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## Title word cross-reference

#12355 [100]. #5375 [454]. #7672 [640].  
 $(BA^2B)^{1/2} \geq B^2$  [716]. 1 [752]. 21 – 6 = 15  
[481].  $2 \times 2$  [291].  $3x + 1$  [625, 388]. 8 [305].  
 $> 1$  [606].  $[0, 1]^\omega$  [47].  $a = b$  [584].  $a^{r+s} \equiv a^r$   
(mod  $m$ ) [100, 3].  $A_5$  [666, 422, 421, 332].  
 $AB - BA = I$  [637].  $A \geq B \geq 0$  [716].  $a$   
(mod  $p$ )  $\leq b$  (mod  $p$ ) [584].  $AX - XB = C$   
[368].  $C$  [301, 606].  $C(\mathbf{R})$  [540, 616].  
 $C^* \approx S^1$  [266].  $C^\infty$  [302].  $\cos f(x) = f(\sin x)$   
[490].  $e$  [561].  $E^3$  [24].  $E^n$  [113].  $e^x$  [45].  
 $\exp(\sum_{k=0}^{\infty} a_k z^k)$  [347].  $f$  [542].  
 $f(f(z)) = az^2 + bz + c$  [31].  $\gamma$  [627].  
 $i^2 + 1 = 0$  [657].  $J$  [733].  $k$  [502, 476, 93, 61].  
 $L^p(\mu)$  [268].  $L^p(\mu) \subset L^q(\mu)$  [444].  $L^q(\mu)$

[268].  $n$  [748, 48, 781, 531, 136, 719, 772, 396, 649, 93, 219, 61, 600].  $\nabla f(x) = 0$  [542].  $n \times n$  [553].  $p$  [460, 584, 17].  $\pi$  [821, 684, 561].  $\pi^4$  [517].  $P \neq NP$  [262].  $\mathbf{R}$  [319].  $\mathbf{R}^2$  [307].  $\mathbf{R}^3$  [310, 736].  $\rho = 0$  [487].  $\rho^2 + \rho + 1 = 0$  [657].  
 $S^1$  [305].  $S^3$  [305].  $S_6$  [229].  $\sin x/x$  [13].  
 $\sum 1/p$  [52].  $\sum_{n=1}^{\infty} 1/n^2 = \pi^2/6$  [620].  
 $T^{n+1}x - T^n x \rightarrow 0$  [95].  $\varphi$  [299].  $|r|$  [487].  $|x|$  [250, 726].  $x$  [542].  $x' = Ax$  [424].  
 $X^2 + 7 = 2^n$  [574].  $x^2 + y^m = z^{2n}$  [683].  
 $x^2 + y^m = z^{2n}$  [813].  $xyz = x + y + z = 1$  [248].  $Z_m$  [339].  $Z_m[i]$  [657].  $Z_m[\rho]$  [657].  $Z_n$  [339].  $Z_n[i]$  [657].  $Z_n[\rho]$ , [657].

-adic [460, 17]. -function [299]. -rings [733]. -set [93]. -shuffles [502]. -subsets [93]. -tuples [649].

**01019a** [8]. **05016a** [512]. **05122a** [343].  
**05139a** [485].

**16** [139].

**29** [454].

**32** [640]. **33005a** [770].

**57** [100].

**61** [139]. **64** [559].

**7** [454]. **72** [640].

**80e** [146, 188]. **80f** [8]. **81b** [432]. **81m** [172]. **83g** [818]. **84c** [454]. **84h** [513]. **84k** [361]. **85** [100, 146, 188, 8]. **85a** [405]. **85c** [463]. **85h** [422, 413, 421]. **85i** [343]. **86-2** [567]. **86c** [532]. **86m** [533]. **87** [432, 172]. **87e** [512, 816]. **87i** [616]. **87j** [485]. **88b** [639, 615]. **88j** [729]. **89** [818]. **89b** [750]. **89c** [815, 729]. **89d** [711]. **89e** [745]. **89f** [813]. **89g** [814]. **89i** [712]. **89m** [817].

**90** [454, 343, 513, 361]. **90c** [769, 771]. **90e** [770, 812]. **91** [405, 422, 463, 413, 421]. **92** [532, 512, 533, 485]. **93** [816, 616]. **94** [639, 815, 615, 729, 750, 641]. **95** [814, 813, 769, 711, 712, 745, 817, 772]. **96** [771, 770, 812].

**a.e** [658]. **Abel** [149]. **abelian** [621, 323, 670]. **Abian** [532]. **absolute** [13, 653]. **abstract** [232, 231]. **academic** [107]. **accelerations** [57]. **ACM** [454]. **Addenda** [711]. **Addendum** [813, 172, 8]. **adic** [460, 17]. **administration** [107]. **Advanced** [700, 819]. **Advice** [423]. **affine** [78, 127]. **affine-regular** [78]. **after** [20]. **Aitken** [350]. **Algebra** [263, 307, 133, 558, 200, 222, 247, 10, 737, 231]. **algebraic** [659, 67, 263]. **algebras** [322, 99, 606]. **Algorithm** [140, 291, 714, 335, 521, 159, 255, 722, 483, 410, 253, 46, 113]. **algorithm-inspired** [113]. **Algorithmic** [407, 252]. **Algorithms** [823, 435, 617]. **allocation** [283]. **Almost** [162]. **Almost-periodic** [162]. **alternate** [756]. **alternating** [536, 102]. **Alternative** [140, 497]. **Amer** [532, 814, 639, 815, 640, 813, 769, 432, 615, 405, 100, 422, 512, 711, 146, 463, 712, 816, 729, 745, 413, 817, 188, 771, 770, 454, 139, 533, 772, 616, 812, 343, 485, 172, 421, 513, 8, 361, 818, 750, 641]. **among** [319]. **analog** [204]. **analogue** [478]. **analysis** [767, 505, 753, 435, 16, 344, 670, 256, 760, 157]. **analyst** [121]. **Analytic** [330, 150, 379, 285, 676, 84, 660]. **analyticity** [549]. **anatomy** [408]. **Ancestors** [500]. **Andrews** [812, 812]. **Angle** [711, 655]. **angles** [681, 142]. **answer** [515, 212]. **anticommutativity** [582]. **Antisocial** [482]. **Any** [223]. **application** [419, 558, 673, 57, 107]. **Applications** [314, 261, 618, 603, 347, 175]. **apportionment** [104]. **approach** [288, 769, 659, 89, 520, 385, 17, 710, 719, 772, 83, 585, 497, 557]. **approaches** [205]. **approximate** [681, 269]. **approximating** [800]. **Approximation** [365, 730, 541, 342, 413, 591, 762, 278, 610]. **approximations** [743, 328]. **Arakelian** [762]. **arbitrarily** [101]. **arc** [752]. **Archimedean** [198, 253, 178]. **Archimedes** [121, 326]. **Arcwise** [359]. **Area** [702]. **Area-minimizing** [702]. **areas** [740]. **arising** [659, 670]. **arithmetic** [684, 125, 636]. **arithmetic-geometric** [684, 636]. **Aron** [616]. **Arora** [745]. **associated** [677]. **associative** [560]. **associativity** [157]. **Asymptotic** [183, 784, 700, 819, 480, 163, 591, 366]. **Author** [311]. **Automated** [394]. **Automorphism** [526]. **automorphisms** [469, 229]. **averaging** [415]. **Award** [642, 195, 406, 727].

**B** [818]. **Babylon** [42]. **balls** [767]. **Banach** [241, 183, 10, 367]. **band** [329]. **Banzhaf** [104]. **Barycentric** [635]. **based** [502]. **Bases** [241, 120, 736]. **basic** [306, 341, 474]. **basis** [367]. **Bateman** [771]. **Baxter** [812]. **be** [279, 795]. **beat** [221]. **became** [701]. **behavior** [183]. **behaviour** [707]. **being** [336]. **Bernoulli** [769, 667, 710]. **Bernstein** [381]. **Bertrand** [419]. **Best** [610]. **beta** [43]. **between** [481, 36, 160]. **Bieberbach** [693, 534]. **biholomorphic** [301]. **Bijecting** [393]. **Biler** [533]. **billion** [743]. **binary** [723, 809]. **Binomial** [571, 460, 232, 88, 700, 724, 819, 810, 440, 375, 774]. **biographers** [196]. **bipartite** [688]. **biplanes** [117]. **bisection** [629, 815, 483]. **Bishop** [320]. **Black** [170]. **Blaschke** [746]. **blocks** [531]. **Blowing** [237]. **body** [566]. **Bolzano** [204]. **Bonnesen** [604]. **Boolean** [492]. **border** [581, 290]. **Borsuk** [295]. **Borsuk-Ulam** [295]. **both** [795]. **bottles** [33]. **bound** [494]. **boundary** [746, 216]. **bounded** [658, 10]. **Bounds** [39, 131]. **box** [615, 575]. **branches** [539]. **Branges** [534]. **bridges** [646, 208]. **brief** [578, 715, 122]. **Brouwer** [645, 383, 65]. **Brownian** [603]. **Bruno** [98]. **bubbles** [202]. **Buffon** [97, 491]. **Bulgarian** [414]. **Burnside** [99]. **butterflies** [27].

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**certain** [680, 712]. **Ceva** [717]. **chain** [122]. **chains** [86, 547]. **chair** [236]. **change** [92]. **change-of-variables** [92]. **changing** [46]. **chaotic** [405, 318]. **characteristic** [594]. **Characterization** [119, 301, 548, 644, 144, 402, 522, 611, 791]. **characterizations** [549, 327]. **Characterizing** [409]. **Characters** [175]. **Chebyshev** [738, 199, 251, 449]. **Chebyshev-type** [199]. **checking** [335]. **Choi** [513]. **Christoffel** [317]. **circle** [555, 405, 318]. **circles** [572, 86, 321, 310]. **circulant** [475, 516, 161]. **circumscribed** [58]. **class** [148, 560, 791, 670]. **classes** [119, 319, 37]. **classical** [237, 144]. **Classification** [430, 708]. **Classroom** [140]. **climbing** [768]. **closed** [409]. **closedness** [453]. **closure** [699, 364]. **code** [69]. **codes** [117]. **coefficient** [487, 700, 724, 819, 810, 440]. **coefficients** [460, 232, 88, 478, 375, 774]. **cohomology** [563]. **coin** [334, 718]. **coincidences** [143]. **coins** [577]. **College** [63]. **color** [85, 231]. **Coloring** [816, 511, 530]. **Colorings** [321]. **Combinatorial** [570, 451, 767, 475, 357, 471, 247, 689, 437, 415]. **combinatorics** [459]. **come** [648]. **Comm** [454]. **Comment** [100, 454, 616, 812]. **Comments** [297]. **Commodore** [559]. **Common** [672]. **commutative** [519, 10]. **commutativity** [663, 582]. **Commutators** [523]. **compact** [373, 453, 442, 630]. **Compactness** [453, 130]. **Companion** [721]. **Comparing** [742]. **comparison** [486]. **complement** [305, 412, 485]. **complements** [550, 297, 448]. **Complete** [82]. **completeness** [288]. **completions** [630]. **complex** [395, 532, 505, 452, 210, 587, 468, 6, 326, 585, 478, 204]. **complexity** [714]. **complicated** [344]. **composition** [791, 57]. **Compound** [192]. **computation** [824, 238]. **compute** [743]. **computer** [823, 206, 380]. **Computers** [193]. **computing** [722, 410, 609, 173]. **concept** [4, 8].

