) 1967**

**Scope and Contents note**

Correspondents:

McKay, John

Bratley, Paul

box 3, folder 10

**My Conjecture & Lee's Disproof 1967-1983**

**Scope and Contents note**

"On Divisibility By Nine of the Sums of Even Amicable Pairs", by Elvin Lee, 1968 (draft)

MG notes on his conjecture (that even amicable Nos are divisible by 9.)

"The Discovery of Amicable Numbers", by E.J. Lee, 1969 (typescript)

Correspondents:

Lee, Elvin

Cheney, Fitch

Ore, Oystein

Guy, Richard

box 3, folder 11

**Sociable Numbers 1969-1991**

**Scope and Contents note**

"Empirical Study of Aliquot Series", by Jack Alanen, Amsterdam, 1972 (publication of Mathematisch Centrum)

Correspondents:

Lee, Elvin

Cohen, Henri

Morris, Noah

Nelson, Harry

Shanks, Daniel

Fruit, Robert

Bergerson, Howard

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**Persons**

**Physical Description:** 19 folder(s)

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 box 3, folder 11
**Sociable Numbers 1969-1991****Scope and Contents note**

"Empirical Study of Aliquot Series", by Jack Alanen, Amsterdam, 1972 (publication of Mathematisch Centrum)

Correspondents:

Lee, Elvin

Cohen, Henri

Morris, Noah

Nelson, Harry

Shanks, Daniel

Fruit, Robert

Bergerson, Howard

box 46, folder 1

**Barcellos, Tony 1984-1989****Scope and Contents note**

Correspondence on various projects, between MG, Tony Barcellos, and Neil Patterson

Tentative names: Martin Gardner's Math Education Software, Doing Geometry with Martin Gardner

Correspondents:

Barcellos, Anthony

box 46, folder 2

**Tom Dietterich 1981-1983****Scope and Contents note**

About Inductive Learning (in A.I.)

2 papers by Dietterich

Correspondents:

Dietterich, Thomas

box 46, folder 3

**Dreyfus & Searl 1968-1993****Scope and Contents note**

Just articles

box 46, folder 4

**Edelman, Gerald M. 1993****Scope and Contents note**

1 review, N.Y. Review

box 46, folder 5

**Fredkin 1988****Scope and Contents note**

Biographical notes by MG

1 article about him, by Robert Wright, from Atlantic Monthly

box 46, folder 6

**Brian Hayes 1983-1984****Scope and Contents note**

First 2 Scientific American columns (on computer recreations)

Suggestions from MG for column

Correspondents:

Hayes, Brian

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box 46, folder 7	<p><b>Hofstadter 1980-1999</b></p> <p><b>Scope and Contents note</b>  CV, Christmas letters, pictures  Book reviews and other articles on Hofstadter  Correspondents:  Hofstadter, Douglass</p>
box 46, folder 8	<p><b>Ada Lovelace 1973-1999</b></p> <p><b>Scope and Contents note</b>  Articles &amp; book reviews about Ada  Correspondence with Joan Baum about her book  Correspondents:  Baum, Joan</p>
box 46, folder 9	<p><b>John McCarthy 1979-1983</b></p> <p><b>Scope and Contents note</b>  Interview in Omni, article in Psychology Today, a reference</p>
box 46, folder 10	<p><b>Minsky 1981-1995</b></p> <p><b>Scope and Contents note</b>  Several articles on him</p>
box 46, folder 11	<p><b>Moravec 1989-2000</b></p> <p><b>Scope and Contents note</b>  Articles by and about Hans Moravec</p>
box 46, folder 12	<p><b>Nelson, Theodore 1976-1987</b></p> <p><b>Scope and Contents note</b>  Biographical correspondence of both MG &amp; Nelson  Various articles and ads for Nelson and Xanadu Project  Correspondents:  Rivest, Ronald  Nelson, Theodore</p>
box 46, folder 13	<p><b>Papert, Seymour 1973-1985</b></p> <p><b>Scope and Contents note</b>  Several short articles about Papert, and an interview (Omni)</p>
box 46, folder 14	<p><b>Shannon, Claude 1987-1990</b></p> <p><b>Scope and Contents note</b>  Interview (Omni) and profile (Scientific American)</p>
box 46, folder 15	<p><b>Shapiro (&amp; Others) Ind. Programs 1980-1981</b></p> <p><b>Scope and Contents note</b>  3 articles on Inductive Programs  "Learning by being Told ...", by R.S. Richalski &amp; R.L. Chilavsky, Int. Journal of Policy Analysis &amp; Info. Systems, Vol. 4, No. 2, 1980 (reprint)  "Automatic Induction of Classification Rules for a Chess Endgame", by A. Shapiro &amp; T. Niblett, March, 1981 (report)  "Inductive Inference of Theories From Facts", by Ehud Shapiro, Research Report 192, 1981, 50pp (typescript)</p>

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box 46, folder 16	<p><b>Shank, roger 1988</b></p> <p><b>Scope and Contents note</b></p> <p>1 article (Discover)</p>
box 46, folder 17	<p><b>Herbert Simon 1958-1994</b></p> <p><b>Scope and Contents note</b></p> <p>Many articles, about Simon's economics, and about his "Bacon" program, about A.I.</p> <p>Articles by Simon</p> <p>Correspondents:</p> <p>Simon, Herbert</p> <p>Newell, Allen</p>
box 46, folder 18	<p><b>Turing (Biographical) 1983-1999</b></p> <p><b>Scope and Contents note</b></p> <p>Biographical articles on Alan Turing</p>
box 46, folder 19	<p><b>Wolfram undated</b></p> <p><b>Scope and Contents note</b></p> <p>1 photocopy of newspaper artical on Stephen Wolfram</p>

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**Pi**

**Physical Description:** 21 folder(s)

box 70, folder 6	<p><b>Pi &amp; e Relations 1959-1979</b></p> <p><b>Scope and Contents note</b></p> <p>MG notes plus articles</p> <p>Several close-to-integral relations</p>
box 70, folder 7	<p><b>Decimal Expansion - Pi [1 of 2] 1960-1986</b></p> <p><b>Scope and Contents note</b></p> <p>Notes, articles, letters, etc - History of claculation, formulas, randomness shown by, etc.</p> <p>Correspondents:</p> <p>Shanks, Daniel</p> <p>Ore, Oystein</p> <p>Singleton, C.R.</p> <p>Wrench, John</p> <p>Gosper, Bill</p> <p>Knuth, Donald</p> <p>Ford, Joseph</p>
box 70, folder 8	<p><b>Decimal Expansion - Pi [2 of 2] 1984-2001</b></p> <p><b>Scope and Contents note</b></p> <p>More on Pi</p>

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box 70, folder 9	<p><b>Japanese Calculation 1981-1999</b></p> <p><b>Scope and Contents note</b></p> <p>A list of Pi calculations, by Akihito Shibata (Who did them, how many digits, etc, through time)</p> <p>Various formulas used, and reports on, the long Japanese calculations (billions of digits of pi)</p>
box 70, folder 10	<p><b>Chudnovsky Calculation 1989-1991</b></p> <p><b>Scope and Contents note</b></p> <p>Various articles on Chudnovsky brothers (David &amp; Gregory) calculation of pi</p>
box 70, folder 11	<p><b>Sequences in Pi - Primes, Runs, Squares, Etc. 1979-1992</b></p> <p><b>Scope and Contents note</b></p> <p>Various notes and letters</p>
box 70, folder 12	<p><b>Pi Curiosities [1 of 2] 1965-1992</b></p> <p><b>Scope and Contents note</b></p> <p>Lots of articles, notes, and letters with curiosities about pi</p> <p>Correspondents:</p> <p>Shanks, Daniel</p> <p>Knuth, Donald</p> <p>Rehkopf, Donald</p>
box 70, folder 13	<p><b>Pi Curiosities [2 of 2] 1988-2001</b></p>
box 70, folder 14	<p><b>Approximations 1961-1985</b></p> <p><b>Scope and Contents note</b></p> <p>Lots of approximations of pi, taken from articles, letters, etc.</p>
box 71, folder 1	<p><b>Castellanos Papers on Pi 1983-1984</b></p> <p><b>Scope and Contents note</b></p> <p>Dirio Castellanos:</p> <p>The Ubiquitous Pi - 1984</p> <p>Fibonacci Numbers, Tchebicheff Polynomials and the Number Pi - 1983</p> <p>Relative Size of Coefficients for Two Arc Tangent Series</p> <p>Correspondents:</p> <p>Castellanos, Dario</p>
box 71, folder 2	<p><b>Crockett Johnson 1968-1969</b></p> <p><b>Scope and Contents note</b></p> <p>"The Circle Squared", mathematical construction for a painting, with various calculations of the square root of pi</p> <p>Correspondents:</p> <p>Johnson, Crockett</p>
box 71, folder 3	<p><b>R. Wise on Pi As a Code 1977</b></p> <p><b>Scope and Contents note</b></p> <p>Long letter proving existence of God by a numerological interpretation of pi, humorous</p> <p>Correspondents:</p> <p>Wise, Raymond</p>

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box 71, folder 4	<p><b>Pi ** e and e ** Pi [ &amp; M**K = K**M 1960-1990</b></p> <p><b>Scope and Contents note</b> Various notes and articles</p>
box 71, folder 5	<p><b>Pi Mnemonics 1961-1998</b></p> <p><b>Scope and Contents note</b> Many mnemonics, in various languages "How I wish I Could Recollect Pi", by Michael Keith, 1997 (The Compleat Book of Pi Mnemonics), 38pp (typescript) Correspondents: Swinford, Paul Eckler, Ross</p>
box 71, folder 6	<p><b>Pi Problems 1977-1980</b></p> <p><b>Scope and Contents note</b> Correspondents: Goldberg, Michael</p>
box 71, folder 7	<p><b>Buffon's Needle (&amp; Variants) 1953-2002</b></p> <p><b>Scope and Contents note</b> Correspondents: Mermin, David</p>
box 71, folder 8	<p><b>Squaring the Circle (&amp; Pi in general) 1950-1992</b></p> <p><b>Scope and Contents note</b> Several "methods", and articles about squarers</p>
box 71, folder 9	<p><b>Poems About Pi 1959-1962</b></p> <p><b>Scope and Contents note</b> Half dozen short poems, from various sources</p>
box 71, folder 10	<p><b>The INdiana Bill 1965-1993</b></p> <p><b>Scope and Contents note</b> Articles on the history of the Indiana Bill No. 246, of 1897, that tried to set a legal value for pi</p>
box 71, folder 11	<p><b>Formulas converging on Pi (Cont. Fractions, etc) 1976-1998</b></p> <p><b>Scope and Contents note</b> Correspondents: Lee, Elvin Salamin, Eugene Beeler, Mike</p>
box 71, folder 12	<p><b>Primes in Pi 1992</b></p> <p><b>Scope and Contents note</b> Correspondents: Dubner, Harvey</p>

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**Plane Geometry**

**Physical Description:** 65 folder(s)



box 10, folder 4

**Plane Dissections 1955-1997**

**Scope and Contents note**

many physical puzzles from "Gathering for Gardner".

Correspondents:

Frederickson, Greg

Reid, Robert

Lundquist, Oliver

McElhany, Tom

Arrieta, Carlos

box 10, folder 5

**Tiles with Surround No. 2 2002**

**Scope and Contents note**

Article by Casey Mann.

box 10, folder 6

**Greg's Hinged Dissections 1999-2001**

**Scope and Contents note**

Several chapters from Frederickson's book on hinged dissections, and articles by him.

box 10, folder 7

**Plane Geometry 1968-2000**

**Scope and Contents note**

"College Life", by A.B. Paulson, story (photocopy).

Lots of short geometric puzzles.

Correspondents:

Silverman, David

Goldberg, Michael

Paulson, A.B.

box 10, folder 8

**Golden Ratio (& Sacred Cut) (Phi) [1 of 2] 1959-1995**

**Scope and Contents note**

Golden Triangle of Anne Tyng

Gnomons

Corss of Lorraine

Phyllotaxis

Correspondents:

Tyng, Anne

Knuth, Donald

box 10, folder 9

**Golden Ratio (& Sacred Cut) (Phi) [2 of 2] 1964-2001**

**Scope and Contents note**

"Phyllotaxis as a Dynamical Sysstem", by Jay Kappraff (typescript), long chapter

Correspondents:

Kappraff, Jay

Lundquist, Oliver

Knuth, Donald

box 10, folder 10

**Phi Problems, Constructions, etc. 1959-2002**

**Scope and Contents note**

Many problems (on cards) involving phi (golden ratio)

Some geometric models from Piet Hein

Correspondents:

Bankoff, Leon

Hein, Piet

Hoggatt, Vernon

box 10, folder 11

**Frank Lonc undated**

**Scope and Contents note**

Lonc Relativity Constant (Phi?) - several of Frank Lonc publications

box 10, folder 12

**String Art - Curve Stitching 1974-1976**

box 10, folder 13

**Phi Crankery [1 of 2] 1972-1992**

**Scope and Contents note**

Articles on misconceptions about golden ratio, and lots of articles furthering those misconceptions as well as new ones.

Correspondents:

Markowsky, George

Fanning, John

box 10, folder 14

**Phi Crankery [2 of 2] 1971-1993**

box 11, folder 1

**Polygons [1 of 2] 1962-1979**

**Scope and Contents note**

Nonagon-Star Creative Game, by Robert Dewar

Dissections

Negative polygons (with negative diagonals), "Hog on Ice" principle

"Enumeration of Restricted Incongruent Cyclic K-gons", by Richard Reis (typescript)

Correspondents:

Dewar, Robert

Silverman, David

box 11, folder 2

**Polygons [2 of 2] 1981-1999**

**Scope and Contents note**

Correspondents:

Knuth, Donald

Lee, Elvin

box 11, folder 3

**Counting Squares, Rectangles, Triangles 1962-1998**

**Scope and Contents note**

Many counting problems and ways to count them.

Correspondents:

Kwong, Harris

box 11, folder 4

**Erdos-Szekeres Theorem (Points & Convex Polygons) 1998**

**Scope and Contents note**

Announcement and MG notes of a talk.

- box 11, folder 5      **Polygon Loops 1995**  
    **Scope and Contents note**  
    1 article "Can You Do It with Heptagons", by Ann Hirst
- box 11, folder 6      **Unlocking Polygons 2000**  
    **Scope and Contents note**  
    Article from Science News
- box 11, folder 7      **Triangles [1 of 2] 1962-1988**  
    **Scope and Contents note**  
    Construction problems  
    Rotating equilateral triangle  
    VUX triangles  
    Ceva's theorem  
    ... and many more  
    Correspondents:  
    Hoggatt, Vernon  
    Coxeter, H.S.M.
- box 11, folder 8      **Triangles [2 of 2] 1989-2002**  
    **Scope and Contents note**  
    Many more puzzles, problems and facts  
    Heron's formula  
    Correspondents:  
    Coxeter, H.S.M.  
    Liu, Andy  
    Wainwright, Robert
- box 11, folder 9      **The Isosceles Triangle Problem 1967-1997**  
    **Scope and Contents note**  
    Given various angles in an isosceles triangle with divided bottom angles, find other angles.  
    Correspondents:  
    ApSimon, H.G.
- box 11, folder 10      **Triangle Tiling & Packing 1975-1994**  
    **Scope and Contents note**  
    "Dissections into Equilateral Triangles", by W.T. Tutte, 1979 (U. of Waterloo Research Report CORR 79-2)  
    "The Impossibility of Tiling a Convex Region With Unequal Equilateral Triangles", by Edwin Buchman (typescript)  
    Correspondents:  
    Pomerance, Carl  
    Knuth, Donald  
    Wainwright, Robert  
    Buchman, Edwin

box 11, folder 11

**Steiner-Lehmus Theorem 1961-1998**

**Scope and Contents note**

Theorem: equal angle bisectors implies isosceles triangle

Many proofs

Correspondents:

Zeitlin, Joel

Coxeter, H.S.M.

Keeler, Donald

box 12, folder 1

**Squares 1957-2001**

**Scope and Contents note**

Many square problems, of all kinds.

"The Kissing Number of the Square", by M. S. Klamkin, 1993 (typescript)

"Packing a Partridge in the Smallest Square Tree", by Robert Wainwright, G4G3, 1998 (typescript)

Correspondents:

Moser, Leo

Terman, Terence

Hoggatt, Vernon

box 12, folder 2

**Lattices (Square, Triangular, Cubical, etc) 1965-1998**

**Scope and Contents note**

Geoboards

Polysticks (Dan Gauteau (Ganteau?))

"Van der Waerden's Theorem Extended", by G.T. Diderrich, 1974 (typescript)

Visibility & invisibility problems.

Correspondents:

DeWitt, Alan

Stewart, Bonnie

box 12, folder 3

**Pick's Theorem 1976-1997**

box 12, folder 4

**Diagonal rug 1959-2000**

**Scope and Contents note**

Carpen in room problem.

Correspondents:

Upton, Leslie

box 12, folder 5

**Tarski's - Squaring Circle 1963-1996**

box 12, folder 6

**Moving Figure Around a Corner (Sofa Prob, etc) 1971-2002**

**Scope and Contents note**

Correspondents:

Van Dyk, F.

Gerver, Joseph

box 12, folder 7

**Art Gallery Theorems 1985-2000**

**Scope and Contents note**

Correspondents:

Conway, John

Robinson, Gordon

O'Rourke, Joseph

- box 12, folder 8      **Worm Problems (Moser) 1973-2001**  
    **Scope and Contents note**  
    Max distance between points in a square, cube, etc.  
    Curves fitting in a square, circle.  
    N-nominoes  
    (Also see box 12, folder 15)  
    Correspondents:  
    Moser, Leo
- box 12, folder 9      **Quadrilaterals - Area Determined by Given Sides 1928-1983**  
    **Scope and Contents note**  
    Correspondents:  
    Lunnon, W.F.
- box 12, folder 10     **Heptagons 1997**  
    **Scope and Contents note**  
    1 article: "golden Fields", by Peter Steinbach (photocopy)
- box 12, folder 11     **Irregular Regular Polygons 1995**  
    **Scope and Contents note**  
    1 article, by Eric Carlson & Sheldon Glashow
- box 12, folder 12     **Star Polygons 1971-1977**  
    **Scope and Contents note**  
    Correspondents:  
    Mollerup, Per  
    Noton, David
- box 12, folder 13     **Computer Growth Patterns 1971-1977**  
    **Scope and Contents note**  
    "Hexagonal Networks Generated by Branching", by Wilson Baker (typescript)  
    Correspondents:  
    Stokes, John  
    Baker, Wilson  
    Andrews, D.J.
- box 12, folder 14     **Fibonacci Residue Patterns undated**  
    **Scope and Contents note**  
    "Fibonacci Residue Cycles", by Loren Meissner (abstract, intro, some pictures)  
    (typescript)
- box 12, folder 15     **Min. Coverings for Closed & Open Curves of Length 1 1966-1996**  
    **Scope and Contents note**  
    (also see box 12, folder 8)  
    Correspondents:  
    Moser, Leo
- box 12, folder 16     **Butterfly Problem (Circles) 1965-1987**  
    **Scope and Contents note**  
    Correspondents:  
    Bankoff, Leon
-

box 12, folder 17  
box 12, folder 18

**Teathered Goats 1960-1998**  
**Projective Incidence 1965-1985**  
**Scope and Contents note**

Correspondents:  
Dorwart, Harrold

box 12, folder 19  
box 12, folder 20  
box 13, folder 1

**Gosper's "C" Curve (Or Pythag. Curve) 1969**  
**Sylvester's Problem 1960-1992**  
**Circles [1 of 2] 1966-1981**

**Scope and Contents note**

"Mid-Circles and Loxodromes", by H.S.M. Coxeter, 1966 (typescript)  
Problems from Moser, Conway  
The Stranded Teddy Bear problem (& refutation.)  
Correspondents:  
Coxeter, H.S.M.  
Cheney, Fitch  
Pedoe, Dan  
Bell, Alex

box 13, folder 2

**Circles [2 of 2] 1983-2001**

**Scope and Contents note**

Correspondents:  
Iles, Kim

box 13, folder 3

**Packing Circles in Triangles 1993-1994**

**Scope and Contents note**

"Dense Packing of Equal Disks in an Equilateral Triangle: From 22 to 34 and Beyond",  
by R. L. Graham & B.D. Lubachevsky, 1994 (typescript)

box 13, folder 4

**Ellipses 1961-1976**

**Scope and Contents note**

Correspondents:  
Abbott, Robert  
Silverman, Richard  
Iles, Kim  
Keeler, Donald

box 13, folder 5

**Curves & Art (Equations Graphed) 1959-1979**

**Scope and Contents note**

Many examples:  
Hans Berlin, "Nous" (Nigel & Sheila Walters)  
NOTE: Original of letter from Hans Berlin needs conservation work. Please just use photocopy.  
Pictorial Mathematics (set of postcards from Scripta Mathematica)  
Rutherford Boyd (Mathematical Ideas in Design)  
Ben Laposky  
Correspondents:  
Berlin, Hans  
Knuth, Donald

box 13, folder 6  
box 13, folder 7

**Lehmer's Module Patterns 1976**  
**The Crossed Ladders 1952-1999**

**Scope and Contents note**

Also longest ladder around a corner problem (see also box 12, folder 6).

box 13, folder 8  
box 13, folder 9  
box 13, folder 10

**Box & Single Ladder 1962-1990**  
**Curve-Drawing Machines (Spirography) 1964-1975**  
**Elsers "Concavexons" 1979**

**Scope and Contents note**

Game of Vex - A letter from Elser

Correspondents:

Elser

box 13, folder 11  
box 13, folder 12

**Table Covering undated**  
**Turtle Geometry 1984**

**Scope and Contents note**

Article from Feb, 1984, Scientific American (by Brian Hayes)

box 13, folder 13

**Bounce Problems undated**

**Scope and Contents note**

2 pages MG notes.

box 13, folder 14

**Rosenwald's Xmas Star 1975-1976**

**Scope and Contents note**

Correspondents:

Rosenwald, Robert

box 13, folder 15

**Minimal Surfaces 1987-1988**

**Scope and Contents note**

2 articles.

box 13, folder 16  
box 13, folder 17  
box 13, folder 18  
box 13, folder 19

**Inversion Geometry 1964-1992**  
**Symplectic Geometry 1990**  
**Cat Scan Problems 1990**  
**Linkages (Mechanical Curios) 1970-1998**

**Scope and Contents note**

Articles, MG notes for column.

"Move Form", by H. Tomura, a 30 bar linkage of pentgons with 20 tri-valent vertices.

box 13, folder 20

**Trigonometry 1994-1998**

**Scope and Contents note**

"Quantum Trigonometry: An Essay on Recreational Mathematics", by Erwin Anderdingen (E.C.Anderson) & Werner Arnoldenberg (James Arnold), satire (typescript)

Correspondents:

Anderson, Ernest

Sanchez, Michael

box 13, folder 21

**Shoelace Problems 1995**

**Scope and Contents note**

1 article (Math. Intell.)

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box 13, folder 22      **Getting Out of Forest undated**  
                                 **Scope and Contents note**  
                                 1 article (Quantum)

box 13, folder 23      **Chromatic No. of Plane 1994**

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**Polycubes**

**Physical Description:** 15 folder(s)

box 54, folder 21      **Soma Cubes [1 of 2] 1957-1997**  
                                 **Scope and Contents note**  
                                 Many articles and booklets on Soma Cube  
                                 Correspondance about Parker Bros. publishing Soma, patents, etc  
                                 Inquirees about patents, sales, etc  
                                 Interview of Piet Hein  
                                 Correspondents:  
                                 Atwater, Thomas  
                                 Hein, Piet

box 54, folder 22      **Soma Cubes [2 of 2] 1970-2000**  
                                 **Scope and Contents note**  
                                 Adlai game  
                                 Much information, patents, pictures etc of various 3x3x3 cubes, from Jerry Slocum  
                                 Correspondents:  
                                 Slocum, Jerry

box 55, folder 1      **Soma Figures [1 of 2] 1958-1974**  
                                 **Scope and Contents note**  
                                 Many figures to build, and proofs of impossibility of other figures  
                                 Bound set of duplicate letters to MG (from GilOutterson)  
                                 Correspondance between Outterson & Piet Hein about manufacturing Soma Cubes  
                                 Much reader correspondance from 1958 S.A. column  
                                 Correspondents:  
                                 Hein, Piet  
                                 Golomb, Solomon  
                                 Lyons, Vossburgh (VOZ)  
                                 Outterson, Gil  
                                 Schwartz, Benjamin

box 55, folder 2      **Soma Figures [2 of 2] 1976-1993**  
                                 **Scope and Contents note**  
                                 MG notes & original structures  
                                 Nice, large-scale drawings of several figures  
                                 Printouts of all solutions of the cube, raised cross, and crystal, from Sivy Farhi  
                                 Correspondents:  
                                 Farhi, Sivy



box 55, folder 3

**3x3x3 Puzzles 1972-1992**

**Scope and Contents note**

(Also see box 54, folder 22)

Diabolical Cube - MG notes, analysis

Lesk Cubes

Correspondents:

JPhilpott, Wade

Dye, Daniel

box 55, folder 4

**Polycubes, Etc. [1 of 2] 1961-1990**

**Scope and Contents note**

Many MG notes, and others notes

"Polycubes", from "More Mathematical Puzzles", chapter 6 (by G.J. Westerink?), typed & drawn

Notes on Alan Schoen visit

Class notes on Solving the Polycubes, by W.M. McKernan, 1973, 52pp (typescript)

"Counting Multidimensional Polyominoes", by W.F. Lunnon, 1973, 8pp (typescript)

Description of "Adlai" game

Correspondents:

McKeeman, William

Bird, David

Guy, Richard

box 55, folder 5

**Polycubes, Etc. [2 of 2] 1959-1998**

**Scope and Contents note**

More polycube designs and puzzles

Correspondents:

Klarnner, David

box 55, folder 6

**Impuzzables 1972-1985**

**Scope and Contents note**

Correspondents:

Slocum, Jerry

box 55, folder 7

**Tetracubes 1967-1992**

**Scope and Contents note**

"Wit's End", Putzl

Notes on "Wit's End" puzzle, by Martin Scullin (many figures)

"The First Book of Putzl", by L.E. Minnick (typescript)

box 55, folder 8

**Pentacubes 1962-1993**

**Scope and Contents note**

Besley patent (3,065,970), 1962

Trimetropentomino, richard, Serena & Beth Sutton

Pentacube & hexacube tilings

Correspondents:

Farhi, Sivy

Jones, Kathy

box 55, folder 9

**The 12 "Solid" Pentominoes 1958-1992**

**Scope and Contents note**

Several "Quint-Grams", from Kadon Enterprises (Nos 1-8, 12)

Marketed version of the pentominoes

Correspondents:

Jones, Kathy

Scott, Dana

box 55, folder 10

**Hexacubes 1964-1973**

**Scope and Contents note**

Correspondents:

Baker, Jack

Bird, David

Card, L.E.