**concepts** [207]. **concerning** [431, 118, 404, 382]. **Concurrences** [11]. **concurrent** [238]. **condition** [258]. **conditions** [309]. **conformal** [572]. **congruence** [100, 3]. **congruences** [502, 631, 750]. **congruent** [580]. **conics** [151, 626]. **conjecture** [739, 455, 696, 673, 716, 693, 534, 771, 262, 750]. **conjectured** [590, 478]. **Conjectures** [272, 122]. **connected** [591, 4]. **connectedness** [359]. **connected'** [8]. **connection** [481, 36]. **consecutive** [138]. **consequence** [582]. **Consequences** [638, 486]. **constant** [277, 182, 81]. **constants** [824]. **constrained** [467]. **Constructing** [581, 703, 141, 97]. **construction** [619, 437]. **constructions** [544]. **constructive** [225, 778]. **contain** [606]. **contained** [268]. **Continued** [691, 291, 680, 712, 785]. **continuity** [445, 699, 756, 260, 92, 130, 18, 766]. **Continuous** [411, 230, 528, 658, 680, 260, 712, 795, 804]. **contraction** [695]. **Convergence** [682, 165, 54, 432, 479, 13, 650, 653, 799, 402, 483, 508, 156, 95, 766]. **Convergence-preserving** [682]. **converges** [167]. **converging** [286]. **converse** [103, 214, 401, 242]. **convex** [639, 569, 793, 187, 566, 314, 37, 183, 803, 18, 49, 442, 602, 580, 610]. **convexity** [244, 128]. **Convolutions** [552]. **coordinates** [736]. **corner** [760, 628, 786]. **Correction** [615, 463, 341, 46, 8]. **Corrections** [146]. **correlation** [487]. **corresponding** [553]. **cosets** [69, 622]. **cost** [283]. **counterexample** [590, 317]. **counterexamples** [665]. **Counting** [573, 798, 53, 261, 123]. **Courant** [599]. **Courant-Fischer** [599]. **cover** [704]. **cover-up** [704]. **Covering** [793, 631, 750]. **coverings** [37, 482]. **covers** [652, 814, 753]. **Cowling** [70]. **criterion** [471]. **Critical** [390, 272]. **Cross** [316, 474]. **cross-symmetric** [474]. **crossing** [491]. **cryptograms** [256]. **Crystallography** [563]. **cube** [373]. **Cubelike** [496]. **cubes** [155]. **curious** [386]. **Curvature** [572, 202]. **curvatures** [518, 86]. **curve** [566, 383, 662, 275]. **curves** [793, 153, 177, 409, 97, 472, 154, 803, 330, 106, 565]. **cut** [77, 172]. **Cyclic** [489, 788, 376]. **Cyclotomic** [5, 146, 188, 71]. **D** [769, 405, 816, 745, 513]. **d'Alembert** [418]. **Daniell** [287]. **Daniell-Stone** [287]. **databases** [259]. **Decomposition** [688, 747, 38, 775]. **Dedekind** [465]. **defective** [334]. **definite** [551]. **definition** [328]. **deformations** [24]. **degree** [118]. **Dehn** [714]. **dense** [411]. **density** [738]. **deranged** [725, 811]. **derivation** [487, 252, 480, 174]. **derivative** [764, 467, 600]. **derivatives** [698, 302, 81, 18, 215]. **derived** [450, 315, 26]. **desert** [649]. **Designing** [491]. **Detection** [334]. **determinant** [450, 516]. **determinants** [806]. **determination** [650]. **Determining** [290]. **detour** [457]. **development** [160, 66]. **deviation** [634]. **diagram** [746]. **diagrams** [732]. **diameter** [644, 412, 485]. **diary** [684]. **Dice** [661, 754]. **difference** [558, 489, 82, 228, 690]. **differences** [783]. **Differentiability** [94, 691]. **Differentiable** [379, 348]. **Differential** [228, 210, 799, 515, 203, 293, 209]. **Differentiation** [163]. **difficult** [247]. **digit** [650]. **digital** [206]. **digits** [743]. **dimension** [548, 606]. **dimensional** [639, 569, 408, 550, 448, 316, 602, 367]. **dimensions** [536, 717]. **Dini** [533, 429]. **Diophantine** [813, 683, 574, 129, 50, 353]. **Direct** [733, 174]. **Dirichlet** [508, 75, 70]. **discontinuous** [795]. **discrete** [728, 369, 662]. **discriminants** [609]. **discriminator** [419]. **discs** [150]. **discussion** [7]. **Disjoint** [631, 750, 310]. **disk** [70]. **Disks** [767]. **Dispersion** [34].

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**E2982** [250, 726]. **E3061** [586]. **E3106** [386]. **E3166** [692]. **E3267** [674, 820]. **E3303** [723, 809]. **E3309** [724, 810]. **E3335** [725, 811]. **each** [274]. **ears** [35]. **earth** [191]. **easy** [562, 137]. **economics** [355, 270]. **editor** [532, 769, 432, 405, 439, 422, 512, 729, 745, 413, 771, 770, 533, 679, 772, 760, 485, 421, 513, 628, 786, 361, 787]. **effectiveness** [14]. **Egorov** [76]. **Eigenvalues** [181, 553, 721, 454, 267, 470, 474]. **eigenvectors** [553, 721, 474]. **Eisenstein** [136]. **Elem** [632]. **element** [751, 607]. **Elementary** [674, 144, 250, 725, 723, 724, 726, 811, 809, 810, 203, 820, 288, 658, 764, 289, 620, 493, 266, 89, 520, 96, 385, 402, 135, 741, 38, 636, 373, 623, 492, 367, 557, 398, 678, 537]. **elements** [808]. **elimination** [675]. **ellipses** [684, 40]. **elliptic** [174, 565]. **Empty** [586]. **encryption** [335]. **ensures** [716]. **entire** [280]. **entries** [239, 721, 454, 267]. **Enumeration** [392, 7]. **epsilon** [265]. **equal** [707, 457]. **equality** [62]. **equation** [683, 813, 181, 368, 574, 129, 418, 690, 248, 353, 417]. **Equations** [744, 395, 532, 44, 743, 210, 521, 799, 50, 17, 203, 293, 82, 228, 106, 209]. **equilateral** [187]. **Equivalence** [157, 340]. **Erdos** [543]. **Errata** [814, 639, 815, 640, 712, 816, 817, 818, 641, 729]. **error** [21, 585, 404]. **errors** [359, 30]. **Estimating** [21]. **estimators** [634]. **etc** [246]. **Euclid** [755, 140]. **Euclidean** [438, 709, 735, 316, 695, 73, 155, 340]. **Euler** [361, 559, 784, 393, 299, 32, 617, 345, 294, 182, 613, 386, 127, 465, 205, 370]. **Euler-Dedekind** [465]. **Eulerian** [484]. **Évariste** [196]. **ever** [344]. **Everett** [406]. **Every** [114, 695, 751]. **Evolution** [4, 8]. **exact** [652, 814, 750]. **examinations** [63]. **example** [597, 680, 712, 805, 19, 664]. **Examples** [652, 814, 415]. **exceters** [635]. **exchangeable** [447]. **exclusion** [96, 427]. **excursion** [353]. **exotic** [805]. **expansion** [700, 819, 695, 347]. **expansions** [784, 366, 205]. **experience** [166]. **exponential** [39, 677, 148]. **Exponentials** [132, 564, 286]. **exposed** [35]. **extended** [79]. **Extending** [233, 385]. **extension** [76, 498]. **extensions** [43, 344, 67]. **extrema** [467]. **Extreme** [602].  
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## References

**Fan:1954:II**

- [1] K. Fan and G. G. Lorentz. An integral inequality. *American Mathematical Monthly*, 61(??):626–631, ???? 1954. See note [139].

**Anonymous:1965:SG**

- [2] Anonymous. Semitopological groups. *American Mathematical Monthly*, 72 (??):996–998, ???? 1965. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See errata [640].

**Livingston:1978:C**

- [3] A. E. Livingston and M. L. Livingston. The congruence  $a^{r+s} \equiv a^r \pmod{m}$ .

*American Mathematical Monthly*, 85(2):97–100, ???? 1978. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See comment [100].

**Wilder:1978:ETC**

- [4] R. L. Wilder. Evolution of the topological concept of “connected”. *American Mathematical Monthly*, 85(9):720–726, ???? 1978. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [8].

**Golomb:1978:CPF**

- [5] Solomon W. Golomb. Cyclotomic polynomials and factorization theorems. *American Mathematical Monthly*, 85(9):734–737, ???? 1978. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See corrections [146] and note [188].

**Murrill:1980:HGC**

- [6] Malcolm Murrill. On a hyperanalytic geometry for complex functions. *American Mathematical Monthly*, 87(1):8–25, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Shen:1980:NEN**

- [7] Yu Ting Shen. A “natural” enumeration of nonnegative rational numbers—an informal discussion. *American Mathematical Monthly*, 87(1):25–29, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wilder:1980:CAE**

- [8] R. L. Wilder. Correction and addendum to: “Evolution of the topological concept of ‘connected’” [Amer. Math. Monthly 85 (1978), no. 9, 720–726,

- MR 80f:01019a]. *American Mathematical Monthly*, 87(1):31–32, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [4].
- Thompson:1980:PPT**
- [9] K. W. Thompson and T. Schonbek. A problem of the Pompeiu type. *American Mathematical Monthly*, 87(1):32–36, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Russell:1980:CBA**
- [10] A. M. Russell. A commutative Banach algebra of functions of bounded variation. *American Mathematical Monthly*, 87(1):39–40, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kirby:1980:CT**
- [11] D. Kirby. Concurrences for a triangle. *American Mathematical Monthly*, 87(1):45–47, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Millman:1980:UHP**
- [12] Richard S. Millman. The upper half plane model for hyperbolic geometry. *American Mathematical Monthly*, 87(1):48–53, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Dym:1980:ACM**
- [13] Harry Dym. On the absolute convergence of a multiple integral of  $\sin x/x$ . *American Mathematical Monthly*, 87(1):53–54, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Hamming:1980:UEM**
- [14] R. W. Hamming. The unreasonable effectiveness of mathematics. *American Mathematical Monthly*, 87(2):81–90, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- MacGregor:1980:GNP**
- [15] Robert M. MacGregor. Generalizing the notion of a periodic sequence. *American Mathematical Monthly*, 87(2):90–102, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- DeTemple:1980:GMP**
- [16] Duane W. DeTemple. A geometric method of phase plane analysis. *American Mathematical Monthly*, 87(2):102–112, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Koblitz:1980:AAS**
- [17] Neal Koblitz. The  $p$ -adic approach to solutions of equations over finite fields. *American Mathematical Monthly*, 87(2):115–118, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Nienhuys:1980:UCD**
- [18] J. W. Nienhuys. Uniform continuity of derivatives in convex sets. *American Mathematical Monthly*, 87(2):118–120, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Sarma:1980:ELF**
- [19] V. L. N. Sarma, Nand Lal, and V. K. Singh. An example of a locally finite family. *American Mathematical Monthly*, 87(2):121–122, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Robbins:1980:PNR**
- [20] David P. Robbins. The probability that neighbors remain neighbors after random rearrangements. *American Mathematical Monthly*, 87(2):122–124, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rozema:1980:EET**
- [21] Edward Rozema. Estimating the error in the trapezoidal rule. *American Mathematical Monthly*, 87(2):124–128, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Klambauer:1980:SS**
- [22] Gabriel Klambauer. Summation of series. *American Mathematical Monthly*, 87(2):128–130, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Zalcman:1980:OIG**
- [23] Lawrence Zalcman. Offbeat integral geometry. *American Mathematical Monthly*, 87(3):161–175, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bleecker:1980:IDP**
- [24] David D. Bleecker. Infinitesimal deformations of portions of the standard sphere in  $E^3$ . *American Mathematical Monthly*, 87(3):175–182, ???? 1980.
- Wilcox:1980:PTP**
- [25] Calvin H. Wilcox. Positive temperatures with prescribed initial heat distributions. *American Mathematical Monthly*, 87(3):183–186, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Steiner:1980:PTS**
- [26] Antonio Steiner. Plancherel's theorem and the Shannon series derived simultaneously. *American Mathematical Monthly*, 87(3):193–197, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Jones:1980:QBP**
- [27] Dixon Jones. Quadrangles, butterflies, Pascal's hexagon, and projective fixed points. *American Mathematical Monthly*, 87(3):197–200, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Nummela:1980:CTT**
- [28] Eric C. Nummela. Cayley's theorem for topological groups. *American Mathematical Monthly*, 87(3):202–203, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Netuka:1980:RH**
- [29] I. Netuka and J. Veselý. Regions of harmonicity. *American Mathematical Monthly*, 87(3):203–205, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- |  |   |
|--|---|
| <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Miel:1980:CCR</b></div> <p>[30] George Miel. Calculator calculus and roundoff errors. <i>American Mathematical Monthly</i>, 87(4):243–252, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Rice:1980:W</b></div> <p>[31] R. E. Rice, B. Schweizer, and A. Sklar. When is <math>f(f(z)) = az^2 + bz + c</math>. <i>American Mathematical Monthly</i>, 87(4):252–263, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Deakin:1980:EVL</b></div> <p>[32] Michael A. B. Deakin. Euler’s version of the Laplace transform. <i>American Mathematical Monthly</i>, 87(4):264–269, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Sequin:1980:TPK</b></div> <p>[33] Carlo H. Sequin. Twisted prismatic Klein bottles. <i>American Mathematical Monthly</i>, 87(4):269–277, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Cobb:1980:DPF</b></div> <p>[34] J. Cobb and W. Voxman. Dispersion points and fixed points. <i>American Mathematical Monthly</i>, 87(4):278–281, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Meisters:1980:PVE</b></div> <p>[35] G. H. Meisters. Principal vertices, exposed points, and ears. <i>American Mathematical Monthly</i>, 87(4):284–285, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> | <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Darst:1980:CBL</b></div> <p>[36] Richard B. Darst. The connection between lim sup and uniform integrability. <i>American Mathematical Monthly</i>, 87(4):285–286, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Groemer:1980:FCC</b></div> <p>[37] H. Groemer. On finite classes of convex sets that permit space coverings. <i>American Mathematical Monthly</i>, 87(4):286–288, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Martins:1980:EPP</b></div> <p>[38] L. C. Martins and P. Podio-Guidugli. An elementary proof of the polar decomposition theorem. <i>American Mathematical Monthly</i>, 87(4):288–290, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Alam:1980:BNE</b></div> <p>[39] Khursheed Alam. Bounds on the negative exponential function. <i>American Mathematical Monthly</i>, 87(4):290–292, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Foster:1980:RPE</b></div> <p>[40] James H. Foster and Jean J. Pedersen. On the reflective property of ellipses. <i>American Mathematical Monthly</i>, 87(4):294–297, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> |
|--|---|

**Watkins:1980:SM**

- [41] William Watkins. Similarity of matrices. *American Mathematical Monthly*, 87(4):300, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Buck:1980:SHB**

- [42] R. Creighton Buck. Sherlock Holmes in Babylon. *American Mathematical Monthly*, 87(5):335–345, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Askey:1980:REG**

- [43] Richard Askey. Ramanujan’s extensions of the gamma and beta functions. *American Mathematical Monthly*, 87(5):346–359, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Antman:1980:ELV**

- [44] Stuart S. Antman. The equations for large vibrations of strings. *American Mathematical Monthly*, 87(5):359–370, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Rubel:1980:SPS**

- [45] Lee Rubel and Kenneth Stolarsky. Subseries of the power series for  $e^x$ . *American Mathematical Monthly*, 87(5):371–376, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Nijenhuis:1980:CMP**

- [46] Albert Nijenhuis. Correction to: “A minimal-path algorithm for the ‘money

changing problem’ ”. *American Mathematical Monthly*, 87(5):377, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Dow:1980:I**

- [47] Alan Dow and John Ginsburg. Integration on  $[0, 1]^\omega$ . *American Mathematical Monthly*, 87(5):378–380, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Brown:1980:RPO**

- [48] D. R. Brown and M. J. O’Malley. On  $n$ th roots of positive operators. *American Mathematical Monthly*, 87(5):380–382, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Rehder:1980:VUT**

- [49] Wulf Rehder. On the volume of unions of translates of a convex set. *American Mathematical Monthly*, 87(5):382–384, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Kiss:1980:MSD**

- [50] Péter Kiss. A method for solving Diophantine equations. *American Mathematical Monthly*, 87(5):384–387, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Redheffer:1980:SIG**

- [51] Ray Redheffer and Carey Smith. On a surprising inequality of Goldberg and Straus. *American Mathematical Monthly*, 87(5):387–390, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- VandenEynden:1980:PD**
- [52] Charles Vanden Eynden. Proofs that  $\sum 1/p$  diverges. *American Mathematical Monthly*, 87(5):394–397, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Spencer:1980:CMS**
- [53] Joel Spencer. Counting magic squares. *American Mathematical Monthly*, 87(5):397–399, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chernoff:1980:PCF**
- [54] Paul R. Chernoff. Pointwise convergence of Fourier series. *American Mathematical Monthly*, 87(5):399–400, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [432].
- Pourciau:1980:MMR**
- [55] B. H. Pourciau. Modern multiplier rules. *American Mathematical Monthly*, 87(6):433–452, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Penna:1980:TT**
- [56] Michael A. Penna. Total torsion. *American Mathematical Monthly*, 87(6):452–461, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Maitra:1980:SAT**
- [57] S. N. Maitra. A simple application of the theorem of composition of accelerations. *American Mathematical Monthly*, 87(6):466–468, ???? 1980. CODEN AMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Klamkin:1980:IIC**
- [58] M. S. Klamkin. Inequalities for inscribed and circumscribed polygons. *American Mathematical Monthly*, 87(6):469–473, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Greiter:1980:NFS**
- [59] Gebhard Greiter. Nonunique factorization in subsemigroups of semigroups with unique prime factorization. *American Mathematical Monthly*, 87(6):473–474, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Satyanarayana:1980:NRS**
- [60] U. V. Satyanarayana. A note on Riemann-Stieltjes integrals. *American Mathematical Monthly*, 87(6):477–478, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Schultz:1980:SPF**
- [61] Henry J. Schultz. The sum of the  $k$ th powers of the first  $n$  integers. *American Mathematical Monthly*, 87(6):478–481, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Robinson:1980:PFR**
- [62] Donald W. Robinson. A proof of the Frobenius rank equality. *American Mathematical Monthly*, 87(6):481–482, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Kennedy:1980:FWE**
- [63] Hubert Kennedy. The first written examinations at Harvard College. *American Mathematical Monthly*, 87(6):483–486, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Halmos:1980:HM**
- [64] P. R. Halmos. The heart of mathematics. *American Mathematical Monthly*, 87(7):519–524, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rogers:1980:LSV**
- [65] C. A. Rogers. A less strange version of Milnor’s proof of Brouwer’s fixed-point theorem. *American Mathematical Monthly*, 87(7):525–527, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Prekopa:1980:DOT**
- [66] András Prékopa. On the development of optimization theory. *American Mathematical Monthly*, 87(7):527–542, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Isaacs:1980:RPA**
- [67] I. M. Isaacs. Roots of polynomials in algebraic extensions of fields. *American Mathematical Monthly*, 87(7):543–544, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Stolarsky:1980:PGL**
- [68] Kenneth B. Stolarsky. The power and generalized logarithmic means. *American Mathematical Monthly*, 87(7):545–548, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- 548, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Schatz:1980:WDC**
- [69] James R. Schatz. On the weight distributions of cosets of a linear code. *American Mathematical Monthly*, 87(7):548–551, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Yamashita:1980:CTD**
- [70] Shinji Yamashita. Cowling’s theorem on a Dirichlet finite holomorphic function in the disk. *American Mathematical Monthly*, 87(7):551–552, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lagarias:1980:DPS**
- [71] J. C. Lagarias and A. M. Odlyzko. Divisibility properties of some cyclotomic sequences. *American Mathematical Monthly*, 87(7):561–564, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Golberg:1980:MOT**
- [72] M. A. Golberg and H. Bowman. Mikusiński operators without the Titchmarsh theorem. *American Mathematical Monthly*, 87(7):564–567, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Parker:1980:MMP**
- [73] George D. Parker. A metric model of plane Euclidean geometry. *American Mathematical Monthly*, 87(7):567–572, ????. 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Rees:1980:MSW**

- [74] Mina Rees. The mathematical sciences and World War II. *American Mathematical Monthly*, 87(8):607–621, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Netuka:1980:DPH**

- [75] Ivan Netuka. The Dirichlet problem for harmonic functions. *American Mathematical Monthly*, 87(8):621–628, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Bartle:1980:EET**

- [76] Robert G. Bartle. An extension of Egorov’s theorem. *American Mathematical Monthly*, 87(8):628–633, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Stromquist:1980:HCC**

- [77] Walter Stromquist. How to cut a cake fairly. *American Mathematical Monthly*, 87(8):640–644, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See addendum [172].

**Gerber:1980:NTP**

- [78] Leon Gerber. Napoleon’s theorem and the parallelogram inequality for affine-regular polygons. *American Mathematical Monthly*, 87(8):644–648, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hutchinson:1980:SPP**

- [79] Joan P. Hutchinson and Paul B. Trow. Some pigeonhole principle results extended. *American Mathematical Monthly*, 87(8):648–651, ???? 1980.

CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Klamkin:1980:NRN**

- [80] M. S. Klamkin and A. Liu. Note on a result of Niven on impossible tessellations. *American Mathematical Monthly*, 87(8):651–653, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Knight:1980:FZR**

- [81] William J. Knight. Functions with zero right derivatives are constant. *American Mathematical Monthly*, 87(8):657–658, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Nijenhuis:1980:CSL**

- [82] Albert Nijenhuis. Complete solutions of linear difference equations. *American Mathematical Monthly*, 87(8):658–660, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Ross:1980:AAR**

- [83] Kenneth A. Ross. Another approach to Riemann-Stieltjes integrals. *American Mathematical Monthly*, 87(8):660–662, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Newman:1980:SAP**

- [84] D. J. Newman. Simple analytic proof of the prime number theorem. *American Mathematical Monthly*, 87(9):693–696, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Swart:1980:PIF**
- [85] E. R. Swart. The philosophical implications of the four-color problem. *American Mathematical Monthly*, 87(9):697–707, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Fox:1980:FCC**
- [86] M. D. Fox. Formulae for the curvatures of circles in chains. *American Mathematical Monthly*, 87(9):708–715, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Boesch:1980:RTM**
- [87] Frank Boesch and Ralph Tindell. Robbins's theorem for mixed multigraphs. *American Mathematical Monthly*, 87(9):716–719, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Golomb:1980:IBC**
- [88] Solomon W. Golomb. Iterated binomial coefficients. *American Mathematical Monthly*, 87(9):719–727, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Galperin:1980:EAJ**
- [89] A. Galperin and Z. Waksman. An elementary approach to Jordan theory. *American Mathematical Monthly*, 87(9):728–732, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Pintz:1980:LPN**
- [90] János Pintz. On Legendre's prime number formula. *American Mathematical Monthly*, 87(9):733–735, ???? 1980.
- CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Nakao:1980:PGL**
- [91] Zensho Nakao. Polynomial group laws. *American Mathematical Monthly*, 87(9):735–736, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Guzman:1980:CVF**
- [92] Miguel de Guzmán. A change-of-variables formula without continuity. *American Mathematical Monthly*, 87(9):736–739, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Prather:1980:GSS**
- [93] Ronald E. Prather. Generating the  $k$ -subsets of an  $n$ -set. *American Mathematical Monthly*, 87(9):740–743, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Whaley:1980:DPQ**
- [94] Thomas Whaley and Judson Williford. Differentiability and permutations of quantifiers. *American Mathematical Monthly*, 87(9):745–748, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Smart:1980:WDI**
- [95] D. R. Smart. When does  $T^{n+1}x - T^n x \rightarrow 0$  imply convergence. *American Mathematical Monthly*, 87(9):748–749, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Johnson:1980:EPI**
- [96] B. R. Johnson. An elementary proof of inclusion-exclusion formulas. *Amer-*