Bouwkamp, C.J.

box 55, folder 11

**The Heptacubes 1972**

**Scope and Contents note**

Correspondents:

Klarnner, David

box 55, folder 12

**Non-cube Polyhedra (Splatts) 1987**

**Scope and Contents note**

Splatt is a truncated octahedron

1 article (from Eureka 47, by Mrk Owen & Mathew Richards)

box 55, folder 13

**The 5x5x5 "Dorian" & a "Logical Subset" of Pentacubes 1972-1975**

**Scope and Contents note**

Correspondents:

Dorie, Joseph

Caffrey, John

**Polyhex**

box 56, folder 1

**Polyhex [1 of 3] 1966-1984**

**Scope and Contents note**

Analysis of pentahex (by Paul Himebaugh)

Hexahex enumeration

Many tetrahex solutions (from S.A. column), some by computer, and new patterns

Correspondents:

Coffin, Stewart

box 56, folder 2

**Polyhex [2 of 3] 1962-1967**

**Scope and Contents note**

More solutions, analyses, and new patterns for polyhexes

Klarners analysis

Correspondents:

Sharp, John

Klarnar, David

Coffin, Stewart

box 56, folder 3

**Polyhex [3 of 3] 1964-1984**

**Scope and Contents note**

More patterns and analysis

Diagrams of many (all?) pentahex solutions of rhombus (by Paul Himebaugh)

Correspondents:

Hitotumatu, Sin

Bird, David

Klarnar, Robert

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**Polyhexes**

**Physical Description:** 3 folder(s)

box 54, folder 8

**Polyhex Enumeration 1967-1972**

**Scope and Contents note**

Several enumerations, with some diagrams, of orders 4-12

Correspondents:

Gilbert, Walter

Travnicek, Edward

box 54, folder 9

**Polyhex Tiling 1967 (?) - 1995**

**Scope and Contents note**

A small number of problem solutions from Clarke, with proofs

Correspondents:

Clarke, Andrew

box 54, folder 10

**Triangular Lattice Problems 1990**

**Scope and Contents note**

Several articles and typescripts of problems and solutions and proofs

MG notes

Correspondents:

Hanegraaf, Anton

Beeler, Michael

Golomb, Solomon

West, Donald

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**Polyiamonds**

box 54, folder 7

**Polyiamonds undated**

**Scope and Contents note**

No content; a couple of references

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**Polyobalos, Etc**

**Physical Description:** 10 folder(s)

box 54, folder 11

**Polyabolo Tiling undated**

**Scope and Contents note**

(Right-angled triangle pieces)

Also tetratans (tetrabolos), polyarcs

box 54, folder 12

**3-D Polyaboloes 1967**

**Scope and Contents note**

Theory in letter form Andrew Clarke

Correspondents:

Clarke, Andrew

box 54, folder 13

**Polyaboloes 1965-1974**

**Scope and Contents note**

Analysis from Tom O'Beirne, Wilfred Shepherd, James Taylor

MG notes

Shephard nomenclature (polytryngles, polyubes, etc)

Set of cardboard tetraboloes [[ in 3-D box ]]

Correspondents:

Bird, David

O'Beirne, Thomas

Taggart, Mary

box 54, folder 14

**Polyabolo Enumeration 1967**

**Scope and Contents note**

Various counts by various people

Correspondents:

Brown, Spencer

Trigg, Charles

Philpott, Wade

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box 54, folder 15

**Langford's 4-Piece Replication Problem 1963**

**Scope and Contents note**

Correspondents:

Cundy, Martyn

Mercer, Leigh

Povah, Maurice

box 54, folder 16

**The Tetrabolo Squares, Rectangles & Rhomboids 1967-1977**

**Scope and Contents note**

Many results from John Harris, Philpott, Trigg

Correspondents:

Harris, John

Philpott, Wade

Trigg, Charles

Shepherd, Wilfred

Taylor, James

box 54, folder 17

**Rhombiominos 1993**

**Scope and Contents note**

1 article/problem, from J.R.M. by Kate Jones

box 54, folder 18

**Rookominos undated**

**Scope and Contents note**

1 MG notes and reference

box 54, folder 19

**Paving Stones 1994**

**Scope and Contents note**

1 reference

box 54, folder 20

**Misc. Variants 2001**

**Scope and Contents note**

From Ed Pegg Jr's Mathpuzzle.com website

References to CFF

Eternity Puzzle

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**Polyominos**

**Physical Description:** 25 folder(s)

box 52, folder 13

**General 1957-2002**

**Scope and Contents note**

Problem: Tile 8x9 board with 11 1x6 bricks plus 1 2x3 rectangle

"Polyomino and Polyiamond Problems", by Wade Philpott, 1976 (typescript)

Description of MacPoly (from Sabaki Corp)

"Polyominoes in a Random Tiling", by Michael Beeler, 1988 (typescript)

"Modest Polyominoes", by Richard Hess, Y. Kotani, & Robert Wainwright (typescript)

Correspondents:

Golomb, Solomon

Bush, V.

Philpott, Wade

Lerner, David

Beeler, Michael

box 52, folder 14

**Polyomino Computer Programs 1958-1970**

**Scope and Contents note**

Lots of programs for various polyomino problems

Correspondents:

Scott, Dana

box 52, folder 15

**Polyomino Enumeration Problem 1958-1987**

**Scope and Contents note**

Many articles & letters, especially by Grank Harary

box 52, folder 16

**Dominos 1965-1995**

**Scope and Contents note**

Several articles (mostly on covering rectangles with dominos)

Correspondents:

Isaacs, Rufus

box 53, folder 1

**Domino (Bricks) (Cards) Overhangs 1964-1985**

**Scope and Contents note**

Several articles & letters

box 53, folder 2

**Trominoes 1971-1998**

**Scope and Contents note**

Articles, letters, notes on problems involving trominoes

box 53, folder 3

**Tetrominoes 1960-1998**

**Scope and Contents note**

Several tetromino problems, in notes and letters and some articles

Correspondents:

Knuth, Donald

box 53, folder 4

**Pentomino & Higher Tiling Problems [1 of 2] 1954-1984**

**Scope and Contents note**

"There is no Gap in a Diamond", by Mogens Esrom Larsen, 1986 (pamphlet)

Lots of Leigh Mercer correspondance

Many problems & solutions, in various articles & letters

Correspondents:

Liu, Andy

Garcia, Abel

Mercer, Leigh

Knuth, Donald

Philpott, Wade

box 53, folder 5

**Pentomino & Higher Tiling Problems [2 of 2] 1960-2000**

**Scope and Contents note**

Many more problems, solutions, counts of numbers of solutions, etc

The 5 superposition problems

"A Pedestrian Approach to a Method of Conway, or, A Tile of Two Cities", by James Propp, 1993 (typescript)

Correspondents:

Digby, David

Liu, Andy

Propp, James

box 53, folder 6

**Pentomino "Farms" 1972-1990**

**Scope and Contents note**

Correspondents:

Reid, Robert

Knuth, Donald

Feser, Victor

Kotani, Yoichi

box 53, folder 7

**Pentominoes (Misc) 1960-1998**

**Scope and Contents note**

Many more puzzles & problems

Pentomino patents & trademark information and court case

MacPoly, short description (David Lerner, Sabaki Corp.)

Covering cubes with pentominoes

2339 solutions to 6x10 pentomino tiling, by Bethel Hooven

Inflated pentominoes

FILL-AGREE - A punctured polyomino puzzles by Kate Jones\*

Modest Polyominoes Problems Book and Modest Hexominoes Puzzle, by Dick Hess\*

[[ items marked "\*" are in 3-D box ]]

Correspondents:

Clark, Arthur C.

Golomb, Solomon

Hunter, J.A.H.

Liu, Andy

Knuth, Donald

Hooven, Bethel

Kurchan, Rodulfo

box 53, folder 8

**Pentomino 13-Hole Problem (& Other Hole Problems) 1969-1973**

**Scope and Contents note**

Various solutions

Correspondents:

Bouwkamp, C.W.

Philpott, Wade

Lindstedt, Christer

box 53, folder 9

**Sawtooth Square Patterns 1960-1964**

**Scope and Contents note**

Solutions with empty square in a corner (or adjacent), and several proofs the hole cannot go in the middle

box 53, folder 10

**Scott Taylor Pattern 1960-1963**

**Scope and Contents note**

Several proofs of impossibility

box 53, folder 11

**Golomb's Pentomino Game 1963-1973**

**Scope and Contents note**

Rules (by Golomb) of his Pentomino Game

Description of program, by S. Kurzbaum & T. McBride to play pentomino game

Correspondance about rights to pentomino game

Correspondents:

Golomb, Solomon

McBride, Tom

Miller, Donald

box 53, folder 12

**Polyomino Games 1960-1978**

**Scope and Contents note**

Pan-Kai

Kent Wadsworth game, one-sided pentomino pieces with values

Cogito (French)

Zim

Skirrid

Locus

Copade (Kenneth Costa)



box 53, folder 13

**Hexominoes 1962-1999**

**Scope and Contents note**

1-sided vs 2-sided discussion

Dr. Hex

Spear's Multipuzzle

Complete set of pents & hexes, plastic, solved as a red 15x18 rectangle of hexominoes, with a contiguous green "Chess rook" of pentominoes in the center [[ in 3-D folder ]]

(D. Woods letter also contains "superparadoxes" and a chessboard problem)

Correspondents:

Bird, David

Woods, Donald

Philpott, Wade

Sherman, Henry

Golomb, Solomon

box 53, folder 14

**Heptominoes (Order 7) 1955-1995**

**Scope and Contents note**

Lists of the pieces, and some problems & solutions

Correspondents:

Bird, David

Golomb, Solomon

Sherman, Henry

Klarner, David

box 53, folder 15

**8-Ominoes & Higher 1972-1988**

**Scope and Contents note**

Monomino density

Interlocking polyominoes

Serial Isogons

Pi-sided polyominoes

Correspondents:

Liu, Andy

Bird, David

Golomb, Solomon

Sallows, Lee

box 54, folder 1

**Corner-Connected Squares (Think-A-Ma-Jig) 1973**

**Scope and Contents note**

Correspondents:

Beeler, Mike

box 54, folder 2

**Rhominoes 1976-1992**

**Scope and Contents note**

James Parker: analysis of 60 degree rhombuses (but tri-rhombuses are a subset of hexiamonds)

Correspondents:

Parker, James

- box 54, folder 3      **Bicolored Polyominoes 1983-1995**  
    **Scope and Contents note**  
    Some checkerboard colorings & problems  
    Quintachex  
    MG notes
- box 54, folder 4      **Polycycles (Dutch) 1979**  
    **Scope and Contents note**  
    Notes from Luitzen Yntena on polyomino variations
- box 54, folder 5      **Bibliography for Solomon Golomb 1988-1991**  
    **Scope and Contents note**  
    Polyomino references to about 1991, compiled by MG for Golomb:  
    Books by Martin Gardner  
    Polyomino references (from 1988)  
    New references added in 1991  
    Chessboard dissections into polyominoes  
    Books  
    Tiling  
    Marketed polyomino games  
    On rectification, on polyiamonds, on tetraboloes, on polyhexes, on polycubes, etc  
    J. of Rec. Math references
- box 54, folder 6      **Polyomino Tiling of Plane 1995**  
    **Scope and Contents note**  
    "Tiling Rectangles with Polyominoes", by Solomon Golomb (typescript)  
    Correspondents:  
    Golomb, Solomon

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**Primes**

**Physical Description:** 26 folder(s)

- box 1, folder 1      **Goldbach Conjecture 1978-1987**  
    **Scope and Contents note**  
    Correspondents:  
    Robertson, Douglas  
    Sklansky, David  
    Yates, Samuel
- box 1, folder 2      **Rieman Hypothesis (Zeta Function) 1972-2002**  
    **Scope and Contents note**  
    Poem: "Where are the zeros of zeta of s?"
- box 1, folder 3      **Mersenne Primes 1978-2001**  
    **Scope and Contents note**  
    Correspondents:  
    Lee, L.E.J.  
    Eberhart, Stephen  
    Nelson, Harry

box 1, folder 4

**General References 1953-1997**

**Scope and Contents note**

Also articles on basic prime info: sieves, prime number theorem, unique factorization, etc.

Correspondents:

Wade, Carlton

McDonnell, E.E.

box 1, folder 5

**Primes (Misc.-Curios-Problem, etc) [ 1 of 3] 1961-1981**

**Scope and Contents note**

"The Numerology of One Hundred", by Solomon Golomb (mimeograph)

Overlapping 9-digit primes

"Prime Period Length Counts and Ratios", by Samuel Yates (typescript)

"A Physicist's Proof of Fermat's Theorem of Primes", by H. Gutfreund & W.A. Little (typescript)

Long essay on "Alpha Operation", by Howard Bergerson, 1981 (typescript)

Correspondents:

Golomb, Solomon

Card, L.E.

Yates, Samuel

box 1, folder 6

**Primes (Misc.-Curios-Problem, etc) [ 2 of 3] 1964-1987**

**Scope and Contents note**

"A Class of Primality Tests for Trinomials Which Includes the Lucas-Lehmer Test", by H.C. Williams (typescript)

Correspondents:

Hitotumatu, Sin

Ondrejka, Rudolf

Williams, Hugh

Adams, Milton

Yates, Samuel

Guy, Richard

box 1, folder 7

**Primes (Misc.-Curios-Problem, etc) [ 3 of 3] 1975-2000**

**Scope and Contents note**

"Strong Law of Small Numbers", by Richard Guy (photocopy of manuscript)

Lots of articles, and MG notes

Correspondents:

Madachy, Joseph

Clawson, Calvin

box 1, folder 8

**Twin Primes (& Variants) 1964-2001**

**Scope and Contents note**

"Prime-Number Pairs", by Schuyler M. Christian, 1985 (booklet)

"Titanic Twins", by Samuel Yates (typescript)

"On Prime Densities and Twin Prime Fallacies", by F.E. von Ammon Jr

"Proof of the Infinitude of Double Twin Primes", by Martin Aaronson

"A Relation Between Twin Primes and their Indices", by A.R. Fazely

Correspondents:

Christian, Schuyler

Crandall, R.E.

Yates, Samuel

Aaronson, Martin

box 1, folder 9

**Fermat Numbers & Primes 1990-1996**

**Scope and Contents note**

"A Tail of Two Sieves", by Carl Pomerance

box 1, folder 10

**Tables (Decimal, Binary) 1993**

box 1, folder 11

**Sieves, Tests, Factoring 1960-1998**

**Scope and Contents note**

"Primes, a Strictly Empirical Study", by F.B. von Amon, Jr (booklet)

"Conway's Prime Producing Machine", by Richard Guy (typescript, ND)

Correspondents:

Ammon, F.E. von

Vanderpool, Donald

Dow, John

Morse, Arthur

Stilgebauer, Robert

Meyer, Marvin

Glass, John

Litvack, Barry

Pritchard, P.A.

box 1, folder 12

**Probability Tests of Primes 1977-1978**

**Scope and Contents note**

"A Note on Monte Carlo Primality Tests and Algorithmic Information Theory", by Gregory Chaitin & Jacob Schwartz (typescript draft)

"Monte-Carlo Tests for Primality", by Donald Malm (typescript)

"Probabilistic Algorithms", by Michael Rabin (typescript)

"Riemann's Hypothesis and Tests for Primality", by Gary Miller (typescript)

"A Fast Monte-Carlo Test for Primality", by R. Solovay & V. Strassen (reprint)

Correspondents:

Malm, Donald

box 2, folder 1

**100-Digit Primes 1964-1996**

**Scope and Contents note**

Correspondents:

Madachy, Joseph

Mauchly, John

Yates, Samuel

Gosper, Bill

box 2, folder 2

**Repunit Primes (& 100-Digit Primes) [1 of 2] 1964-1985**

**Scope and Contents note**

Much from column March, 1964

Correspondents:

Yates, Samuel

Williams, Hugh

Schaechter, David

Jordan, Steven

Brillhart, John

Chiles, Griffin

Cohen, Martin

Madachy, Joseph

Thompson, Hugh

Knowlton, William

Lee, Wallace

Mauchly, John

box 2, folder 3

**Repunit Primes (& 100-Digit Primes) [2 of 2] 1976-1985**

**Scope and Contents note**

"Divisibility with Repunit Factores", by Samuel Yates (typescript)

Many letters & articles of Samuel Yates

Correspondents:

Yates, Samuel

box 2, folder 4

**Reversible Primes (Emirps) 1964-1999**

**Scope and Contents note**

Correspondents:

Card, L.E.