- American Mathematical Monthly*, 87(9):750–751, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- DeTemple:1980:CBC**
- [97] Duane W. DeTemple and Jack M. Robertson. Constructing Buffon curves from their distributions. *American Mathematical Monthly*, 87(10):779–784, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Roman:1980:FFB**
- [98] Steven Roman. The formula of Faà di Bruno. *American Mathematical Monthly*, 87(10):805–809, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Halperin:1980:BTA**
- [99] Israel Halperin and Peter Rosenthal. Burnside’s theorem on algebras of matrices. *American Mathematical Monthly*, 87(10):810, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Ecker:1980:CNC**
- [100] A. Ecker. Comment on the note: “The congruence  $a^{r+s} \equiv a^r \pmod{m}$ ” [Amer. Math. Monthly 85 (1978), no. 2, 97–100, MR 57 #12355] by A. E. Livingston and M. L. Livingston. *American Mathematical Monthly*, 87(10):811–814, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [3].
- Henle:1980:FAS**
- [101] J. M. Henle. Functions with arbitrarily small periods. *American Mathematical Monthly*, 87(10):816, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cowen:1980:RAH**
- [102] C. C. Cowen, K. R. Davidson, and R. P. Kaufman. Rearranging the alternating harmonic series. *American Mathematical Monthly*, 87(10):817–819, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Burckel:1980:SCG**
- [103] R. B. Burckel. A strong converse to Gauss’s mean-value theorem. *American Mathematical Monthly*, 87(10):819–820, ???? 1980. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Grofman:1981:FAB**
- [104] Bernard Grofman. Fair apportionment and the Banzhaf index. *American Mathematical Monthly*, 88(1):1–5, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Roth:1981:RFF**
- [105] B. Roth. Rigid and flexible frameworks. *American Mathematical Monthly*, 88(1):6–21, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Quine:1981:PEC**
- [106] J. R. Quine. Plücker equations for curves. *American Mathematical Monthly*, 88(1):21–29, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Meyer:1981:APR**
- [107] Kenneth R. Meyer. An application of Poincaré's recurrence theorem to academic administration. *American Mathematical Monthly*, 88(1):32–33, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Schaefer:1981:SPR**
- [108] Paul Schaefer. Sum-preserving rearrangements of infinite series. *American Mathematical Monthly*, 88(1):33–40, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Mendez:1981:LLN**
- [109] C. G. Méndez. On the law of large numbers, infinite games, and category. *American Mathematical Monthly*, 88(1):40–42, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Dean:1981:RPW**
- [110] Richard A. Dean. A rational polynomial whose group is the quaternions. *American Mathematical Monthly*, 88(1):42–45, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bridges:1981:MPG**
- [111] Douglas S. Bridges. On Montel's proof of the great Picard theorem. *American Mathematical Monthly*, 88(1):45–47, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Zamfirescu:1981:MMF**
- [112] Tudor Zamfirescu. Most monotone functions are singular. *American Mathematical Monthly*, 88(1):47–49, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wilf:1981:AIP**
- [113] Herbert S. Wilf. An algorithm-inspired proof of the spectral theorem in  $E^n$ . *American Mathematical Monthly*, 88(1):49–50, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Meyerson:1981:EPS**
- [114] Mark D. Meyerson. Every power series is a Taylor series. *American Mathematical Monthly*, 88(1):51–52, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Isbell:1981:SFM**
- [115] John Isbell. Submodules of free modules. *American Mathematical Monthly*, 88(1):53, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Zaslavsky:1981:GRS**
- [116] Thomas Zaslavsky. The geometry of root systems and signed graphs. *American Mathematical Monthly*, 88(2):88–105, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Salwach:1981:PBT**
- [117] Chester J. Salwach. Planes, biplanes, and their codes. *American Mathematical Monthly*, 88(2):106–125, ???? 1981.

- CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Siegberg:1981:SHR**
- [118] Hans Willi Siegberg. Some historical remarks concerning degree theory. *American Mathematical Monthly*, 88(2):125–139, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Buck:1981:CCF**
- [119] R. Creighton Buck. Characterization of classes of functions. *American Mathematical Monthly*, 88(2):139–142, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Childs:1981:MGR**
- [120] Lindsay N. Childs and Morris Orzech. On modular group rings, normal bases, and fixed points. *American Mathematical Monthly*, 88(2):142–145, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Phillips:1981:ANA**
- [121] G. M. Phillips. Archimedes the numerical analyst. *American Mathematical Monthly*, 88(3):165–169, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Ratliff:1981:BHS**
- [122] L. J. Ratliff, Jr. A brief history and survey of the catenary chain conjectures. *American Mathematical Monthly*, 88(3):169–178, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Merris:1981:PCT**
- [123] Russell Merris. Pólya's counting theorem via tensors. *American Mathematical Monthly*, 88(3):179–185, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Feldman:1981:PLT**
- [124] Marcus B. Feldman. A proof of Lusin's theorem. *American Mathematical Monthly*, 88(3):191–192, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cusmariu:1981:PAM**
- [125] Adolf Cusmariu. A proof of the arithmetic mean-geometric mean inequality. *American Mathematical Monthly*, 88(3):192–194, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Gagola:1981:VPI**
- [126] S. M. Gagola, Jr., S. C. Garrison, and M. R. Pettet. On a vanishing product in the integral group ring. *American Mathematical Monthly*, 88(3):195–196, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Snapper:1981:AGE**
- [127] Ernst Snapper. An affine generalization of the Euler line. *American Mathematical Monthly*, 88(3):196–198, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Riley:1981:NSC**
- [128] Charles Riley. A note on strict convexity. *American Mathematical Monthly*, 88(3):198–199, ???? 1981. CODEN AM-

- MYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kertzner:1981:LDE**
- [129] Stanley Kertzner. The linear Diophantine equation. *American Mathematical Monthly*, 88(3):200–203, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Hueber:1981:UCC**
- [130] Hermann Hueber. On uniform continuity and compactness in metric spaces. *American Mathematical Monthly*, 88(3):204–205, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Deutsch:1981:BZP**
- [131] Emeric Deutsch. Bounds for the zeros of polynomials. *American Mathematical Monthly*, 88(3):205–206, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Knoebel:1981:ER**
- [132] R. Arthur Knoebel. Exponentials reiterated. *American Mathematical Monthly*, 88(4):235–252, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Brenner:1981:PFT**
- [133] J. L. Brenner and R. C. Lyndon. Proof of the fundamental theorem of algebra. *American Mathematical Monthly*, 88(4):253–256, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Brown:1981:FPQ**
- [134] Ezra Brown. The first proof of the quadratic reciprocity law, revisited.
- American Mathematical Monthly*, 88(4):257–264, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kannai:1981:EPN**
- [135] Yakar Kannai. An elementary proof of the no-retraction theorem. *American Mathematical Monthly*, 88(4):264–268, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kraft:1981:ERP**
- [136] James Kraft and Michael Rosen. Eisenstein reciprocity and  $n$ th-power residues. *American Mathematical Monthly*, 88(4):269–270, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Ewell:1981:EPT**
- [137] John A. Ewell. An easy proof of the triple-product identity. *American Mathematical Monthly*, 88(4):270–272, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Sentance:1981:OCO**
- [138] W. A. Sentance. Occurrences of consecutive odd powerful numbers. *American Mathematical Monthly*, 88(4):272–274, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Pecaric:1981:NII**
- [139] Josip E. Pečarić. Note on: “An integral inequality” [Amer. Math. Monthly **61** (1954), 626–631, MR **16**, 342] by K. Fan and G. G. Lorentz. *American Mathematical Monthly*, 88(4):275–276, April

1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [1].
- Marcus:1981:CNA**
- [140] Daniel A. Marcus. Classroom notes: An alternative to Euclid's algorithm. *American Mathematical Monthly*, 88(4):280–283, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). URL <http://www.jstor.org/stable/2320557>.
- Copeland:1981:CLG**
- [141] Arthur H. Copeland, Jr. and Albert O. Shar. Constructing loops from groups. *American Mathematical Monthly*, 88(4):283–285, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Porter:1981:NAO**
- [142] G. J. Porter. New angles on an old game. *American Mathematical Monthly*, 88(4):285–286, April 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Davis:1981:TCM**
- [143] Philip J. Davis. Are there coincidences in mathematics. *American Mathematical Monthly*, 88(5):311–320, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Hrusa:1981:ECC**
- [144] W. Hrusa and J. L. Troutman. Elementary characterization of classical minima. *American Mathematical Monthly*, 88(5):321–327, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Griffiths:1981:CVR**
- [145] H. B. Griffiths. Cayley's version of the resultant of two polynomials. *American Mathematical Monthly*, 88(5):328–338, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Golomb:1981:CCP**
- [146] Solomon W. Golomb. Corrections to: “Cyclotomic polynomials and factorization theorems” [Amer. Math. Monthly **85** (1978), no. 9, 734–737, MR 80e:10011]. *American Mathematical Monthly*, 88(5):338–339, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [5].
- Boes:1981:FSI**
- [147] Duane Boes, Richard Darst, and Paul Erdős. Fat, symmetric, irrational Cantor sets. *American Mathematical Monthly*, 88(5):340–341, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Dence:1981:MCE**
- [148] Thomas P. Dence. On the monotonicity of a class of exponential sequences. *American Mathematical Monthly*, 88(5):341–344, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rosen:1981:ATL**
- [149] Michael Rosen. Abel's theorem on the lemniscate. *American Mathematical Monthly*, 88(6):387–395, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Burckel:1981:IAS**
- [150] R. B. Burckel. Iterating analytic self-maps of discs. *American Mathematical Monthly*, 88(6):396–407, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Grosshans:1981:RMC**
- [151] Frank D. Grosshans. Rigid motions of conics: an introduction to invariant theory. *American Mathematical Monthly*, 88(6):407–413, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Luchins:1981:WMF**
- [152] Edith H. Luchins. Women and mathematics: fact and fiction. *American Mathematical Monthly*, 88(6):413–419, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bloom:1981:GRC**
- [153] John Bloom and Lee Whitt. The geometry of rolling curves. *American Mathematical Monthly*, 88(6):420–426, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Holbrook:1981:SIS**
- [154] John A. R. Holbrook. Stochastic independence and space-filling curves. *American Mathematical Monthly*, 88(6):426–432, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Sternfeld:1981:HCE**
- [155] Y. Sternfeld. Homeomorphisms of cubes into Euclidean spaces. *American Mathematical Monthly*, 88(6):436–439, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Small:1981:MCT**
- [156] Robert D. Small. Modified convergence of Taylor series. *American Mathematical Monthly*, 88(6):439–441, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Sobczyk:1981:EIV**
- [157] Andrew Sobczyk. Equivalence of an identity in vector analysis to quaternion associativity, and ramifications. *American Mathematical Monthly*, 88(6):441–443, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lane:1981:MMS**
- [158] Saunders Mac Lane. Mathematical models: a sketch for the philosophy of mathematics. *American Mathematical Monthly*, 88(7):462–472, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Dubins:1981:MGS**
- [159] L. E. Dubins and D. A. Freedman. Machiavelli and the Gale–Shapley algorithm. *American Mathematical Monthly*, 88(7):485–494, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Grattan-Guinness:1981:DLB**
- [160] I. Grattan-Guinness. On the development of logics between the two World Wars. *American Mathematical Monthly*, 88(7):495–509, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wong:1981:PCM**

- [161] Edward T. Wong. Polygons, circulant matrices, and Moore–Penrose inverses. *American Mathematical Monthly*, 88(7):509–515, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cooke:1981:APF**

- [162] Roger L. Cooke. Almost-periodic functions. *American Mathematical Monthly*, 88(7):515–526, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Newman:1981:DAF**

- [163] D. J. Newman. Differentiation of asymptotic formulas. *American Mathematical Monthly*, 88(7):526–527, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Abian:1981:GGM**

- [164] Alexander Abian. Generalizing the generalized mean-value theorem. *American Mathematical Monthly*, 88(7):528–530, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Alefeld:1981:CHM**

- [165] G. Alefeld. On the convergence of Halley’s method. *American Mathematical Monthly*, 88(7):530–536, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Katchalski:1981:EPS**

- [166] M. Katchalski, M. S. Klamkin, and A. Liu. An experience in problem solving. *American Mathematical Monthly*,

88(8):551–556, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Arthur:1981:WPC**

- [167] W. B. Arthur. Why a population converges to stability. *American Mathematical Monthly*, 88(8):557–563, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Rappaport:1981:KML**

- [168] Karen D. Rappaport. S. Kovalevsky: a mathematical lesson. *American Mathematical Monthly*, 88(8):564–574, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Abikoff:1981:UT**

- [169] William Abikoff. The uniformization theorem. *American Mathematical Monthly*, 88(8):574–592, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Kenschaft:1981:BWM**

- [170] Patricia C. Kenschaft. Black women in mathematics in the United States. *American Mathematical Monthly*, 88(8):592–604, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Garner:1981:MQS**