Farrell, Jeremiah

Barbour, David

box 2, folder 5

**Palindromic Primes, Squares, Cubes, etc. 1969-1999**

**Scope and Contents note**

Correspondents:

Simmons, Gustavus

Card, L.E.

Ondrejka, Rudolf

Kaprekar, D.R.

Madachy, Joseph

Ely, Robert

box 2, folder 6

**Gustavus Simmons Factoring, & Lenstra 1984-1986**

**Scope and Contents note**

Correspondents:

Simmons, Gustavus

box 2, folder 7

**Prime Generating Formulas 1964-1998**

**Scope and Contents note**

MG notes.

Correspondents:

Szulyovszky, D.

Koch, George

Higgins, Olga

Von Ammon, Fred

Atkin, Oliver

box 2, folder 8

**Primes: Permutable, Snowballs, & Cyclics, Truncatable, etc. 1965-1997**

**Scope and Contents note**

Correspondents:

Madachy, Joseph

Green, Milton

Card, L.E.

box 2, folder 9

**Mills Formula & Others Like It 1963-1997**

**Scope and Contents note**

Correspondents:

Cina, Jerome

Kravitz, Sidney

Golomb, Solomon

Ore, Oystein

Koch, George

Heppe, Robert

box 2, folder 10

**Consecutive Digit Primes 1972-1978**

**Scope and Contents note**

Correspondents:

Madachy, Joseph

Beeler, Michael

Golomb, Solomon

Cassel, Alan

Crandall, R.E.

box 2, folder 11

**Gaps of No Primes 1964-1966**

**Scope and Contents note**

Correspondents:

McMillan, Edwin

Brenner, Joel

Meally, Victor

box 2, folder 12

**Conjectures - False and Unproved 1963-1985**

**Scope and Contents note**

Correspondents:

Golomb, Solomon

Stevens, J.W.

box 2, folder 13

**Pseudo Primes (Ulam's Luck) (Poulet No's) undated**

box 2, folder 14

**Recent Tests for Primes 1981-1986**

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**Primes in A.P. & Prime Squares**

**Physical Description:** 5 folder(s)

box 2, folder 15

**Primes in Arithmetical Progressions 1975-1995**

**Scope and Contents note**

Correspondents:

Madachy, Joseph

Rose, Nicholas

Guy, Richard

Fry, James

box 2, folder 16

**Prime Squares ca.1913-1991**

**Scope and Contents note**

2 articles from "The Monist:

"Magic Squares Made With Prime Numbers", by W.S. Andrews & Harry Sayles, 1913  
(photocopy from The Monist)

"Pandiagonal Prime Number Magic Squares", by Chas. D. Shulldham, 1914 (photocopy  
from The Monist)

Correspondents:

Madachy, Joseph

Ondrejka, Rudolf

Card, L.E.

Walker, George

Fendall, Chuck

box 2, folder 17

**Allan W. Johnson, Jr. 1981-1989**

**Scope and Contents note**

Correspondents:

Johnson, Allan

Dubner, Harvey

box 3, folder 1

**Capt. Wm. H. Benson 1927-1980**

**Scope and Contents note**

Various writings on prime magic squares, by Benson

Correspondents:

Benson, William

box 3, folder 2

**Gukuho Abe 1986-1988**

**Scope and Contents note**

Several articles in Japanese

Correspondents:

Abe, Gakuho

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**Probability**

**Physical Description:** 34 folder(s)

box 28, folder 9

**Probability 1950-2001**

**Scope and Contents note**

Many popular science articles, some on "philosophy" of probability.

box 28, folder 10

**The 2 Shells & Switch of Choice [1 of 2] 1959-1992**

**Scope and Contents note**

3-door problem, 3 prisoners problem, Monty Hall problem

Many letters and much analysis of the problem (in various guises) and variations.

Correspondents:

Rosa, Domenico

Frazier, Kendrick

Gillman, Leonard

Vos Savant, Marilyn

Pohl, Frederick

box 28, folder 11

**undated**

box 29, folder 1

**Vos Savant - Other Puzzles 1991-2000**

**Scope and Contents note**

Lots of correspondence about problems from her column.

Correspondents:

Vos Savant, Marilyn

box 29, folder 2

**Probability Paradoxes (& Sucker Bets) 1968-1997**

**Scope and Contents note**

Many paradoxes, and many sucker bets

"The Strange Game of Lucky Louie", by Michael Stueben (typescript)

Correspondents:

Bar-Hillel, Maya

Stueben, Michael

Winkless, Nelson Brock

box 29, folder 3

**Eldest Sono Paradox 1972-1999**

**Scope and Contents note**

Two thirds of men are eldest sons.

box 29, folder 4

**Paradox of 2nd Ace 1957-1992**

**Scope and Contents note**

Set of correspondence with Warren Weaver & Norman Gridgeman, with much discussion and analysis of the problem (1963-1964)

Set of correspondence with John Ford

Correspondents:

Weaver, Warren

Gridgeman, Norman

Ford, John

Fuhrmann, Steve

Gillman, Leonard



- box 29, folder 5                   **Paradox of the Second Child 1958-1992**  
  **Scope and Contents note**  
  Correspondents:  
  Eliasberg, Jay  
  Duggleby, R.G.
- box 29, folder 6                   **Birthday Paradox (& Variants) 1970-2001**  
  **Scope and Contents note**  
  Correspondents:  
  Diaconis, Persi
- box 29, folder 7                   **Necktie Paradox & Variants (May 77) 1975-2001**  
  **Scope and Contents note**  
  Exchanging envelopes with \$x & \$2x paradox  
  Correspondents:  
  Coffman, Bill  
  Lewis, Hal  
  Girard, Martin
- box 29, folder 8                   **Unfaithful Wives 1985**  
  **Scope and Contents note**  
  2 reports on cheating husbands problem (same as unfaithful wives.)  
  Correspondents:  
  Halpern, Joe
- box 29, folder 9                   **Statistical Paradoxes 1959-1999**  
  **Scope and Contents note**  
  Waiting time paradox  
  Boltzmann's dice paradox  
  Popular and technical articles  
  Correspondents:  
  Vos Savant, Marilyn
- box 29, folder 10                  **Defining "Random" [1 of 2] 1952-1987**  
  **Scope and Contents note**  
  Several long papers  
  Correspondents:  
  Alcock, James
- box 29, folder 11                  **Defining "Random" [2 of 2] 1988-1992**  
  **Scope and Contents note**  
  Correspondents:  
  Compagner, Aaldert

box 30, folder 1

**Probability & Cards (ESP also) [1 of 2] 1961-1978**

**Scope and Contents note**

Game with deck of 20 cards, by Howard (?)

Several articles on chance

Three-dimensional draw poker

Several items from Persi Diaconis (notes by MG)

Correspondents:

Wilson, Robert Ross

Curry, Paul

Diaconis, Persi

box 30, folder 2

**Probability & Cards (ESP also) [2 of 2] 1967-1997**

**Scope and Contents note**

"The Analysis of Sequential Experiments with Feedback to Subjects", by Persi Diaconis & Ronald Graham, Tech. Rep. No. 119, 1978

box 30, folder 3

**Dice-Probability Problems 1960-2002**

**Scope and Contents note**

Moser's problem (& Related ones) of loaded dice

"Stochastic Inequalities", by Walter Funkenbusch, 1989 (typescript)

Correspondents:

Moser, Leo

Thorp, Edward

Propp, James

Goldberg, Steven

box 30, folder 4

**"Small World" Paradox 1967-2000**

**Scope and Contents note**

Correspondents:

Kochen, Manfred

box 30, folder 5

**First Digits in Tables - Benford's Law 1960-1999**

**Scope and Contents note**

"Limits of Measures of the Integers With Application to Random Number Generators ...", by Persi Diaconis, 1973, Memorandum NS-211 (typescript)

"On the Distribution of First Significant Digits", by Roger Pinkham, 1960 (dittograph)

Correspondents:

Duquet, Robert

Federighi, Francis

Rudkin, Arthur

box 30, folder 6

**"Random" Triangles 1968-1982**

**Scope and Contents note**

Breaking a stick in 3 pieces - is it a triangle?

Is a random triangle acute?

box 30, folder 7

**Matching Pennies Machines (Dunning) 1954-1975**

**Scope and Contents note**

Sprace (a Piet Hein game)

Cleo (Computer to Learn Even-Odd), Dunning's machine

SEER, A Sequence Extrapolating Robot - Hagelbargers machine

Correspondents:

Dunning, Charles

Hein, Piet

box 30, folder 8

**Simpson's Paradoxes & Other "Worst-Best" 1960-1992**

**Scope and Contents note**

March, 1976 column

Many letters & articles

"A Paradox", by J.W. Moon, 1975 (typescript)

Correspondents:

Mendelsohn, Nathan

Moon, J.W.

Moser, Leo

Blyth, Colin

Brams, Steven

box 30, folder 9

**On Poker 1978-1981**

**Scope and Contents note**

"Is My Poker Hand Better Than Yours?", by William H. Cutler (typescript)

"How To Cheat at Mental Poker", by Richard Lipton, 1979 (typescript)

box 30, folder 10

**Blackjack Systems 1961-1979**

**Scope and Contents note**

Mostly newspaper articles

Correspondents:

Thorp, Edward

box 30, folder 11

**Monte Carlo Method 1955-1958**

**Scope and Contents note**

MG notes

box 30, folder 12

**"Death-Dips" - Do Deaths Correlate with Important Events? 1980**

**Scope and Contents note**

Is there a dip in the number of deaths before important events (birthdays, etc), or a rise after?

box 30, folder 13

**Negative Probability (Feynman) 1977**

**Scope and Contents note**

"Negative Probabilities", by R.P. Feynman

A paper on the concept of negative probabilities (by Feynman), with notes on it and a letter by MG.

Correspondents:

Feynman, Richard

box 31, folder 1

**Resampling (Efron's Bootstrap) 1984-1995**

**Scope and Contents note**

Several papers about Resampling & Bootstrap, by and about Simon & Efron

Correspondents:

Simon, Julian

box 31, folder 2

**Metaanalysis 1992**

**Scope and Contents note**

Single article (by Ingram Olkin), from The Sciences

box 31, folder 3

**Transparent Proofs 1992**

**Scope and Contents note**

2 short articles, from Focus and from Science

box 31, folder 4

**Probability Problems [1 of 2] 1957-1987**

**Scope and Contents note**

Many problems and puzzles

"Two Statistical Fables", by Richard Zeckhauser, Discussion Paper No. 57, 1968 (typescript) I: "Decisions of Alice"; II: "A Tale of Probable Regions"

Gardner's Dice

Correspondents:

Morgenstern, Leonard

Dunne, Alex

Curry, Paul

Moser, Leo

Upton, L.J.

Moore, A.D.

Griggs, Jerry

Diaconis, Persi

Hawkins, David

Lenning, Alvar

Fulves, Karl

Gilbert, Edward

box 31, folder 5

**Probability Problems [2 of 2] 1968-1998**

**Scope and Contents note**

Many problems

Physics of models for generating random events (in Diaconis letter)

Correspondents:

Potvin, robert

Hein, Piet

Diaconis, Persi

box 31, folder 6

**Roulette 1993-1999**

**Scope and Contents note**

Single paper: "A Solution to Roulette", by Stephen Hu, 1993 (typescript)

Correspondents:

Hu, Stephen

box 31, folder 7

**Doomsday Argument 2000**

**Scope and Contents note**

MG note

computer printout of article (a literature review)

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**Sequences**

**Physical Description:** 16 folder(s)

box 6, folder 1

**Integer Sequences 1965-2001**

**Scope and Contents note**

MG notes on 2 R. Penrose problems.

"Find the Next Term", by Neil Sloane (typescript) - sequence puzzles

"Computer-Aided Analysis of Monotonic Sequence Games", by Frank Harary, Bruce Sagan, David West (typescript)

Correspondents:

Sloane, N.J.A.

Van Tooren, A.

Trigg, Charles

Knowlton, Kenneth

Sagan, Bruce

Sallows, Lee

box 6, folder 2

**Looping Problems "Black Holes" 1945-2000**

**Scope and Contents note**

Correspondents:

Green, Milton

box 6, folder 3

**Looping Problem -  $3X+1$  [1 of 2] 1978-1982**

**Scope and Contents note**

(Collatz conjecture, Syracuse problem, Hailstone numbers)

Correspondents:

Ulam, Stanislav

Erdos, Paul

Mendelsohn, Nathan

Wilber, James

box 6, folder 4

**Looping Problem -  $3X+1$  [2 of 2] 1971-1999**

**Scope and Contents note**

Correspondents:

Christy, Donald

Knuth, Donald

Trigg, Charles

Thompson, Hugh

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box 6, folder 5

**Palindrome Conjecture 1961-1996**

**Scope and Contents note**

"A Note on Palindromes by Addition", by Michael Rebmann & Frank Sentyrz (typescript)

"A Study of Palindromic Numbers", by D.R. Kaprekar, 1976

"Researches on Reversed Subtraction Process", by D.R. Kaprekar, 1977

Correspondents:

Trigg, Charles

Beatty, Millard

Beeler, Michael

box 6, folder 6

**Fibonacci 1961-2000**

**Scope and Contents note**

Lots of short articles.

MG notes.