- [171] Cyril W. L. Garner and Agnes M. Herzberg. On McCarty’s queen squares. *American Mathematical Monthly*, 88(8):612–613, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Stromquist:1981:AHC**
- [172] Walter Stromquist. Addendum to: “How to cut a cake fairly” [Amer. Math. Monthly 87 (1980), no. 8, 640–644, MR 81m:05016]. *American Mathematical Monthly*, 88(8):613–614, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [77].
- Shafrroth:1981:GFC**
- [173] Chantal Shafrroth. A generalization of the formula for computing the inverse of a matrix. *American Mathematical Monthly*, 88(8):614–616, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Schoenberg:1981:DDJ**
- [174] I. J. Schoenberg. A direct derivation of a Jacobian identity from elliptic functions. *American Mathematical Monthly*, 88(8):616–618, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Srinivasan:1981:CFG**
- [175] Bhama Srinivasan. Characters of finite groups: some uses and mathematical applications. *American Mathematical Monthly*, 88(9):639–646, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Delahaye:1981:SPP**
- [176] J.-P. Delahaye. The set of periodic points. *American Mathematical Monthly*, 88(9):646–651, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bruce:1981:CPC**
- [177] J. W. Bruce, P. J. Giblin, and C. G. Gibson. On caustics of plane curves. *American Mathematical Monthly*, 88(9):651–667, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Narici:1981:STN**
- [178] Lawrence Narici and Edward Beckenstein. Strange terrain — non-Archimedean spaces. *American Mathematical Monthly*, 88(9):667–676, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Hansen:1981:SFS**
- [179] Eldon Hansen. Sums of functions satisfying recursion relations. *American Mathematical Monthly*, 88(9):676–679, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Golomb:1981:NDD**
- [180] Solomon W. Golomb. Normed division domains. *American Mathematical Monthly*, 88(9):680–686, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Dodziuk:1981:ELH**
- [181] Jozef Dodziuk. Eigenvalues of the Laplacian and the heat equation. *American Mathematical Monthly*, 88(9):686–695, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Johnsonbaugh:1981:TRS**
- [182] Richard Johnsonbaugh. The trapezoid rule, Stirling’s formula, and Euler’s constant. *American Mathematical Monthly*,

- 88(9):696–698, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kohlberg:1981:ABN**
- [183] Elon Kohlberg and Abraham Neyman. Asymptotic behavior of nonexpansive mappings in uniformly convex Banach spaces. *American Mathematical Monthly*, 88(9):698–700, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Knuth:1981:PI**
- [184] Donald E. Knuth. A permanent inequality. *American Mathematical Monthly*, 88(10):731–740, 798, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Berresford:1981:CT**
- [185] Geoffrey C. Berresford. Cauchy’s theorem. *American Mathematical Monthly*, 88(10):741–744, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Guggenheimer:1981:HMH**
- [186] Heinrich Guggenheimer. The Hilbert model of hyperbolic geometry. *American Mathematical Monthly*, 88(10):744–748, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Buchman:1981:ITC**
- [187] Edwin Buchman. The impossibility of tiling a convex region with unequal equilateral triangles. *American Mathematical Monthly*, 88(10):748–753, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- McLain:1981:NWG**
- [188] Katherine E. McLain and Hugh M. Edgar. A note on S. W. Golomb’s: “Cyclotomic polynomials and factorization theorems” [Amer. Math. Monthly 85 (1978), no. 9, 734–737, MR 80e:10011]. *American Mathematical Monthly*, 88(10):753, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [5].
- Salat:1981:FMN**
- [189] Tibor Šalát. On functions that are monotone on no interval. *American Mathematical Monthly*, 88(10):754–755, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Davis:1981:MSM**
- [190] Richard A. Davis. More on similarity of matrices. *American Mathematical Monthly*, 88(10):761–762, ???? 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bonsall:1982:EVM**
- [191] F. F. Bonsall. A down-to-earth view of mathematics. *American Mathematical Monthly*, 89(1):8–15, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Duijvestijn:1982:CPS**
- [192] A. J. W. Duijvestijn, P. J. Federico, and P. Leeuw. Compound perfect squares. *American Mathematical Monthly*, 89(1):15–32, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Wavrik:1982:CMP**
- [193] John Wavrik. Computers and the multiplicity of polynomial roots. *American Mathematical Monthly*, 89(1):34–36, 45–56, ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Small:1982:SPF**
- [194] Charles Small. A simple proof of the four-squares theorem. *American Mathematical Monthly*, 89(1):59–61, ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Price:1982:ADS**
- [195] G. Baley Price. Award for distinguished service to Dr. Thornton Carl Fry. *American Mathematical Monthly*, 89(2):81–83 (1 plate), ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rothman:1982:GBF**
- [196] Tony Rothman. Genius and biographers: the fictionalization of Évariste Galois. *American Mathematical Monthly*, 89(2):84–106, ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Norwood:1982:LP**
- [197] F. H. Norwood. Long proofs. *American Mathematical Monthly*, 89(2):110–112, ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Simoson:1982:AP**
- [198] Andrew Simoson. An “Archimedean” paradox. *American Mathematical Monthly*, 89(2):114–116, 125, ????. 1982.
- CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Nair:1982:CTI**
- [199] M. Nair. On Chebyshev-type inequalities for primes. *American Mathematical Monthly*, 89(2):126–129, ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Fearnley-Sander:1982:HGP**
- [200] Desmond Fearnley-Sander. Hermann Grassmann and the prehistory of universal algebra. *American Mathematical Monthly*, 89(3):161–166, ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chicone:1982:GPQ**
- [201] Carmen Chicone and Jing Huang Tian. On general properties of quadratic systems. *American Mathematical Monthly*, 89(3):167–178, ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Reilly:1982:MCL**
- [202] Robert C. Reilly. Mean curvature, the Laplacian, and soap bubbles. *American Mathematical Monthly*, 89(3):180–188, 197–198, ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Li:1982:EQO**
- [203] Hong Xiang Li. Elementary quadratures of ordinary differential equations. *American Mathematical Monthly*, 89(3):198–208, ????. 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Shih:1982:ABT**
- [204] Mau Hsiang Shih. An analog of Bolzano's theorem for functions of a complex variable. *American Mathematical Monthly*, 89(3):210–211, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Walter:1982:ONA**
- [205] Wolfgang Walter. Old and new approaches to Euler's trigonometric expansions. *American Mathematical Monthly*, 89(4):225–230, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rosenfeld:1982:HDC**
- [206] Azriel Rosenfeld. How a digital computer can tell whether a line is straight. *American Mathematical Monthly*, 89(4):231–235, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Hwang:1982:NCS**
- [207] F. K. Hwang. New concepts in seeding knockout tournaments. *American Mathematical Monthly*, 89(4):235–239, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Madguerova:1982:BPG**
- [208] Andreana S. Madguerova. On Bridges' proof of the great Picard theorem. *American Mathematical Monthly*, 89(4):239, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rudin:1982:NGF**
- [209] Walter Rudin. Nonuniqueness and growth in first-order differential equations. *American Mathematical Monthly*, 89(4):241–244, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bose:1982:LDE**
- [210] A. K. Bose. Linear differential equations on the complex plane. *American Mathematical Monthly*, 89(4):244–249, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Flanders:1982:FI**
- [211] Harley Flanders. On the Fresnel integrals. *American Mathematical Monthly*, 89(4):264–266, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wilf:1982:WA**
- [212] Herbert S. Wilf. What is an answer. *American Mathematical Monthly*, 89(5):289–292, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Jacobson:1982:MVT**
- [213] Bernard Jacobson. On the mean value theorem for integrals. *American Mathematical Monthly*, 89(5):300–301, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See errata [818].
- Challener:1982:CRT**
- [214] David Challener and Lee Rubel. A converse to Rouché's theorem. *American Mathematical Monthly*, 89(5):302–305, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Salzberg:1982:RPC**

- [215] Pablo M. Salzberg. A reflection principle for calculating the derivatives of a polynomial. *American Mathematical Monthly*, 89(5):305–307, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Scott:1982:BTS**

- [216] Brian M. Scott and Zachary Robinson. The boundary topology of a space. *American Mathematical Monthly*, 89(5):307–309, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wolk:1982:IST**

- [217] E. S. Wolk. On the inadequacy of subnets and transfinite sequences. *American Mathematical Monthly*, 89(5):310–311, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Azpeitia:1982:LRT**

- [218] Alfonso G. Azpeitia. On the Lagrange remainder of the Taylor formula. *American Mathematical Monthly*, 89(5):311–312, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Rice:1982:RPO**

- [219] Norman M. Rice. On  $n$ th roots of positive operators. *American Mathematical Monthly*, 89(5):313–314, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Clausing:1982:KTI**

- [220] Achim Clausing. Kantorovich-type inequalities. *American Mathematical*

*Monthly*, 89(5):314, 327–330, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Fraenkel:1982:HBY**

- [221] Aviezri S. Fraenkel. How to beat your Wythoff games' opponent on three fronts. *American Mathematical Monthly*, 89(6):353–361, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hatcher:1982:CA**

- [222] William S. Hatcher. Calculus is algebra. *American Mathematical Monthly*, 89(6):362–370, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Buchman:1982:NHN**

- [223] Edwin O. Buchman and Frederick A. Valentine. Any new Helly numbers. *American Mathematical Monthly*, 89(6):370–375, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Strichartz:1982:RIV**

- [224] Robert S. Strichartz. Radon inversion — variations on a theme. *American Mathematical Monthly*, 89(6):377–384, 420–423, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Richman:1982:MIC**

- [225] Fred Richman. Meaning and information in constructive mathematics. *American Mathematical Monthly*, 89(6):385–388, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Ayoub:1982:NGP**
- [226] Raymond G. Ayoub. On the nonsolvability of the general polynomial. *American Mathematical Monthly*, 89(6):397–401, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kalman:1982:CFF**
- [227] Dan Kalman. Central functions and fixed points. *American Mathematical Monthly*, 89(6):401–402, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Potts:1982:DDE**
- [228] Renfrey B. Potts. Differential and difference equations. *American Mathematical Monthly*, 89(6):402–407, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Janusz:1982:OA**
- [229] Gerald Janusz and Joseph Rotman. Outer automorphisms of  $S_6$ . *American Mathematical Monthly*, 89(6):407–410, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bagchi:1982:NOF**
- [230] Amitava Bagchi and Edward M. Reingold. A naturally occurring function continuous only at irrationals. *American Mathematical Monthly*, 89(6):411–417, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wene:1982:LCA**
- [231] G. P. Wene. A little color in abstract algebra. *American Mathematical Monthly*, 89(6):417–419, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Clark:1982:SAP**
- [232] Dean S. Clark. On some abstract properties of binomial coefficients. *American Mathematical Monthly*, 89(7):433–443, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Fisher:1982:EFI**
- [233] Dawn Fisher. Extending functions to infinitesimals of finite order. *American Mathematical Monthly*, 89(7):443–449, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Snyder:1982:FR**
- [234] W. M. Snyder. Factoring repunits. *American Mathematical Monthly*, 89(7):462–466, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cater:1982:MMF**
- [235] F. S. Cater. Most monotone functions are not singular. *American Mathematical Monthly*, 89(7):466–469, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Strang:1982:WC**
- [236] Gilbert Strang. The width of a chair. *American Mathematical Monthly*, 89(8):529–534, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Devaney:1982:BSC**
- [237] Robert L. Devaney. Blowing up singularities in classical mechanical systems. *American Mathematical Monthly*, 89(8):535–552, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Johnsonbaugh:1982:PNM**
- [238] Richard Johnsonbaugh and Tadao Murata. Petri nets and marked graphs — mathematical models of concurrent computation. *American Mathematical Monthly*, 89(8):552–566, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Fredricks:1982:STM**
- [239] Gregory A. Fredricks. Sylvester’s theorem for matrices with smooth entries. *American Mathematical Monthly*, 89(8):586–587, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rosay:1982:IHM**
- [240] Jean-Pierre Rosay. Injective holomorphic mappings. *American Mathematical Monthly*, 89(8):587–588, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- James:1982:BBS**
- [241] Robert C. James. Bases in Banach spaces. *American Mathematical Monthly*, 89(9):625–640, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wong:1982:SCM**
- [242] Yung Chow Wong and Kai Man Tsang. A strong converse of Morley’s trisection theorem. *American Mathematical Monthly*, 89(9):642–653, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Brown:1982:FPP**
- [243] Robert F. Brown. The fixed point property and Cartesian products. *American Mathematical Monthly*, 89(9):654–678, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Marshall:1982:CPH**
- [244] A. W. Marshall and I. Olkin. A convexity proof of Hadamard’s inequality. *American Mathematical Monthly*, 89(9):687–688, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Ungar:1982:GHF**
- [245] Abraham Ungar. Generalized hyperbolic functions. *American Mathematical Monthly*, 89(9):688–691, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Duncan:1982:TQL**
- [246] Donald Duncan and William Barnier. On trisection, quintisection, ..., etc. *American Mathematical Monthly*, 89(9):693, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Proctor:1982:STD**
- [247] Robert A. Proctor. Solution of two difficult combinatorial problems with linear algebra. *American Mathematical Monthly*, 89(10):721–734, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Small:1982:E**

- [248] Charles Small. On the equation  $xyz = x + y + z = 1$ . *American Mathematical Monthly*, 89(10):736–749, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Bell:1982:SWW**

- [249] Murray Bell and John Ginsburg. A space which will not go where its proper subspaces want it to go. *American Mathematical Monthly*, 89(10):749–751, ???? 1982. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Knuth:1983:EPE**

- [250] Donald E. Knuth. Elementary problem E2982, a double infinite sum for  $|x|$ . *American Mathematical Monthly*, 90 (??):54, 1983. ISSN 0002-9890 (print), 1930-0972 (electronic). Solution in [726].