Correspondents:

Hoggatt, Vernon

Feinberg, Andrew

box 6, folder 7

**Applications 1951-1977**

**Scope and Contents note**

"Life, Form, and Number", by C.A.B. Smith, 1965 (pamphlet)

box 6, folder 8

**Fib. Magic Tricks 1959-1978**

**Scope and Contents note**

Heath's Fibonacci Trick, AAG Principle, Fibonacci Fantasy

Correspondents:

James, Stewart

box 6, folder 9

**Fib. Variants 1968-1999**

**Scope and Contents note**

A Tribonacci Application

Vibonacci numbers

Correspondents:

Webb, Edward

box 6, folder 10

**Proberties, Curiosities, etc. 1964-1992**

**Scope and Contents note**

Correspondents:

Albright, Charles

Hoggatt, Vernon

box 6, folder 11

**Harmonic Series 1963-1997**

**Scope and Contents note**

MG notes.

Many articles.

"Partial Sums of the Harmonic Series", by R.B. Boas & John Wrench (typescript)

"Optimal Card Stacking", by Brad Jackson (typescript)

Correspondents:

Engel, Joseph

Boas, R.P.

Asimov, Dan

Clawson, Calvin

box 6, folder 12

**Thue Sequence & Infinite Chess (Non-repeating Chains) 1957-1998**

**Scope and Contents note**

MG notes.

Correspondents:

Scott, Dana

Sutcliffe, Alan

Erdos, Paul

Leech, John

Beek, Allan

box 6, folder 13

**Linus (& Sally) Sequences 1977**

**Scope and Contents note**

Notes from Scott Kim

Correspondents:

Hellerstein, Nathaniel

box 6, folder 14

**Conways, 1, 2, 3 1984-1997**

**Scope and Contents note**

Correspondents:

Morris, Scot

box 6, folder 15

**Golomb's Self-Ref. Sequence 1967**

**Scope and Contents note**

2 articles and short note.

box 6, folder 16

**Farey Sequences 1967-1995**

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**Serial Isogons**

box 14, folder 1

**Isogon Paper 1988-1996**

**Scope and Contents note**

"Contour Codes of Isothetic Polygons", by Prabir Bhattacharya & Azriel Rosenfeld, Aug. 1988 (U. Md. Report)

Correspondents:

Dewdney, A.K.

Farhi, Sivy

Alexanderson, G.L.

Guy, Richard

Vardi, Ilan

Reid, Robert

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**Software Projects**

**Physical Description:** 11 folder(s)

box 47, folder 1

**Programmed Card Tricks 1966-1996**

**Scope and Contents note**

Clock-Card Trick, Hans Trixer

"Magical Mathematics", by Persi Diaconis & Ron Graham (typescript) - outline of book to teach mathematical appreciation with magic tricks

"Powerful Magic", by Michael Powers (104 pp) (1983) (booklet)

"Computer Magic with the ZX-81", by David Hambly, 1983 (25 pp) (booklet)

Riffle Shuffle tricks

Chris Morgan's Space-bar Code Trick

Correspondents:

Busby, Jeff

Haines, Bob

Goldstein, Phil (Max Maven)

Kolb, William

Morgan, Christopher

box 47, folder 2

**Non-Card Magic 1985-1986**

**Scope and Contents note**

Many tricks (about 15) involving computer, mostly hidden ways of supplying info to computer

New Angle 16 Digit Test; AAG Principle; Precognition

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box 47, folder 3

**Freeman Software Project (Neil Patterson) 1982-1985**

**Scope and Contents note**

Book (about 64 pp) and computer disks (2) to be written by MG & published by Neil Patterson Publishers, Inc.

Working title: Mathematical Insights, or "The Recreational Road to Mathematics"

Some subjects: Polyominoes, Parity checks

Explorations, notes, and correspondence about possible topics for math disk

Correspondents:

Goodman, Frederick

Barcellos, Anthony

Miller, Marvin

Patterson, Neil

Gardner, Jim

box 47, folder 4

**Classic P's (Save for Refs) undated**

**Scope and Contents note**

Many (40-50) straightforward, classic math problems (many from his books), adapted for computer presentation

box 47, folder 5

**Classic Problems 1985**

**Scope and Contents note**

Lots of problems (about 60) selected by MG and rewritten with comments for manual and computer interaction

Editors comments (Bill Fritzmeier & Joan Webb) on the problems

box 47, folder 6

**Other Disk Ideas undated**

**Scope and Contents note**

MG notes on: Competitive Games, Recreational Problem Solving, Mazes or graph-traversing puzzles, Graphics, General topics

box 47, folder 7

**Polyomino Chap. for Demo 1985**

**Scope and Contents note**

Draft polyominoes chapter for book ("Doing Mathematics with Martin Gardner"??)

Notes on demo disk (preliminary version) - Omino maker program

Correspondents:

Kohl, Herb

box 47, folder 8

**Parity 1985**

**Scope and Contents note**

Various storyboards & notes for section on parity, with examples of computer screens

box 47, folder 9

**Kohl, Herb 1985**

**Scope and Contents note**

Much correspondence with Kohl on program for recreational math computer project (and other writing projects)

Some other Herb Kohl writings

Polyomino Demo disk (5-inch floppy) -- itransferred to Box 73, Folder 15

Correspondents:

Kohl, Herb

Kahn, Ted

- box 47, folder 10      **Silverman, Brian 1985**  
                                 **Scope and Contents note**  
                                 Letters: from MG and Brian Silverman to Tony Barcellos, from Barcellos to MG and to Brian Silverman, about the educational math diskette project
- box 47, folder 11      **Text for MIT Demo 1985**  
                                 **Scope and Contents note**  
                                 "Martin Gardner's Plane Games, An Excursion in Geometry", draft of text (by MG), and screen shots, with comments by MG
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**Solid Geometry**

**Physical Description:** 26 folder(s)

- box 15, folder 12      **Platonic Solids - SA Card (Xmas, 1966) 1958-2000**  
                                 **Scope and Contents note**  
                                 Couple of problems.  
                                 Many descriptions.  
                                 "The Platonic Solids", by Eugene Catalan, 1879, translated by Leon Bankoff.  
                                 Hamiltonian paths on platonic solids.  
                                 Correspondents:  
                                 Wheeler, Nicholas  
                                 Shannon, Elihu  
                                 Coxeter, H.S.M.  
                                 Singmaster, David
- box 15, folder 13      **Conways "Holyhedra" 1999-2000**  
                                 **Scope and Contents note**  
                                 Conway's introduction to Jade Vinson paper, and Math Trek reporting of the Vinson paper. (But not the Vinson paper itself.)
- box 15, folder 14      **Cone (Sphericon) 1999**  
                                 **Scope and Contents note**  
                                 Ian Steward column in SA.
- box 15, folder 15      **Gabriel's Horn 1999**  
                                 **Scope and Contents note**  
                                 Article by Julian Fleron.
- box 15, folder 16      **Pop-Up Solids 1997-2000**  
                                 **Scope and Contents note**  
                                 Some models and articles and MG notes.
- box 15, folder 17      **Solid Geometry 1964-1975**  
                                 **Scope and Contents note**  
                                 Some good, unusual problems.  
                                 Correspondents:  
                                 Silverman, David  
                                 Kim, Scott  
                                 McClellan, John
-

box 15, folder 18

**Mutually Touching Figures (2- & 3-Space) 1947-1980**

**Scope and Contents note**

Cubes, Common 3-D objects, convex (not congruent) (Crum's Problem), Tetrahedra.

MG notes.

Correspondents:

Kim, Scott

James, Leigh

box 15, folder 19

**Cubes [1 of 2] 1958-1976**

**Scope and Contents note**

Pop-up cube (in envelope).

Many cube problems and dissections.

Correspondents:

Luke, Dorman

Conway, John

Hein, Piet

Byther, John

Philpott, Wade

box 15, folder 20

**Cubes [2 of 2] 1965-1997**

**Scope and Contents note**

Correspondents:

Knuth, Donald

Escher, G.A.

Uribe, Diego

box 16, folder 1

**Polyhedra [1 of 2] 1963-1980**

**Scope and Contents note**

Many articles.

MG notes.

Correspondents:

Price, J. Federico

Schwartz, Benjamin

Gott, J. Richard

box 16, folder 2

**Polyhedra [2 of 2] 1981-2001**

**Scope and Contents note**

More articles, etc.

"Origins of Graph Theory", revised outline, Section 7-Polyhedra: Euler's Formula and Section 8- Euler's Theorem (continued), by Federico (?).

box 16, folder 3

**Polyhedra Enumeration (By Faces) [1 of 3] 1961-1980**

**Scope and Contents note**

Many letters (from June, 1961, column), several articles (by Federico)

Correspondents:

Wormald, E.Gordon

Ellis, Ray

Coxeter, H.S.M.

Hayward, Roger

Grunbaum, Branko

Federico, P.J.

McClellan, John

box 16, folder 4

**Polyhedra Enumeration (By Faces) [2 of 3] 1965-1980**

**Scope and Contents note**

More Federico articles & papers.

Correspondents:

Federico, P.J.

McClellan, John

box 16, folder 5

**Polyhedra Enumeration (By Faces) [3 of 3] 1977-1991**

**Scope and Contents note**

More Federico articles.

"On The Enumeration of Convex Polyhedra", by W.T. Tutte, March 1977; Research Report Corr 77/6, U. of Waterloo.

box 16, folder 6

**Unistable Polyhedra 1966-1993**

**Scope and Contents note**

"A Unistable Polyhedron", by Richard Guy, Oct. 1968, Reserach Paper No. 62, U. of Calgary

Correspondents:

Conway, John

Guy, Richard

McClellan, John

Knowlton, Kenneth

box 16, folder 7

**Folding Toroidal Polyhedra 1995**

**Scope and Contents note**

Single article, by Ivars Peterson, from Science News: "Crinklet Doughnuts"

box 16, folder 8

**Buckyballs (Fullerine) 1990-2002**

**Scope and Contents note**

Many articles, from popular science magazines & newspapers.

box 16, folder 9

**Melencolia - Octahedron 1971-1998**

**Scope and Contents note**

About the cube-like figure in Albrecht Durer's "Melencolia" painting.

"Infinite Vision: The Octahedron" - A. Durer, "Melencolia I", by Kazuko Enomoto, exhibition catalogue, 1998 (in Japanese with an English translation booklet.)

Correspondents:

Johansson, Torbjorn

Enomoto, Kazuko

box 16, folder 10

**Tetrahedron Puzzles [1 of 2] 1953-1973**

**Scope and Contents note**

Various problems and puzzles involving tetrahedra - dissecting them, constructing them, various special tetrahedra, origami, etc.

Correspondents:

Klarner, David

Pscheidt, Gordon

Wetzel, John

Beyer, William

box 16, folder 11

**Tetrahedron Puzzles [2 of 2] 1956-1997**

**Scope and Contents note**

National Geographic article on Alexander Graham Bell.

Correspondents:

Trigg, Charles

Franklin, J. Stuart

Hermann, Franz

box 17, folder 1

**Rotating Tetrahedral Rings 1965-1990**

**Scope and Contents note**

IsoAxis, Tumbli, Sphinx, "Overtwisted" chains, Inver-flex, Kalaidocycles, etc.

Several Douglass Engel articles, published and unpublished, on twisting and tetrahedra.

"Vew Vistas in Design", by Sakene Itsuo (excerpt from Graphic Design No. 39, 1970).

Correspondents:

Schattschneider, Doris

Roosevelt, Cornelius Van S.

Engel, Douglas

Best, Wilt

Walker, Wallace

Sharp, John

Hooker, Rea

box 17, folder 2

**Tetrahedron to Cube 1988-1996**

**Scope and Contents note**

3-D fractal (analogous to snowflake curve.)

Scot Morris article (from Omni), and his draft of it.

Correspondents:

Morris, Scot

Gosper, Bill

Coxeter, H.S.M.

Madachy, Joseph

Banchoff, Tom

Schattschneider, Doris

- box 17, folder 3      **Determining Polyhedrons from Orthogonal Projections 1979-1981**  
    **Scope and Contents note**  
    Several articles and research reports (from IBM Research Division), mostly by George Markowsky & Michael Wesley.  
    Correspondents:  
    Wesley, Michael  
    Grossman, David
- box 17, folder 4      **Connelly's Flexible Deltahedron 1977-1998**  
    **Scope and Contents note**  
    Correspondents:  
    Schattschneider, Doris  
    Goldberg, Michael
- box 17, folder 5      **"Jackstraw" Problems (Remove one, not disturbing others) 1984**  
    **Scope and Contents note**  
    1 article on these, by Robert Dawson
- box 17, folder 6      **Volume-Area Paradoxes 1972-1984**  
    **Scope and Contents note**  
    Correspondents:  
    Wyche, Cecil

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### Spheres

**Physical Description:** 12 folder(s)

- box 17, folder 7      **Spheres 1969-1987**  
    **Scope and Contents note**  
    MG notes & referencnes to various sphere problems.  
    "The Baseball Seam Curve", by Mary Krimmel, 1972 (typescript)  
    Correspondents:  
    Hayward, Roger  
    Hallerberg, Arthur  
    Lindgren, Harry  
    Krimmel, Mary  
    Knowlton, Kenneth  
    Pedoe, Dan
- box 17, folder 8      **Geodesics on Distorted Spheres 1992**  
    **Scope and Contents note**  
    2 articles from Science & Siam News, reporting on work of John Franks & Victor Bengert
- box 17, folder 9      **Banach-Tarski Paradox 1989**  
    **Scope and Contents note**  
    Several articles on paradox, and some on Stan Wagon's book on it.  
    MG notes on 3x5 cards.

- box 17, folder 10      **(Spheres) 1995-1997**  
    **Scope and Contents note**  
    Double bubble conjecture.  
    Why are some astronomical bodies not round.  
    Billiard ball puzzle solution, by Naoaki Takashima.
- box 17, folder 11      **Mech. Sphere Puzzles undated**  
    **Scope and Contents note**  
    Leonard Gordon analysis of ball-pyramid puzzles.
- box 17, folder 12      **Misc. Tangent Circle Problems 1957-1968**  
    **Scope and Contents note**  
    MG notes and original problems.  
    Correspondents:  
    Bankoff, Leon
- box 17, folder 13      **The Kiss Precise 1936-1984**  
    **Scope and Contents note**  
    Copy of the original poem, and successors.  
    Also, The Hexlet.
- box 17, folder 14      **The 13-Spheres - in n-Dimensions 1963-2000**  
    **Scope and Contents note**  
    Sphere packing, in various dimensions.  
    Correspondents:  
    Tangen, John  
    Coxeter, H.S.M.
- box 17, folder 15      **Kepler's Conjecture 1984-2000**  
    **Scope and Contents note**  
    Articles on Hsiang's proof and Hales proof.
- box 17, folder 16      **Packing Spheres 1972-2000**  
    **Scope and Contents note**  
    "Close Packing and Cracking", by Bradley R. Miller, U. of Oregon, 1977 (Booklet, partly thesis and partly exhibition catalog.)  
    Various close packing articles, notes, etc: spheres may be different sizes, loosely packed, etc.  
    "Loxodromic Sequences of Tangent Spheres", by H.S.M. Coxeter, 1968 (typescript)
- box 17, folder 17      **Recent Results on Dense Packing in Higher Spaces [1 of 2] 1968-1990**  
    **Scope and Contents note**  
    Many articles & results in sphere packing in higher dimensions (with self-dual codes, lattices, etc.)  
    Correspondents:  
    Leech, John  
    Conway, John

box 17, folder 18

**Recent Results on Dense Packing in Higher Spaces [2 of 2] 1964-1994**

**Scope and Contents note**

More articles & book reviews.

Correspondents:

Coxeter, H.S.M.

Sloane, N.J.A.

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**Tangrams**

**Physical Description:** 16 folder(s)

box 61, folder 1

**Tangrams I (History) Aug/74 1974-1998**

**Scope and Contents note**

Much correspondence for writing Tangram article for SA by MG

Correspondents:

Read, Ronald

Van Note, Peter

Lipscomb, Kenneth

Reis, Richard

Sakane, Itsuo

Slocum, Jerry

box 61, folder 2

**Bibliography 1972-2000**

**Scope and Contents note**

Various lists, references, and ads

box 61, folder 3

**Tangram Solving Computer Programs 1972-1974**

**Scope and Contents note**

Detailed description of tangram solving computer program, from Sam Deutsch (E.S. Deutsch)

"A Computer Solution of Polygonal Jigsaw-Puzzles", by Ejvind Lynning, 1972, 36pp

Correspondents:

Deutsch, E.

box 61, folder 4

**Japanese Version - Sei Shonagon 1974-1977**

**Scope and Contents note**

Bound booklet, photocopied, of "Sei Shonagon Chie-no-ita", consisting of 42 patterns of Sei Shonagon, with answers, 32pp, in Japanese, 16cmx11cm

Correspondents:

Read, R.C.

Hitotumatu, Sin

Sakane, Itsuo

Takagi, Shigeo

box 61, folder 5

**Letter From Italy - Old Chinese MSS? 1986**

**Scope and Contents note**

2 Italian articles

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box 61, folder 6	<b>Tan Patterns &amp; Puzzles 1974-1998</b> <b>Scope and Contents note</b> Lots of tangram patterns, mostly with solutions (some impossible) Correspondents: Ransom, Tom
box 61, folder 7	<b>Tangrams II (Read &amp; Deutsch) Sept/74 1974-1976</b> <b>Scope and Contents note</b> Only a couple of corrections (for book version)
box 61, folder 8	<b>Revised Tangram Columns (For SA Premium) 1976-1978</b> <b>Scope and Contents note</b> Proposed "Tangram Kit" sample, for new subscribers
box 61, folder 9	<b>Mail on the 53 Pentagonal Tangrams 1974-1984</b> <b>Scope and Contents note</b> Many drawings of pentagonal tangrams Correspondents: Read, R.C. Beeler, Mike Hitotumatu, Sin
box 61, folder 10	<b>Snug Hexagons (?) 1977</b> <b>Scope and Contents note</b> Algorithm & program to find 200 snug hexagonal tangrams, by Lyle L. Welch, with results (unchecked) Correspondents: Welch, Lyle
box 61, folder 11	<b>Tan Games (Competitive) 1972</b> <b>Scope and Contents note</b> Game by Lech Pijanowski (in Polish) "Snuggle Up", idea by MG (& Snuggle Down) "Tangoes", by Rex Games, Inc.
box 61, folder 12	<b>Tangram Variants 1963-1999</b> <b>Scope and Contents note</b> Locus of Archimedes (2 Italian articles) "Kingram", designed by Yasuo Kiga Bitangram Solitario Puzzle, designed by Feliceantonio Botta "Six Bits", Victory Patience Puzzle I-Qube Stomachion (Locus of Archimedes) Shinpan Chiye No I'ta Pentagram Pythagram (David Singmaster) Correspondents: Shepherd, Wilfred Howell, Greg

box 61, folder 13

**Read's Work on Tangrams 1962-2002**

**Scope and Contents note**

Correspondence between MG and Ron Read, about writing an article & what would be in it (but NOT the article itself.)

Correspondents:

Read, R.C.

box 61, folder 14

**Puzzle Medley [1 of 3] 1980-1999**

**Scope and Contents note**

(Puzzles collected for a book of that title.)

Many problems, from a great variety of sources, including readers, Car Talk, Ask Marilyn, and many magazines, domestic and foreign

MG notes of problems he has encountered

Correspondents:

Card, L.E.

box 61, folder 15

**Puzzle Medley [2 of 3] 1976-1999**

**Scope and Contents note**

More problems

Correspondents:

Pomerance, Carl

Stewart, Bonnie

Penney, Walter

Golomb, Solomon

Bergerson, Howard

box 61, folder 16

**Puzzle Medley [3 of 3] 1974-1996**

**Scope and Contents note**

More problems`

Correspondents:

Isaacs, Rufus

Smullyan, Raymond

Knuth, Donald

Duncan, Fred

Charosh, Mannis

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**Tesselations**

**Physical Description:** 22 folder(s)

box 14, folder 2

**NOB/Knuth Decagon Packing Problem 1994**

**Scope and Contents note**

Packing 72-72-36 triangles in a decagon

Correspondents:

Knuth, Donald

Yoshagihara, Nob

box 14, folder 3

**Designs by Paulus, Calif. 1963-1977**

**Scope and Contents note**

Jigsaw-type puzzles using shapes that fill a rectangle, etc. Examples of several different styles of "Symbolocks", using alphabet or numerals.

box 14, folder 4

**Penrose Material 1975-1985**

**Scope and Contents note**

Much material from Penrose about Penrose Tilings, as well as MG notes, articles, etc.

Correspondents:

Penrose, Roger

box 14, folder 5

**Tesselations (Mosaics) [1 of 3] 1957-1978**

**Scope and Contents note**

Conway notes on Conway tile, Versa-tiles.

Correspondents:

Brocklebank, R.W.

Alexander, Howard

Weil, Roman

Roosevelt, Cornelius VAn S.

Schattschneider, Doris

box 14, folder 6

**Tesselations (Mosaics) [2 of 3] 1978-1989**

**Scope and Contents note**

Piet Hein, whirling pentagons: aperiodic tilings with similar (but not congruent) shapes.

Various articles, preprints and typescripts.

Correspondents:

Hein, Piet

Klamkin, Murray

Giles, Jack Jr.

Mielke, Paul

Coxeter, H.S.M.

Golomb, Solomon

Wagon, Stan

box 14, folder 7

**Tesselations (Mosaics) [3 of 3] 1980-2000**

**Scope and Contents note**

Several examples of space-filling tilings: by Akira Hamakawa, Peter Raedschelders

Correspondents:

Knuth, Donald

Pegg, Ed Jr.

box 14, folder 8

**Voronoi Cells 1998**

**Scope and Contents note**

Just 2 articles.

box 14, folder 9

**Solid Tesselations 1960-1996**

**Scope and Contents note**

Cross Tesselations.

Space filling crosses, pentahedra, heptahedra, tetrahedra, etc.

Correspondents:

Goldberg, Michael

Hein, Piet

McMillan, Edwin

Gosper, Bill

box 14, folder 10

**Claire Kenney's Cluster Puzzles 1966**

box 14, folder 11

**Huff's "Parquet Deformations" 1975-1977**

**Scope and Contents note**

Correspondents:

Huff, William

box 14, folder 12

**Crystals 1975**

**Scope and Contents note**

"Hierarchies in Crystals", lecture notes by Paul B. Moore.

box 15, folder 1

**Fabrics 1978**

**Scope and Contents note**

"The Geometry of Fabrics", by Branko Grunbaum & G.C. Shephard, Prelim. version, 1978 (mimeograph) (2 copies)

box 15, folder 2

**Octagon (NYR) 1982**

**Scope and Contents note**

(NYR = New York Review of Books.)

Octagons, warped octagons, luxated octagons.

Correspondents:

Shapiro, Raymond

box 15, folder 3

**R-Morphic Prototiles (Tile in Just R Ways) 1982-1983**

**Scope and Contents note**

Correspondents:

Ammann, Robert

box 15, folder 4

**Tiling Rectangles 1987-1998**

**Scope and Contents note**

Wagon's 14 proofs that a rectangle tiled with smaller rectangles with an integral side, must have at least 1 pair of integral sides.

Filling boxes with bricks.

box 15, folder 5

**Rectangles with Rectangles (Graham, Fan, etc) undated**

**Scope and Contents note**

Tiling an integer-sided rectangle with smaller integer-sided rectangles which do not combine to form any subrectangle.

box 15, folder 6

**Shmuzzles undated**

**Scope and Contents note**

Mostly advertizing flyers and instruction pamphlets

box 15, folder 7

**Alan Schoen - Cyclotome 1979**

**Scope and Contents note**

Tiling polygons with sets of rhombuses (or pairs, etc, of rhombuses) with same edge length (as polygon), but different shapes.

"The Cyclotome Puzzles" - analyses of cyclotomes, by Alan Schoen (typescript)

"Tiling A Regular  $2n$ -Gon with  $[n/2]$  Rhombs and Pairs of Rhombs with no Two Pieces Alike", by Alan Schoen, 64pp (typescript)

Correspondents:

Schoen, Alan

box 15, folder 8

**George Woodman 1975**

**Scope and Contents note**

Tesselation pictures, a la Escher.

box 15, folder 9

**Osborn's Tesselations 1988-1996**

**Scope and Contents note**

Many Escher-like tesselations.

Correspondents:

Osborn, John

box 15, folder 10

**Peter Curzon 1992**

**Scope and Contents note**

Geometrical tilings, many with 5-fold symmetry.

Correspondents:

Curzon, Peter

box 15, folder 11

**Peter Raedschelders 1993**

**Scope and Contents note**

3 signed prints of his (hyperbolic?) pentagon tilings.

Correspondents:

Raedschelders, Peter

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**TickTackToe**

**Physical Description:** 22 folder(s)

box 34, folder 5

**Golomb's Hypercube TTT 2000**

**Scope and Contents note**

"Hypercube Tic-Tac-Toe", by Solomon Golomb & Alfred Hales, 2000 (typescript).  
(Paper from MSRI Conference on mathematical games.)

box 34, folder 6

**4x4x4 ( & higher) 1961-2000**

**Scope and Contents note**

Much analysis

Correspondents:

Banerji, Ranan

Patashnik, Oren

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box 34, folder 7

**Patashnik's Proof for 4x4x4 1978-1982**

**Scope and Contents note**

"A Qubic Solution", by Oren Patashnik (comp. printout)

Correspondents:

Patashnik, Oren

Berlekamp, Elwyn

Beeler, Michael

box 34, folder 8

**TTTj General 1877-2000**

**Scope and Contents note**

References, history, analysis (by MG)

"The Science of Naughts and Crosses", by A. Wrangler, 1877, an article from The Boys Own Paper (earliest analysis)

Some ads, cartoons, stamps, etc, featuring TTT

box 34, folder 9

**Numbers TTT 1956-1996**

**Scope and Contents note**

"Numerical Tic-Tac-Toe", by George Markowsky - 2 drafts, and correspondence concerning them.

Various variants, by Graham, Nygaard, James Rosenberg ("Hyper-Tic-Tac-Toe"), Keith Gunn, Ted Lau

Correspondents:

Markowsky, George

Graham, Ron

Nygaard, P.H.

box 34, folder 10

**Random TTT 1959-1982**

**Scope and Contents note**

Gambling Tic-Tac-Toe (Frank Tapson)

Tic-Tac-Toe as a Game of Chance

Correspondents:

Harary, Frank

Landau, Remy

box 34, folder 11

**Circular Boards 1970-1974**

**Scope and Contents note**

Several versions

box 34, folder 12

**Linear TTT undated**

**Scope and Contents note**

MG notes

box 34, folder 13

**Wild TTT & Reverse Wild TTT 1964**

**Scope and Contents note**

Correspondents:

Golomb, Solomon

Abbott, Robert

Austin, A.K.

Shepherd, Wilfred H.

box 34, folder 14

**4D TTT 1957-1978**

**Scope and Contents note**

4-Dimensional Tic-Tac-Toe

"4th Dimensional Tic Tac Toe", by Russell Dalby, 1972, instructions, examples and many game sheets (spiral bound booklet)

"Variants and Generalizations of Tic-Tac-Toe", by Solomon Golomb, 1964 (mimeograph)

Proofs of 1st player win on order-4 hypercube

MG notes

Correspondents:

Dalby, Russell

Stiennon, O. Arthur

Funkenbusch, William

Golomb, Solomon

Paul, Jerome

box 34, folder 15

**Larger & Smaller Grids TTT 1957-1993**

**Scope and Contents note**

Taktik

MG notes

box 34, folder 16

**Misc Variants 1962-1989**

**Scope and Contents note**

Reverse TTT

MG notes

Games & Puzzles from A.K. Austin: Rolling Cube Puzzles, Game of Path, Path Patience, Game of Pathex, Game of Branch

"O & X, A Book of Games", by Frank Tapson, 1973 (booklet)

Correspondents:

Silverman, David

Stevenson, Paul

box 35, folder 1

**Two-Sided Counters 1965-1974**

**Scope and Contents note**

Notes on original MG idea

TAU

Correspondents:

Austin, A.K.

box 35, folder 2

**Original Ideas for Games & Sets, Etc. 1941-1968**

**Scope and Contents note**

Enlarged Magic set

Game based on Wizard of Oz

Strong Man Box

House Game (1941)

Clown game (based on Garter trick)

box 35, folder 3

**TTT Magic 1956-1982**

**Scope and Contents note**

A Thorson trick

Tic-Tac-Toe Super mental stunt, by "Printz"

Polish Epic

Correspondents:

Webb, Walter

box 35, folder 4

**3D Variants 1970-1971**

**Scope and Contents note**

Cube Fusion

MG notes on his original

Correspondents:

Shepherd, Witt.

box 35, folder 5

**3x3x3 1959-1975**

**Scope and Contents note**

MG notes

Correspondents:

Morgan, John

Simmons, Gustavus

Moser, Leo

Ondrejka, Rudolf

box 35, folder 6

**Moving Counters TTT 1957-1993**

**Scope and Contents note**

MG notes

Teeko

Tic-Tackle

Correspondents:

Austin, A.K.

box 35, folder 7

**Go-Moku 1971-1997**

**Scope and Contents note**

MG notes

Renju

Go-Bang

Morpion Solitaire

Correspondents:

Richards, Dana

Stover, Mel

Wang, Shein

Comfort, John

Lunnon, W.F.