**Ortiz:1983:ALC**

- [251] E. L. Ortiz and T. J. Rivlin. Another look at the Chebyshev polynomials. *American Mathematical Monthly*, 90(1):3–10, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Fletcher:1983:ADJ**

- [252] R. Fletcher and D. C. Sorensen. An algorithmic derivation of the Jordan canonical form. *American Mathematical Monthly*, 90(1):12–16, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Miel:1983:CPP**

- [253] George Miel. Of calculations past and present: the Archimedean algorithm. *American Mathematical Monthly*, 90(1):

17–35, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Rudin:1983:WDM**

- [254] Walter Rudin. Well-distributed measurable sets. *American Mathematical Monthly*, 90(1):41–42, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Gelbaum:1983:AMP**

- [255] Bernard R. Gelbaum. An algorithm for the minimal polynomial of a matrix. *American Mathematical Monthly*, 90(1):43–44, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Moler:1983:SVA**

- [256] Cleve Moler and Donald Morrison. Singular value analysis of cryptograms. *American Mathematical Monthly*, 90(2):78–87, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Fenn:1983:WGS**

- [257] Roger Fenn. What is the geometry of a surface. *American Mathematical Monthly*, 90(2):87–98, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**McIntosh:1983:NSC**

- [258] Richard McIntosh. A necessary and sufficient condition for the primality of Fermat numbers. *American Mathematical Monthly*, 90(2):98–99, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Stout:1983:RD**

- [259] Quentin F. Stout and Patricia A. Woodworth. Relational databases. *American Mathematical Monthly*, 90(2):101–118, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Guthrie:1983:CMC**

- [260] J. A. Guthrie. A continuous modulus of continuity. *American Mathematical Monthly*, 90(2):126–127, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hausner:1983:ASC**

- [261] Melvin Hausner. Applications of a simple counting technique. *American Mathematical Monthly*, 90(2):127–129, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Mycielski:1983:MCM**

- [262] Jan Mycielski. The meaning of the conjecture  $P \neq NP$  for mathematical logic. *American Mathematical Monthly*, 90(2):129–130, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Kendig:1983:AGA**

- [263] Keith M. Kendig. Algebra, geometry, and algebraic geometry: some interconnections. *American Mathematical Monthly*, 90(3):161–174, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Leron:1983:SMP**

- [264] Uri Leron. Structuring mathematical proofs. *American Mathematical Monthly*, 90(3):174–185, ???? 1983.

CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Grabiner:1983:WGY**

- [265] Judith V. Grabiner. Who gave you the epsilon? Cauchy and the origins of rigorous calculus. *American Mathematical Monthly*, 90(3):185–194, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Duffy:1983:EPI**

- [266] L. Richard Duffy. An elementary proof of the isomorphism  $\mathbf{C}^* \approx S^1$ . *American Mathematical Monthly*, 90(3):201–202, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Renaud:1983:MIE**

- [267] J.-C. Renaud. Matrices with integer entries and integer eigenvalues. *American Mathematical Monthly*, 90(3):202–203, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See comment [454].

**Romero:1983:WC**

- [268] Juan L. Romero. When is  $L^p(\mu)$  contained in  $L^q(\mu)$ ? *American Mathematical Monthly*, 90(3):203–206, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hiriart-Urruty:1983:SPV**

- [269] J.-B. Hiriart-Urruty. A short proof of the variational principle for approximate solutions of a minimization problem. *American Mathematical Monthly*, 90(3):206–207, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Franklin:1983:MME**
- [270] Joel Franklin. Mathematical methods of economics. *American Mathematical Monthly*, 90(4):229–244, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Jech:1983:RIT**
- [271] Thomas Jech. The ranking of incomplete tournaments: a mathematician’s guide to popular sports. *American Mathematical Monthly*, 90(4):246–266, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See supplement [343].
- Marden:1983:CCP**
- [272] Morris Marden. Conjectures on the critical points of a polynomial. *American Mathematical Monthly*, 90(4):267–276, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Hartig:1983:RRT**
- [273] Donald G. Hartig. The Riesz representation theorem revisited. *American Mathematical Monthly*, 90(4):277–280, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Posey:1983:FPL**
- [274] E. E. Posey and J. E. Vaughan. Functions with a proper local maximum in each interval. *American Mathematical Monthly*, 90(4):281–282, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wen:1983:SFC**
- [275] Liu Wen. A space filling curve. *American Mathematical Monthly*, 90(4):283, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Choi:1983:TTH**
- [276] Man Duen Choi. Tricks or treats with the Hilbert matrix. *American Mathematical Monthly*, 90(5):301–312, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [513].
- Hirshon:1983:GCG**
- [277] R. Hirshon. A group with constant growth rate. *American Mathematical Monthly*, 90(5):312–317, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Schelin:1983:CFA**
- [278] Charles W. Schelin. Calculator function approximation. *American Mathematical Monthly*, 90(5):317–325, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Schwenk:1983:HSC**
- [279] Allen J. Schwenk and J. Ian Munro. How small can the mean shadow of a set be. *American Mathematical Monthly*, 90(5):325–329, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Blair:1983:UEF**
- [280] Charles Blair and Lee A. Rubel. A universal entire function. *American Mathematical Monthly*, 90(5):331–332, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Milnor:1983:GKP**
- [281] John Milnor. On the geometry of the Kepler problem. *American Mathematical Monthly*, 90(6):353–365, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Spencer:1983:STL**
- [282] Joel Spencer. Short theorems with long proofs. *American Mathematical Monthly*, 90(6):365–366, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Fishburn:1983:FRC**
- [283] P. C. Fishburn and H. O. Pollak. Fixed-route cost allocation. *American Mathematical Monthly*, 90(6):366–378, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Waterhouse:1983:DSP**
- [284] William C. Waterhouse. Do symmetric problems have symmetric solutions. *American Mathematical Monthly*, 90(6):378–387, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Davidson:1983:PLA**
- [285] Kenneth R. Davidson. Pointwise limits of analytic functions. *American Mathematical Monthly*, 90(6):391–394, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rubel:1983:NEC**
- [286] Lee A. Rubel and Aristomenis Siskakis. A net of exponentials converging to a nonmeasurable function. *American Mathematical Monthly*, 90(6):394–396, ???? 1983. CODEN AMMYAE.
- ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kindler:1983:SPD**
- [287] Jürgen Kindler. A simple proof of the Daniell-Stone representation theorem. *American Mathematical Monthly*, 90(6):396–397, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Austin:1983:EAN**
- [288] A. Keith Austin. An elementary approach to NP-completeness. *American Mathematical Monthly*, 90(6):398–399, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chang:1983:IPE**
- [289] Geng Zhe Chang and Philip J. Davis. Iterative processes in elementary geometry. *American Mathematical Monthly*, 90(7):421–431, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Hill:1983:DFB**
- [290] Theodore P. Hill. Determining a fair border. *American Mathematical Monthly*, 90(7):438–442, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Applegate:1983:SCF**
- [291] Harry Applegate and Hironori Onishi. The slow continued fraction algorithm via  $2 \times 2$  integer matrices. *American Mathematical Monthly*, 90(7):443–455, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Coppel:1983:ICS**

- [292] W. A. Coppel. An interesting Cantor set. *American Mathematical Monthly*, 90(7):456–460, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Littlejohn:1983:SFD**

- [293] Lance L. Littlejohn. Symmetry factors for differential equations. *American Mathematical Monthly*, 90(7):462–464, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Haruki:1983:EI**

- [294] H. Haruki and S. Haruki. Euler's integrals. *American Mathematical Monthly*, 90(7):464–466, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [361].

**Walker:1983:HVB**

- [295] James W. Walker. A homology version of the Borsuk-Ulam theorem. *American Mathematical Monthly*, 90(7):466–468, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hughes:1983:NMP**

- [296] John F. Hughes and J. O. Shallit. On the number of multiplicative partitions. *American Mathematical Monthly*, 90(7):468–471, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Haimo:1983:CC**

- [297] Deborah Tepper Haimo and Franklin Tepper Haimo. Comments and com-

plements. *American Mathematical Monthly*, 90(7):472–478, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Berndt:1983:QRR**

- [298] Bruce C. Berndt. The quarterly reports of S. Ramanujan. *American Mathematical Monthly*, 90(8):505–516, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cross:1983:EFG**

- [299] James T. Cross. The Euler  $\varphi$ -function in the Gaussian integers. *American Mathematical Monthly*, 90(8):518–528, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Bruce:1983:GG**

- [300] J. W. Bruce and P. J. Giblin. Generic geometry. *American Mathematical Monthly*, 90(8):529–545, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Krantz:1983:CSD**

- [301] Steven G. Krantz. Characterization of smooth domains in  $\mathbf{C}$  by their biholomorphic self-maps. *American Mathematical Monthly*, 90(8):555–557, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hoffman:1983:SDF**

- [302] Michael J. Hoffman and Richard Katz. The sequence of derivatives of a  $C^\infty$  function. *American Mathematical Monthly*, 90(8):557–560, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Bullen:1983:IV**
- [303] P. S. Bullen. An inequality for variations. *American Mathematical Monthly*, 90(8):560, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kominek:1983:MCS**
- [304] Z. Kominek. Measure, category, and the sums of sets. *American Mathematical Monthly*, 90(8):561–562, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Francis:1983:DSS**
- [305] George K. Francis. Drawing Seifert surfaces that fiber the figure-8 knot complement in  $S^3$  over  $S^1$ . *American Mathematical Monthly*, 90(9):589–599, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Howe:1983:VBL**
- [306] Roger Howe. Very basic Lie theory. *American Mathematical Monthly*, 90(9):600–623, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Althoen:1983:WDA**
- [307] Steven C. Althoen and Lawrence D. Kugler. When is  $\mathbf{R}^2$  a division algebra. *American Mathematical Monthly*, 90(9):625–635, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Ewell:1983:SPF**
- [308] John A. Ewell. A simple proof of Fermat’s two-square theorem. *American Mathematical Monthly*, 90(9):635–637, ???? 1983. CODEN AMMYAE.
- ISSN 0002-9890 (print), 1930-0972 (electronic).
- Ladas:1983:NSC**
- [309] G. Ladas, Y. G. Sficas, and I. P. Stavroulakis. Necessary and sufficient conditions for oscillations. *American Mathematical Monthly*, 90(9):637–640, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Szulkin:1983:UDC**
- [310] Andrzej Szulkin.  $\mathbf{R}^3$  is the union of disjoint circles. *American Mathematical Monthly*, 90(9):640–641, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Thompson:1983:AVR**
- [311] Robert C. Thompson. Author vs. referee: a case history for middle level mathematicians. *American Mathematical Monthly*, 90(10):661–668, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Spencer:1983:LNU**
- [312] Joel Spencer. Large numbers and unprovable theorems. *American Mathematical Monthly*, 90(10):669–675, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Mays:1983:FWP**
- [313] Michael E. Mays. Functions which parametrize means. *American Mathematical Monthly*, 90(10):677–683, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- |   |  |
|---|--|
| <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Falconer:1983:ARS</b></div> <p>[314] K. J. Falconer. Applications of a result on spherical integration to the theory of convex sets. <i>American Mathematical Monthly</i>, 90(10):690–693, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Higgs:1983:IDS</b></div> <p>[315] Denis Higgs. Iterating the derived set function. <i>American Mathematical Monthly</i>, 90(10):693–697, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Massey:1983:CPV</b></div> <p>[316] W. S. Massey. Cross products of vectors in higher-dimensional Euclidean spaces. <i>American Mathematical Monthly</i>, 90(10):697–701, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Johnston:1983:CSC</b></div> <p>[317] Elgin Johnston. A “counterexample” for the Schwarz–Christoffel transform. <i>American Mathematical Monthly</i>, 90(10):701–703, ???? 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Saari:1984:NMC</b></div> <p>[318] Donald G. Saari and John B. Urenko. Newton’s method, circle maps, and chaotic motion. <i>American Mathematical Monthly</i>, 91(1):3–17, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [405].</p> | <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Diamond:1984:RAS</b></div> <p>[319] Harvey Diamond and Gregory Gellès. Relations among some classes of subsets of <math>\mathbf{R}</math>. <i>American Mathematical Monthly</i>, 91(1):19–22, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Burckel:1984:BSW</b></div> <p>[320] R. B. Burckel. Bishop’s Stone–Weierstrass theorem. <i>American Mathematical Monthly</i>, 91(1):22–32, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Jackson:1984:CC</b></div> <p>[321] Brad Jackson and Gerhard Ringel. Colorings of circles. <i>American Mathematical Monthly</i>, 91(1):42–49, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Fuster:1984:GSI</b></div> <p>[322] R. Fuster and A. Marquina. Geometric series in incomplete normed algebras. <i>American Mathematical Monthly</i>, 91(1):49–51, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>MacCluer:1984:SPF</b></div> <p>[323] C. R. MacCluer. A simple proof of the fundamental theorem on finite abelian groups. <i>American Mathematical Monthly</i>, 91(1):52, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Kupka:1984:MUU</b></div> <p>[324] Joseph Kupka and Karel Prikry. The measurability of uncountable unions. <i>American Mathematical Monthly</i>, 91(2):</p> |
|---|--|