Leech, John

Patashnik, Oren



box 35, folder 8

**Tit-Tat-Toe "Machines" 1955-1989**

**Scope and Contents note**

Autotac

Correspondents:

Mott-Smith, Geoffrey

box 35, folder 9

**TTT Isomorphs 1963-1966**

**Scope and Contents note**

Moser's Hot

Jam

"Isomorphism Through Tic-Tac-Toe", by David Page, 25pp (mimeograph)

"The Game of Jam - An Isomorph of Tic Tac Toe", by John Michon, 7pp (typescript)

box 35, folder 10

**Variant Boards (Graphs) 195401996**

**Scope and Contents note**

Correspondents:

Shepherd, Wilfred

Hein, Piet

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**Topology**

**Physical Description:** 12 folder(s)

box 18, folder 10

**Annulus Conjecture & Horned Sphere 1964-1969**

**Scope and Contents note**

Several postcards of Helaman Ferguson sculptures.

"The Topological Concept of Space", by A.W. Tucker (booklet)

Correspondents:

Milnor, John

Flanagan, Dennis

Stewart, Ian

box 18, folder 11

**Antoine's Necklace 1988**

**Scope and Contents note**

Single article, from college Math Journal, Sep. '88, by Beverly Brechner.

box 18, folder 12

**Bandwidth Problem 1982**

**Scope and Contents note**

Single survey article, Journal of Graph Theory, Chinn, Chvataluva, Dewney, Gibbs

box 18, folder 13

**Moebius Strip Molecules 1982-1983**

**Scope and Contents note**

Several (short) articles about Moebius strip molecules and their discovery

"Magic and Molecule", short article by MG (typescript)

box 18, folder 14

**Poincare Conjecture 1976-2002**

**Scope and Contents note**

Various articles on the conjecture, reports of its proof (by rourke), and refutations of that proof.

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box 18, folder 15	<p><b>N.Y.R. of Catast. Th. 1969-1981</b></p> <p><b>Scope and Contents note</b></p> <p>MG's review of 4 books on Catastrophe Theory from The New York Review of Books, 1978, and correspondence about it. (The review is itself missing a page.)</p> <p>Pictures of "escargot hyperbolique" and "escargot elliptique"</p> <p>Correspondents:</p> <p>Zahler, Raphael</p> <p>Davis, Monte</p> <p>Stewart, Ian</p>
box 18, folder 16	<p><b>Inside-Out Sphere 1965-1998</b></p> <p><b>Scope and Contents note</b></p> <p>Turning the Sphere Inside Out - Scientific American article, ads for Internationa Film Bureau film (Nelson Mx), Inside Out review</p> <p>Correspondents:</p> <p>Phillips, Anthony</p>
box 18, folder 17	<p><b>Fixed Point Problems 1965-1985</b></p> <p><b>Scope and Contents note</b></p> <p>Correspondents:</p> <p>Garson, James</p>
box 18, folder 18	<p><b>Sperner's Lemma &amp; Balanced Rod 1975-1996</b></p> <p><b>Scope and Contents note</b></p> <p>Notes and articles on Courant &amp; Robbins's problem of balancing a rod on a moving platform.</p>
box 18, folder 19	<p><b>Catastrophe Theory (Thom) 1974-1987</b></p> <p><b>Scope and Contents note</b></p> <p>Mostly articles &amp; a few references</p>
box 18, folder 20	<p><b>Criticisms of C.T. (Catastrophe Theory) 1976-1978</b></p> <p><b>Scope and Contents note</b></p> <p>Correspondents:</p> <p>Sussman, Hector</p> <p>Poston, Tim</p> <p>Stewart, Ian</p>
box 19, folder 1	<p><b>Dirac's Scissors &amp; Cable Twisting, Etc 1959-1997</b></p> <p><b>Scope and Contents note</b></p> <p>Two rotations cancelling twist: in string, cable, etc, and the relation to spinors &amp; twistors</p> <p>"Boros the Boa", by Bob Neale (magic trick) (typescript)</p> <p>Note on Dirac's original presentation</p> <p>"The Tangled Scissors", magic trick (typescript)</p> <p>"Direct Energy Communication Between Continuously Rotating and Stationalry Platforms", by D.A. Adams, cardboard &amp; string model of Dirac Scissors</p> <p>Correspondents:</p> <p>Neale, Robert</p> <p>Adams, D.A.</p> <p>Dirac, P.A.M.</p>

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**Types of Numbers (Alphabetized)**

**Physical Description:** 32 folder(s)

box 7, folder 1

**Misc. No. types 1970-1991**

**Scope and Contents note**

Friendly vs Solitary  
U-Numbers, Mu-Numbers  
Powerful Numbers, Self-Powerful Numbers  
Harshad No's  
Exotic Numbers  
Rephigit Numbers  
SUNS (Smoothly Undulating Number)  
Robbins Numbers  
Weird Numbers  
Correspondents:  
Recaman, Bernardo  
Schwartz, Benjamin

box 7, folder 2

**Automorphic Numbers [ 1 of 2 ] 1962-1991**

**Scope and Contents note**

1000 digit automorphs in various bases (& more)  
Correspondents:  
McMillan, Edwin  
Baker, Kirby  
Fairbairn, R.  
Feser, Victor  
Katsanix, Ted  
Hooven, Frederick  
Morris, Larry Dean

box 7, folder 3

**Automorphic Numbers [ 2 of 2 ] 1972**

**Scope and Contents note**

"A Study of Some Recurrence Formulae Associated With Mersenne Numbers and Chebyshev Polynomials", by Staffan Wrigge, 1972 (Peport, 85pp.)

box 7, folder 4

**Bernoulli No's 1997**

**Scope and Contents note**

2 articles (by Kenneth Williams & by S.C. Woon)

box 7, folder 5

**Carmichael No's 1992-1994**

box 7, folder 6

**Congruent No's 1972-1974**

box 7, folder 7

**Factorials 1967-1997**

**Scope and Contents note**

S.A. Math. Games article from Aug. 1967

MG notes (called "Serious Material" & "Recreational Material")

"Tables of  $n!$  and  $\text{GAMMA}(n+1/2)$  for the First Thousand Values of  $n$ ", by Herbert Salzer, Bureau of Standards, 1951 (pamphlet)

Correspondents:

Simmons, Gustavus

Huffman, Dean

Knuth, Donald

Trigg, Charles

Madachy, Joseph

Singmaster, David

Alexanderson, G.L.

Kraus, Alexander

box 7, folder 8

**Farey No's undated**

box 7, folder 9

**Fibonacci No's 1981**

**Scope and Contents note**

Not much here -- see folders 6/6-6/9 instead.

Letter from Gerard Bergum about Vern Hoggatt's death.

box 7, folder 10

**Kaprekar No's 1988**

box 7, folder 11

**Joseph Liouville No's (1809-1882)(Frenchman) 1976**

box 7, folder 12

**Many Factors No's (eg. Plato's 5040) undated**

**Scope and Contents note**

"Versatile Numbers", by William Lauritzen (typescript)

box 7, folder 13

**Modest No's 1983-1985**

**Scope and Contents note**

Correspondents:

Havermann, Hans

box 7, folder 14

**Niven No's 1984-1989**

box 7, folder 15

**P-Adic Numbers 1976-1996**

**Scope and Contents note**

Correspondents:

Bernhart, Frank

box 7, folder 16

**Palindromes 1988-2000**

**Scope and Contents note**

"On Palindromic Numbers and Their Divisibility by 11", by R.M. Sternheimer, 1990 (typescript)

Correspondents:

Owen ? (from Ireland)

box 7, folder 17

**Palindromic Squares 1962-1986**

**Scope and Contents note**

Correspondents:

Ondrejka, Rudolf

box 7, folder 18

**Par Numbers 1967**

**Scope and Contents note**

Mostly a rather long computer listing.

Correspondents:

Parmenter, Frederick

box 7, folder 19

**Numbers That are Sums of the Cubes (etc) of Digits (PDI's) 1963-1998**

**Scope and Contents note**

Narcissistic numbers

"Self Generating Integers and Extended Self Generating Integers", by B.L. Schwartz (typescript)

Correspondents:

Madachy, Joseph

Chilton, Stephen

Deimel, Lionel

Schwartz, Benjamin

Isaacs, Anthony

box 7, folder 20

**Persistent Numbers (Keep Multiplying Digits) 1973-1997**

**Scope and Contents note**

Correspondents:

Penszko, Marek

box 7, folder 21

**Quaternions 1965-1989**

**Scope and Contents note**

"Vectors Verses Quaternions", by Alfred Bork (mimeograph)

"DeMorgan's Field of Triplets", by David Schaller (?) (manuscript)

box 7, folder 22

**Samoan Numbers 1968**

**Scope and Contents note**

"On Genealogical Trees Containing Quadratic Residues", by Birger Jansson, 1968 (typescript)

box 7, folder 23

**Smith Numbers 1982-2002**

**Scope and Contents note**

Correspondents:

Yates, Samuel

Lee, Elvin

Trigg, Charles

box 8, folder 1

**S-P Numbers (Sum & Product) undated**

**Scope and Contents note**

Article, by A.F. Beardon (no date)

box 8, folder 2

**Square Numbers & Sq. Roots 1963-2001**

**Scope and Contents note**

Lots of MG notes.

Trigg on his "Mathematical Quickies"

Correspondents:

Aehle, Truman

Metzger, James

Madachy, Joseph

Cheney, Fitch

Trigg, Charles

Brackney, r.L.

Ondrejka, Rudolf

box 8, folder 3

**Cubes & Higher Powers 1958-1997**

**Scope and Contents note**

Correspondents:

Allen, Kenneth

Pugh, Henry

Goldberg, Michael

box 8, folder 4

**Powers (Mod M) 1994-1999**

box 8, folder 5

**Figurates 1989-1998**

**Scope and Contents note**

"On Figurate Numbers", by Istvan Gaal & Akos Pinter, Tech Report No. 93/78, 1993

box 8, folder 6

**Tetrahedral Numbers 1958-1991**

box 8, folder 7

**Triangular No's 1980-2000**

box 8, folder 8

**Polyhedral No's 1994**

box 8, folder 9

**Vampire No's 1995**

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**Word Play**

**Physical Description:** 51 folder(s)

box 63, folder 15

**Chess Spells, ONE->NINE 1995**

**Scope and Contents note**

About arranging letters in a grid, so you can spell out numbers

Correspondents:

Eckler, Ross

box 63, folder 16

**Alphabet (Letter Fun) 1996**

**Scope and Contents note**

Correspondents:

Golomb, Solomon

box 63, folder 17

**ABC Lists & Books 1993**

**Scope and Contents note**

Alphabet books (& lists)

box 63, folder 18

**Ashleigh Brilliant 1987-1992**

**Scope and Contents note**

Pot-Shots

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box 63, folder 19

**Borgmann, Dmitri 1965-1998**

**Scope and Contents note**

Correspondents:

Eckler, Ross

Borgmann, Dmitri

box 63, folder 20

**J. A. Lindon [1 of 2] 1966-1987**

**Scope and Contents note**

Much humorous poetry (mostly undated)

Articles from Worm Runners Digest

"Behind the Surface", by J.A. Lindon, a fancasy (10pp) (typescript)

Correspondents:

Lindon, J.A.

box 63, folder 21

**J. A. Lindon [2 of 2] 1965-1995**

**Scope and Contents note**

Star numbers

More poetry, mostly humorous, some math-related

Correspondents:

Lindon, J.A.

box 63, folder 22

**Palindromes [1 of 2] 1961-1978**

**Scope and Contents note**

Many palindromes, articles on palindromes, articles about people who specialize in palindromes, etc.

Some J.A. Lindon poetry & palindromes

"The Poetics of the Palindrome", by Gary Coen, 1977, 44p (typescript)

Correspondents:

Lindon, J.A.

Mercer, Leigh

box 63, folder 23

**Palindromes [2 of 2] 1967-1999**

**Scope and Contents note**

"Llet's PLLay LLama", by Howard Nottage, 1968 (booklet)

Correspondents:

Hunt, Patrick

Dickson, Paul

Eckler, Ross

Hein, Piet

Morice, Dave

Golomb, Solomon

box 64, folder 1

**Palindrome Poetry 1963-1999**

**Scope and Contents note**

"Party Trap", by Jennifer Curtis, 1984, 6pp (booklet)

Correspondents:

Lindon, J.A.

Bergerson, Howard

box 64, folder 2

**S & S Crossword Book - Introduction 1925-1973**

**Scope and Contents note**

Introduction to Simon & Schusters "Crosswords Sereies 107"

Some references

Lots of newspaper articles, most on history and popularity of crossword puzzles

First draft of intorduction

Correspondents:

Barrow, Helen

Farrar, Margaret

box 64, folder 3

**"Double Crostic" 1966-1979**

**Scope and Contents note**

Articles, obituaries

box 64, folder 4

**Anagrams [1 of 2] 1960-1999**

**Scope and Contents note**

Many anagrams, various types

"Bibliography of Studies Employing Anagrams", by Charles Haertzen, 1965 (typescript)

Translation of "Memory, Dreams, Reflections", by C.G. Jung, Appendix V (anagrams at end) (photocoy)

"On Computing Anagrams", by James A. Wood, 1984 (typescript)

Correspondents:

Borgmann, Dmitri

Card, L.E.

Swinford, Paul

Francis, Darryl

Golomb, Solomon\

Woods, James

box 64, folder 5

**Anagrams [2 of 2] 1999-2000**

**Scope and Contents note**

Computer listing of single word anagrams, from Guy Steele, 1999

box 64, folder 6

**Word Shifts 1961-1993**

**Scope and Contents note**

Correspondents:

Mercer, Leigh

Borgmann, Dmitri

box 64, folder 7

**Qwerty 1998**

**Scope and Contents note**

1 article (photocopy)

box 64, folder 8

**Person Names 1964-1993**

**Scope and Contents note**

Regular people

Promenent people

Non-existant people, and books, etc.

Correspondents:

McGovern, Eugene

Dickson, Paul



box 64, folder 9

**Place Names 1966-1993**

**Scope and Contents note**

Correspondents:  
Dickson, Paul

box 64, folder 10

**Acrostics 1961-1969**

**Scope and Contents note**

Correspondents:  
Mercer, Leigh  
Borgmann, Dmitri  
Lindon, J.A.

box 64, folder 11

**King's Tour Spelling Matrices 1968-1969**

**Scope and Contents note**

Methods of making these  
Correspondents:  
Munson, John  
Kruskal, Martin

box 64, folder 12

box 64, folder 13

**Acronyms 1961-1988**

**Bombaugh Project 1959-1979**

**Scope and Contents note**

For annotated edition of "Gleanings for the Curious", by C.C. Bombough (published as "Oddities and Curiosities")  
Notes from National Puzzlers' League  
Correspondents:  
Hooke, robert  
Mercer, Leigh

box 64, folder 14

**Bombaugh - Revisions 1969-1970**

**Scope and Contents note**

Correspondents:  
Coulthard, John  
Mercer, Leigh  
Singleton, C.R.J.  
Borgmann, Dmitri  
Petroski, Henry

box 64, folder 15

box 64, folder 16

box 64, folder 17

**Long Words 1959-1965**

**Spoonerisms 1957-1994**

**Unusual Words 1960-1995**

**Scope and Contents note**

Mostly, havning unusual properties  
Correspondents:  
Neale, Robert  
Knuth, Donald  
Dickson, Paul  
Gosper, Bill  
Newby, Peter

box 64, folder 18  
box 65, folder 1

**Tom Swifties & Elephant Jokes 1963-1983**  
**Punw 1961-1999**

**Scope and Contents note**

Correspondents:  
Lindon, John

box 65, folder 2  
box 65, folder 3

**CDB Language 1981**  
**Knock, Knock 1936-1981**

**Scope and Contents note**

"Knock Knock Featuring Enoch Knox", by Bob Dunn, 1936, Whitman Publishing  
"Knock, Knock - Who's There?", words by Jimmy Tyson & Bill Davies, Music by Vincent Lopez & Johnny Morris, 1936 (sheet music)

box 65, folder 4

**Eodermdromes 1991**

**Scope and Contents note**

Non-planar spelling nets  
Correspondents:  
Bloom, Gary

box 65, folder 5

**Unusual Poems 1960-2000**

**Scope and Contents note**

Many kinds of poems, including:  
Short Verse (2 or 3 words)  
Clerihew's  
Flexigon Poems  
Limericks

box 65, folder 6

**Pangrams 1960-1992**

**Scope and Contents note**

Correspondents:  
Mercer, Leigh

box 65, folder 7

**Lee Sallows Pangrams 1983-1994**

**Scope and Contents note**

Sallows pangram machine - checks pangrams (Autograms) of the form "This pangram contains five a's, ..., and six z's".  
"In quest of a Pangram", by Lee Sallows, 1984, 33pp (pamphlet)

box 65, folder 8

**Skellings' Color Poems 1979**

**Scope and Contents note**

Correspondents:  
Skellings, Edmund

box 65, folder 9

**Lipograms 1952-1995**

**Scope and Contents note**

An "E"-less technical article  
An "it"-less technical article, by Norman Gridgeman

box 65, folder 10

**Shaped Verse 1961-1983**

**Scope and Contents note**

Correspondents:  
Hein, Piet

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- box 65, folder 11      **Garbled Verse Project 1972-1983**  
    **Scope and Contents note**  
    Correspondents:  
    Eckler, Ross  
    Lindon, J.A.  
    Cousins, Norman
- box 65, folder 12      **Word Squares - Palindormic & Latin 1963-1964**  
    **Scope and Contents note**  
    Correspondents:  
    Card, L.E.  
    Golomb, Solomon
- box 65, folder 13      **Sator, Arepo 1957-1982**  
    **Scope and Contents note**  
    "The Cirencester Word-Square", by Donald Atkinson, 1964, 34pp (booklet)  
    Correspondents:  
    Mercer, Leigh
- box 65, folder 14      **Cryptography, codes 1973-1999**  
    **Scope and Contents note**  
    Correspondents:  
    Kahn, David
- box 65, folder 15      **Beale Cipher 1972-1981**  
    **Scope and Contents note**  
    "The Beale Ciphers", The Beale Cypher Association, 1978, 50pp (pamphlet)
- box 66, folder 1      **Voynich MSS. 1988-2000**  
    **Scope and Contents note**  
    Some articles about MSS itself and about books concerning it  
    "The Voynich Manuscript: An Elegant Enigma", by M.E. D'Imperio, 1978, 140pp (photocopy)
- box 66, folder 2      **Raymond Roussel 1974-1995**  
    **Scope and Contents note**  
    Photocopies of articles on and by him
- box 66, folder 3      **California Zodiac Murders 1981-1990**  
    **Scope and Contents note**  
    Articles (by Gareth Penn) on Zodiac killers' cyphers  
    Correspondents:  
    Penn, Gareth
- box 66, folder 4      **N.Y. Zodiac Copycat 1996**  
    **Scope and Contents note**  
    Some web pages on New York Zodiac Killer
- box 66, folder 5      **Mrs. Herndon's Decoding 1996**  
    **Scope and Contents note**  
    Of Zodiac cryptograms
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|------------------|---|
| box 66, folder 6 | <p><b>Misc. Word Play [ 1of 4] 1963-1985</b><br/> <b>Scope and Contents note</b><br/> Correspondents:<br/> Borgmann, Dmitri</p>   |
| box 66, folder 7 | <p><b>Misc. Word Play [2 of 4] 1959-1993</b><br/> <b>Scope and Contents note</b><br/> "Speechstuff and Thoughtstuff", by Douglas Hofstadter, 36pp (typescript)<br/> Jack Green periodical, preliminary edition<br/> Correspondents:<br/> Browne, Owens Hand<br/> Borgmann, Dmitri</p> |
| box 66, folder 8 | <p><b>Misc. Word Play [3 of 4] 1959-1982</b><br/> <b>Scope and Contents note</b><br/> Correspondents:<br/> Barr, Steven<br/> O'Beirne, Thomas<br/> Weaver, Warren<br/> Lindon, J.A.<br/> Golomb, Solomon<br/> Legman, Gershon<br/> Gilmer, robert</p>                                 |
| box 66, folder 9 | <p><b>Misc. Word Play [4 of 4] 1956-1983</b><br/> <b>Scope and Contents note</b><br/> Section with much early (50's) wordplay from Dmitri Borgmann<br/> Correspondents:<br/> Mercer, Leigh<br/> Tompkins, Pendleton<br/> Borgmann, Dmitri</p>   |

**Additional papers Series 3**

**Puzzles**

- |                  |  |
|------------------|--|
| box 1, folder 1  | <b>Jerry Slocum, Directory of Puzzle Collectors Puzzle Sellers 35431</b>   |
| box 1, folder 2  | <b>Jerry Slocum, Directory of Puzzle Collectors and Puzzle Sellers 34425</b>                                       |
| box 1, folder 3  | <b>Jerry Slocum, Compendium of Checkerboard Puzzles 30407</b>  |
| box 1, folder 4  | <b>Jerry Slocum and Jacques Haubrich, Compendium of Checkerboard Puzzles 34182</b>                                 |
| box 1, folder 5  | <b>Jerry Slocum and Dieter Gebhardt, Puzzles from Catel's Caibnet and BEstelmeier's Magazine 1785 to 1823 1997</b> |
| box 1, folder 6  | <b>Jerry Slocum, Wire Puzzles Ch'ung-en Yu</b>   |
| box 1, folder 7  | <b>Ruan Liuqi, the Ingenious Puzzle Craftsman of Suzhou; edited by Wei Zhang and Peter Rasmussen circa 1998</b>    |
| box 1, folder 8  | <b>Die 12 Verhext - Steine Zimpfer Puzzles</b>   |
| box 1, folder 9  | <b>Stewart T. Coffin, Puzzle Craft 1981</b>  |
| box 1, folder 10 | <b>Stewart T. Coffin, Wooden Puzzles 1984</b>  |
| box 1, folder 11 | <b>William A. Miller, The Official Handbook for Peg Solitaire 1979</b>   |
| box 1, folder 12 | <b>Sivy Farhi, projected book on the soma cube, with letter and c.v. 1982</b>                                      |
| box 1, folder 13 | <b>James Dalgety, R. Journet and Company; a Brief History of the Company and Its Puzzles 1989</b>                  |
| box 1, folder 14 | <b>Norman L. Sandfield, Chinese Ceramic Puzzle Vessels Feb. 2000</b>   |

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box 1, folder 15	<b>gamepuzzles for the joy of thinking - catalogs 1993-1999</b>
box 1, folder 16	<b>Multimatch I, II, III, IV Game rules / puzzle designs</b>
box 1, folder 17	<b>Miscellaneous items</b>
box 2	<b>Mind-bending puzzles by Terry Stickels, a 365-day calendar [4 items] 1997, 1999-2001</b>
box 2	<b>Visual Brain Storms, the Smart Thinking Game</b>
box 2	<b>Tangoes, the Ancient Chinese Puzzle Game with training guide</b>
box 2	<b>Word Trek, An Adventure from Start to Finish</b>
box 2	<b>Puzzle pieces for TANGRAM [2 unopened items]</b>
box 2	<b>Karl Fulves, Punch-Out Puzzle Kit</b>
box 2	<b>Mathematical curiosities 1, a collection of interesting and curious models...ready to cut out and glue together</b>
box 2	<b>Magnificent Mazes 1980 Appointment Calendar</b>
box 2	<b>Two games using Escher images</b>
box 3, folder 1	<b>Notebook on Calculus - Probability - Infinite numbers</b>
box 3, folder 2	<b>M. C. Escher address book with letter from Gardner to Frank Harary relating his own Escher artworks 1996</b>
	<b>Additional papers</b> Accession ARCH-2003-016
box 1	<b>Books and articles by or about Martin Gardner, Lewis Carroll; annotated editions of <i>Alice in Wonderland</i>, <i>The Hunting of the Snark</i>, etc.</b>
box 2	<b>Gardner, Martin, <i>The Flight of Peter Fromm</i></b> <b>Scope and Contents</b> Original manuscript (edited), galley proofs, etc.
box 3	<b>Materials re: <i>The Hunting of the Snark</i></b>
box 4	<b>Materials re: <i>The Flight of Peter Fromm</i>, the annotated centennial edition of Lewis Carroll's <i>The Hunting of the Snark</i></b>
box 5	<b>Books re: Lewis Carroll</b>
	<b>Additional papers</b> Accession ARCH-2018-018
box 1, folder 1	<b>Pentominoes 6 x 10</b>
box 1, folder 2	<b>Cutler, Bill, "A computer analysis of all 6-piece burrs" 1994</b>
box 1, folder 3	<b>Pentominoes 4 x 15</b>
box 1, folder 4	<b>Pentominoes 5 x 12</b>
box 1, folder 5	<b>Pentominoes 6 x 10</b>
box 1, folder 6	<b>Bouwkamp, C. J., "Catalog of solutions of the rectangular 3x4x5 solid pentomino problem" 1967 Jul</b>
box 1, folder 7	<b>Bouwkamp, C. J. and A. J. W. Duijvestijn, "Catalogue of simple perfect squared squares of orders 21, through 25" 1992 Nov</b>
box 1, folder 8	<b>HEXED circa 1960</b>
box 1, folder 9	<b>Pentomino workshop, Batavia, IL 1986 Dec 2</b>
box 1, folder 10	<b>Tribute to Piet Hein; Rube Goldberg Inventions circa 1997</b>
box 1, folder 11	<b>Design Science Toys 1993</b>
box 1, folder 12	<b>Pentominoes Workshop correspondence</b>
box 1, folder 13	<b>AGATE "Mathematics for gifted students" v.3, no.1 1989 Spring</b>
box 1, folder 14	<b>Wilson, Marguerite, "SOMA puzzle solutions" 1973</b>
box 1, folder 15	<b>Computer printouts</b>
box 1, folder 16	<b>EWS Collectors Evening 1992 May 14</b>
box 1, folder 17	<b>Pentomino solutions 1963 Jun-Jul</b>
box 1, folder 18	<b>Fontaine, Anne, "An infinite number of plane figures with Heesch Number Two"</b>
box 1, folder 19	<b>Golomb, Solomon, "Max Delbruck: an appreciation" 1982 Summer</b>
box 1, folder 20	<b>World Game Review - Special issue on polyforms 1989 Dec</b>
box 1, folder 21	<b>Articles in tribute to Martin Gardner 1993</b>
box 1, folder 22	<b>Gardner Atlanta gathering 1993</b>
box 1, folder 23	<b>Dedicated to M.G. by NOB 1993 Jan</b>
	<b>Additional papers</b> Accession ARCH-2019-179

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Box 1	<b>Various math and puzzle publications</b>
box 1	<b>AAAS Teaching Notes</b>
box 1	<b>Hakmem 1972 Feb 29</b>
box 1	<b>Jamnitzer, Wenzel, "Perspectiva Corporum Regularium"</b>
box 1	<b>Reprints</b>
box 1	<b>Blackjack Forum 2000 Spring</b>
Box 1	<b>Miscellaneous correspondence</b>
Box 2	<b>Adventures in Perception &amp; Maurits Escher: Painter of Fantasies 1_01</b> <b>Physical Description:</b> 1 videotape(s) (vhs)
Box 2	<b>Escher: Art &amp; Math 1_02</b> <b>Physical Description:</b> 1 videotape(s) (vhs)
Box 2	<b>Air on the Dirac Strings - University of Illinois at Chicago &amp; Urbana-Champaign 1_03</b> <b>Physical Description:</b> 1 videotape(s) (vhs)
Box 2	<b>Ed Hordern 1_04</b> <b>Physical Description:</b> 1 videotape(s) (vhs)
Box 2	<b>N is a Number - A Portrait of Pal Erdős 1_05</b> <b>Physical Description:</b> 1 videotape(s) (vhs)