- 85–97, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Miller:1984:AC**
- [325] Daniel B. Shapiro. A periodicity problem in plane geometry. *American Mathematical Monthly*, 91(2):97–108, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Johnson:1984:UFT**
- [326] George M. Phillips. Archimedes and the complex plane. *American Mathematical Monthly*, 91(2):108–114, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Gallian:1984:APS**
- [327] P. G. Laird and R. McCann. On some characterizations of polynomials. *American Mathematical Monthly*, 91(2):114–116, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Li:1984:GPL**
- [328] Timothy C. Brown. Poisson approximations and the definition of the Poisson process. *American Mathematical Monthly*, 91(2):116–123, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Christen:1984:DDC**
- [329] Joseph MacDonnell. A ruled Moebius band which self-intersects in a straight line. *American Mathematical Monthly*, 91(2):125–127, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Boyer:1984:PCR**
- [330] Thomas L. Miller and Robert F. Olin. Analytic curves. *American Mathematical Monthly*, 91(2):127–130, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [331] G. W. Johnson. An unsymmetric Fubini theorem. *American Mathematical Monthly*, 91(2):131–133, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [332] Joseph A. Gallian. Another proof that  $A_5$  is simple. *American Mathematical Monthly*, 91(2):134–135, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [421, 422].
- [333] Hung C. Li. A generalized problem of least squares. *American Mathematical Monthly*, 91(2):135–137, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [334] Claude Christen and Frank K. Hwang. Detection of a defective coin with partial weight information. *American Mathematical Monthly*, 91(3):173–179, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [335] Robert S. Boyer and J. Strother Moore. Proof checking the RSA public key encryption algorithm. *American Mathematical Monthly*, 91(3):181–189, ???? 1984.

1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Simoson:1984:THB**
- [336] Andrew Simoson. On two halves being two wholes. *American Mathematical Monthly*, 91(3):190–193, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Greenberg:1984:NCH**
- [337] Marvin Jay Greenberg. Note on the Cayley–Hamilton theorem. *American Mathematical Monthly*, 91(3):193–195, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See correction [463].
- Pecaric:1984:SPJ**
- [338] Josip E. Pečarić. A simple proof of the Jensen-Steffensen inequality. *American Mathematical Monthly*, 91(3):195–196, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Gallian:1984:NH**
- [339] Joseph A. Gallian and James Van Buskirk. The number of homomorphisms from  $Z_m$  into  $Z_n$ . *American Mathematical Monthly*, 91(3):196–197, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wilker:1984:MEE**
- [340] J. B. Wilker. Möbius equivalence and Euclidean symmetry. *American Mathematical Monthly*, 91(4):225–247, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Howe:1984:CVB**
- [341] Roger Howe. Correction to: “Very basic Lie theory”. *American Mathematical Monthly*, 91(4):247, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Levasseur:1984:PPW**
- [342] Kenneth M. Levasseur. A probabilistic proof of the Weierstrass approximation theorem. *American Mathematical Monthly*, 91(4):249–250, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [413].
- Stob:1984:SMG**
- [343] Michael Stob. A supplement to: “A mathematician’s guide to popular sports” [Amer. Math. Monthly **90** (1983), no. 4, 246–266, MR 85i:05122a] by T. Jech. *American Mathematical Monthly*, 91(5):277–282, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [271].
- Eisemann:1984:NTA**
- [344] Kurt Eisemann. Number-theoretic analysis and extensions of “the most complicated and fantastic card trick ever invented”. *American Mathematical Monthly*, 91(5):284–289, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Guinand:1984:ELT**
- [345] Andrew P. Guinand. Euler lines, tritangent centers, and their triangles. *American Mathematical Monthly*, 91(5):290–300, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Rudin:1984:IFP**

- [346] Walter Rudin. The inner function problem. *American Mathematical Monthly*, 91(5):301–302, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Pourahmadi:1984:TES**

- [347] Mohsen Pourahmadi. Taylor expansion of  $\exp(\sum_{k=0}^{\infty} a_k z^k)$  and some applications. *American Mathematical Monthly*, 91(5):303–307, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cater:1984:VWN**

- [348] F. S. Cater. On van der Waerden’s nowhere differentiable function. *American Mathematical Monthly*, 91(5):307–308, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Dixon:1984:FPT**

- [349] John D. Dixon. Factorization and primality tests. *American Mathematical Monthly*, 91(6):333–352, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Phillips:1984:ASF**

- [350] G. M. Phillips. Aitken sequences and Fibonacci numbers. *American Mathematical Monthly*, 91(6):354–357, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Magyar:1984:RQ**

- [351] Zoltán Magyar. A recursion on quadruples. *American Mathematical Monthly*, 91(6):360–362, ???? 1984. CODEN AM-

MYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Barany:1984:HTV**

- [352] I. Bárány, M. Katchalski, and János Pach. Helly’s theorem with volumes. *American Mathematical Monthly*, 91(6):362–365, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Stroeker:1984:HSD**

- [353] R. J. Stroeker. How to solve a Diophantine equation — a number-theoretic excursion. *American Mathematical Monthly*, 91(7):385–392, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Burrows:1984:SPI**

- [354] B. L. Burrows and R. F. Talbot. Sums of powers of integers. *American Mathematical Monthly*, 91(7):394–403, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Baxley:1984:LMP**

- [355] John V. Baxley and John C. Moorsehouse. Lagrange multiplier problems in economics. *American Mathematical Monthly*, 91(7):404–412, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Avis:1984:NFN**

- [356] David Avis. The number of furthest neighbour pairs of a finite planar set. *American Mathematical Monthly*, 91(7):417–420, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Lewis:1984:CPT**

- [357] R. P. Lewis. A combinatorial proof of the triple product identity. *American Mathematical Monthly*, 91(7):420–423, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Schattschneider:1984:TG**

- [358] Doris J. Schattschneider. The taxicab group. *American Mathematical Monthly*, 91(7):423–428, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Ball:1984:ACP**

- [359] B. J. Ball. Arcwise connectedness and the persistence of errors. *American Mathematical Monthly*, 91(7):431–433, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Henle:1984:TPI**

- [360] J. M. Henle. Tangent planes with infinitesimals. *American Mathematical Monthly*, 91(7):433–435, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Williams:1984:LEE**

- [361] Kenneth S. Williams. Letter to the editor: “Euler’s integrals” [Amer. Math. Monthly **90** (1983), no. 7, 464–466, MR 84k:26012], by H. Haruki and S. Haruki. *American Mathematical Monthly*, 91(7):455, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [294].

**Knuth:1984:TPP**

- [362] Donald E. Knuth. The toilet paper problem. *American Mathematical Monthly*,

91(8):465–470, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Boolos:1984:LP**

- [363] George Boolos. The logic of provability. *American Mathematical Monthly*, 91(8):470–480, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Scherer:1984:SNT**

- [364] Karl Scherer. Some new types of closure properties in the plane. *American Mathematical Monthly*, 91(8):480–487, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Henry:1984:API**

- [365] Myron S. Henry. Approximation by polynomials: interpolation and optimal nodes. *American Mathematical Monthly*, 91(8):497–499, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Spigler:1984:DLM**

- [366] R. Spigler. Double limits and matched asymptotic expansions. *American Mathematical Monthly*, 91(8):501–505, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Tsing:1984:IDB**

- [367] Nam Kiu Tsing. Infinite-dimensional Banach spaces must have uncountable basis—an elementary proof. *American Mathematical Monthly*, 91(8):505–506, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Feintuch:1984:ME**

- [368] Avraham Feintuch and Matatyahu Rubin. The matrix equation  $AX - XB = C$ . *American Mathematical Monthly*, 91(8):506–507, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Morsche:1984:DLP**

- [369] H. G. ter Morsche and G. W. Veltkamp. A discrete Landau problem. *American Mathematical Monthly*, 91(8):508–509, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Weil:1984:E**

- [370] André Weil. Euler. *American Mathematical Monthly*, 91(9):537–542, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Birman:1984:TLG**

- [371] Graciela S. Birman and Katsumi Nomizu. Trigonometry in Lorentzian geometry. *American Mathematical Monthly*, 91(9):543–549, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Horst:1984:RSL**

- [372] H. J. ter Horst. Riemann-Stieltjes and Lebesgue-Stieltjes integrability. *American Mathematical Monthly*, 91(9):551–559, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Morris:1984:EPH**

- [373] Sidney A. Morris. An elementary proof that the Hilbert cube is compact. *American Mathematical Monthly*, 91(9):563–

564, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cater:1984:PUI**

- [374] F. S. Cater. A partition of the unit interval. *American Mathematical Monthly*, 91(9):564–566, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wolfram:1984:GBC**

- [375] Stephen Wolfram. Geometry of binomial coefficients. *American Mathematical Monthly*, 91(9):566–571, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Richards:1984:RNC**

- [376] I. M. Richards. A remark on the number of cyclic subgroups of a finite group. *American Mathematical Monthly*, 91(9):571–572, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Koch:1984:MI**

- [377] Richard Koch. Matrix invariants. *American Mathematical Monthly*, 91(9):573–575, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Taylor:1984:LMR**

- [378] Angus E. Taylor. A life in mathematics remembered. *American Mathematical Monthly*, 91(10):605–618, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cater:1984:DNA**

- [379] F. S. Cater. Differentiable, nowhere analytic functions. *American Mathematical Monthly*, 91(9):563–

- cal Monthly*, 91(10):618–624, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Schechter:1984:SDS**
- [380] Murray Schechter. Summation of divergent series by computer. *American Mathematical Monthly*, 91(10):629–632, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chang:1984:BPS**
- [381] Geng Zhe Chang. Bernstein polynomials via the shifting operator. *American Mathematical Monthly*, 91(10):634–638, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Solomon:1984:TCL**
- [382] Frederick Solomon. A theorem concerning Lorentz transformations. *American Mathematical Monthly*, 91(10):638–641, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Maehara:1984:JCT**
- [383] Ryuji Maehara. The Jordan curve theorem via the Brouwer fixed point theorem. *American Mathematical Monthly*, 91(10):641–643, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Gerber:1984:WFR**
- [384] Hans U. Gerber. Wronski’s formula and the resultant of two polynomials. *American Mathematical Monthly*, 91(10):644–646, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Johnson:1984:EAE**
- [385] Bruce R. Johnson. An elementary approach for extending Poisson processes to the nonstationary case. *American Mathematical Monthly*, 91(10):646–648, ???? 1984. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Knuth:1985:PCS**
- [386] Donald E. Knuth. Problem E3106, A curious sum for Euler’s totient function. *American Mathematical Monthly*, 92(??):590, 1985. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lehmer:1985:SSP**
- [387] Emma Lehmer. On square-separable primes. *American Mathematical Monthly*, 92(??):719–720, ???? 1985. CODEN CACMA2. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lagarias:1985:PG**
- [388] Jeffrey C. Lagarias. The  $3x + 1$  problem and its generalizations. *American Mathematical Monthly*, 92(1):3–23, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Fisher:1985:PP**
- [389] J. Chris Fisher, D. Ruoff, and J. Shillette. Perpendicular polygons. *American Mathematical Monthly*, 92(1):23–37, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bardsley:1985:CPS**
- [390] W. G. Bardsley and R. M. W. Wood. Critical points and sigmoidicity of positive rational functions. *American Math-*

- ematical Monthly*, 92(1):37–48, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Olkil:1985:PPT**
- [391] Ingram Olkin. A probabilistic proof of a theorem of Schur. *American Mathematical Monthly*, 92(1):50–51, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Reiner:1985:EMT**
- [392] David L. Reiner. Enumeration in music theory. *American Mathematical Monthly*, 92(1):51–54, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bressoud:1985:BEP**
- [393] David M. Bressoud and Doron Zeilberger. Bijecting Euler’s partitions-recurrence. *American Mathematical Monthly*, 92(1):54–55, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wos:1985:AR**
- [394] L. Wos. Automated reasoning. *American Mathematical Monthly*, 92(2):85–92, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Abian:1985:SIS**
- [395] Alexander Abian. Solvability of infinite systems of polynomial equations over the field of complex numbers. *American Mathematical Monthly*, 92(2):94–98, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [429] and letter to the editor [532].
- Pittenger:1985:LMV**
- [396] A. O. Pittenger. The logarithmic mean in  $n$  variables. *American Mathematical Monthly*, 92(2):99–104, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Fraenkel:1985:SN**
- [397] Aviezri S. Fraenkel. Systems of numeration. *American Mathematical Monthly*, 92(2):105–114, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Walter:1985:EPC**
- [398] Wolfgang Walter. An elementary proof of the Cauchy-Kowalevsky theorem. *American Mathematical Monthly*, 92(2):115–126, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Berndt:1985:GFH**
- [399] Bruce C. Berndt. The gamma function and the Hurwitz zeta-function. *American Mathematical Monthly*, 92(2):126–130, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Gander:1985:HIM**
- [400] Walter Gander. On Halley’s iteration method. *American Mathematical Monthly*, 92(2):131–134, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chicone:1985:CCH**
- [401] Carmen Chicone, N. J. Kalton, and Ira J. Papick. A converse for the Cayley-Hamilton theorem. *American Mathematical Monthly*, 92(2):134–136, ???? 1985.

1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Johnson:1985:ECW**
- [402] Jerry Johnson. An elementary characterization of weak convergence of measures. *American Mathematical Monthly*, 92(2):136–137, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Diamond:1985:ISC**
- [403] Harvey Diamond and Gregory Gelles. Interlaced second category sets. *American Mathematical Monthly*, 92(2):138–140, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Snapper:1985:IEC**
- [404] Ernst Snapper. An ingrained error concerning resultants. *American Mathematical Monthly*, 92(2):141, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cosnard:1985:LEN**
- [405] M. Cosnard and C. Masse. Letter to the editor: “Newton’s method, circle maps, and chaotic motion” [Amer. Math. Monthly 91 (1984), no. 1, 3–17, MR 85a:58060] by D. Saari and J. Urenko. *American Mathematical Monthly*, 92(2):157–158, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [318].
- Roselle:1985:ADS**
- [406] David Roselle. Award for distinguished service to Professor Everett Pitcher. *American Mathematical Monthly*, 92(3):169–170, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Knuth:1985:ATM**
- [407] Donald E. Knuth. Algorithmic thinking and mathematical thinking. *American Mathematical Monthly*, 92(3):170–181, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). This is a revised version of [823].
- Britt:1985:ALD**
- [408] Jonathan Britt. The anatomy of low-dimensional stable singularities. *American Mathematical Monthly*, 92(3):183–201, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Carvalho:1985:CML**
- [409] F. J. Craveiro de Carvalho. Characterizing maximally looped closed curves. *American Mathematical Monthly*, 92(3):202–207, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Leach:1985:GAC**
- [410] Ronald J. Leach. On Gelbaum’s algorithm for computing the minimal polynomial of a matrix. *American Mathematical Monthly*, 92(3):208–209, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Drobot:1985:CFD**
- [411] Vladimir Drobot and Michał Morayne. Continuous functions with a dense set of proper local maxima. *American Mathematical Monthly*, 92(3):209–211, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Harary:1985:DGC**

- [412] Frank Harary and Robert W. Robinson. The diameter of a graph and its complement. *American Mathematical Monthly*, 92(3):211–212, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [485].

**Levasseur:1985:LEP**

- [413] Kenneth M. Levasseur. Letter to the editor: “A probabilistic proof of the Weierstrass approximation theorem” [Amer. Math. Monthly **91** (1984), no. 4, 249–250, MR 85h:41016]. *American Mathematical Monthly*, 92(3):227, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [342].

**Akin:1985:BS**

- [414] Ethan Akin and Morton Davis. Bulgarian solitaire. *American Mathematical Monthly*, 92(4):237–250, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wilf:1985:SEC**

- [415] Herbert S. Wilf. Some examples of combinatorial averaging. *American Mathematical Monthly*, 92(4):250–261, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Gale:1985:MMS**

- [416] David Gale and Marilda Sotomayor. Ms. Machiavelli and the stable matching problem. *American Mathematical Monthly*, 92(4):261–268, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Waterhouse:1985:WOE**

- [417] William C. Waterhouse. When one equation solves them all. *American Mathematical Monthly*, 92(4):270–273, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Papp:1985:AFE**

- [418] F. J. Papp. The d’Alembert functional equation. *American Mathematical Monthly*, 92(4):273–275, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Arnold:1985:DSA**

- [419] L. K. Arnold, S. J. Benkoski, and B. J. McCabe. The discriminator (a simple application of Bertrand’s postulate). *American Mathematical Monthly*, 92(4):275–277, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Lipschutz:1985:NGM**

- [420] Seymour Lipschutz. Notes on graphs and matrix inequalities. *American Mathematical Monthly*, 92(4):277–280, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Teo:1985:LEA**

- [421] K. L. Teo and M. D. Hendy. Letter to the editor: “Another proof that  $A_5$  is simple” [Amer. Math. Monthly **91** (1984), no. 2, 134–135, MR 85h:20020] by J. A. Gallian. *American Mathematical Monthly*, 92(4):303, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [332, 422].

**Gallian:1985:LEA**

- [422] Joseph A. Gallian. Letter to the editor: “Another proof that  $A_5$  is simple” [Amer. Math. Monthly 91 (1984), no. 2, 134–135, MR 85h:20020]. *American Mathematical Monthly*, 92(4):303–304, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [332, 421].

**Bloore:1985:AHP**

- [423] F. J. Bloore and H. R. Morton. Advice on hanging pictures. *American Mathematical Monthly*, 92(5):309–321, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Rootselaar:1985:HSS**

- [424] B. van Rootselaar. How to solve the system  $x' = Ax$ . *American Mathematical Monthly*, 92(5):321–327, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Stone:1985:TPS**

- [425] A. H. Stone. Trees and power-sums. *American Mathematical Monthly*, 92(5):328–331, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [512].

**Osserman:1985:FMV**

- [426] Robert Osserman. The four-or-more vertex theorem. *American Mathematical Monthly*, 92(5):332–337, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Leader:1985:IEP**

- [427] Solomon Leader. The inclusion-exclusion probability formulas by Tay-

lor’s theorem. *American Mathematical Monthly*, 92(5):343–345, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Charnow:1985:TLO**

- [428] A. Charnow and E. Charnow. On transcendental linear operators. *American Mathematical Monthly*, 92(5):345–347, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Biler:1985:DTT**

- [429] Piotr Biler. Dini type theorems on positive series. *American Mathematical Monthly*, 92(5):347–349, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letters to the editor [395, 533].

**Burgess:1985:CS**

- [430] C. E. Burgess. Classification of surfaces. *American Mathematical Monthly*, 92(5):349–354, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Kimelfeld:1985:ICM**

- [431] Boris Kimelfeld. An inequality concerning minors of a semidefinite matrix. *American Mathematical Monthly*, 92(5):354–355, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Chernoff:1985:LEP**

- [432] Paul R. Chernoff. Letter to the editor: “Pointwise convergence of Fourier series” [Amer. Math. Monthly 87 (1980), no. 5, 399–400, MR 81b:42028]. *American Mathematical Monthly*, 92(5):373–374, ???? 1985. CODEN AMMYAE.

- ISSN 0002-9890 (print), 1930-0972 (electronic). See [54].
- Larsen:1985:RRG**
- [433] Mogens Esrom Larsen. Rubik's revenge: the group theoretical solution. *American Mathematical Monthly*, 92(6):381–390, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- MacGregor:1985:LMG**
- [434] T. H. MacGregor. Linear methods in geometric function theory. *American Mathematical Monthly*, 92(6):392–406, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cull:1985:THA**
- [435] Paul Cull and E. F. Ecklund, Jr. Towers of Hanoi and analysis of algorithms. *American Mathematical Monthly*, 92(6):407–420, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Connor:1985:SPS**
- [436] Jeff Connor. A short proof of Steinhaus' theorem on summability. *American Mathematical Monthly*, 92(6):420–421, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Thomas:1985:CCN**
- [437] Robin Thomas. A combinatorial construction of a nonmeasurable set. *American Mathematical Monthly*, 92(6):421–422, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bankston:1985:TPE**
- [438] Paul Bankston and Ralph Fox. Topological partitions of Euclidean space by spheres. *American Mathematical Monthly*, 92(6):423–424, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Dixon:1985:LEF**
- [439] John D. Dixon. Letter to the editor: "Factorization and primality tests". *American Mathematical Monthly*, 92(6):444, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lehmer:1985:ISI**
- [440] D. H. Lehmer. Interesting series involving the central binomial coefficient. *American Mathematical Monthly*, 92(7):449–457, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- McKee:1985:LGT**
- [441] T. A. McKee. The logic of graph-theoretic duality. *American Mathematical Monthly*, 92(7):457–464, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rogalski:1985:IAS**
- [442] Marc Rogalski and Jean Saint-Raymond. Inequalities about symmetric compact convex sets in the plane. *American Mathematical Monthly*, 92(7):466–480, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Wallen:1985:MIP**
- [443] Lawrence J. Wallen. Modified iteration and probability. *American Mathematical Monthly*, 92(7):481–485, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Villani:1985:ANI**
- [444] Alfonso Villani. Another note on the inclusion  $L^p(\mu) \subset L^q(\mu)$ . *American Mathematical Monthly*, 92(7):485–487, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chaves:1985:SWA**
- [445] M. Arala Chaves. Spaces where all continuity is uniform. *American Mathematical Monthly*, 92(7):487–489, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rudin:1985:URI**
- [446] Walter Rudin. Unique right inverses are two-sided. *American Mathematical Monthly*, 92(7):489–490, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Blom:1985:SPE**
- [447] Gunnar Blom. A simple property of exchangeable random variables. *American Mathematical Monthly*, 92(7):491–492, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lord:1985:SCF**
- [448] N. J. Lord. Simultaneous complements in finite-dimensional vector spaces. *American Mathematical Monthly*, 92(7):492–493, ???? 1985. CODEN AM-
- MYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Pereira:1985:SPC**
- [449] N. Costa Pereira. A short proof of Chebyshev's theorem. *American Mathematical Monthly*, 92(7):494–495, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chang:1985:PMI**
- [450] Geng Zhe Chang. Planar metric inequalities derived from the Vandermonde determinant. *American Mathematical Monthly*, 92(7):495–499, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Paul:1985:CPP**
- [451] Jerome L. Paul. Combinatorial proofs of Pascal's formula for sums of powers of the integers. *American Mathematical Monthly*, 92(7):499–501, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Baker:1985:NCI**
- [452] I. N. Baker and P. J. Rippon. A note on complex iteration. *American Mathematical Monthly*, 92(7):501–504, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Page:1985:CCL**
- [453] Warren Page. Compactness and closedness in locally compact Hausdorff spaces. *American Mathematical Monthly*, 92(7):504–506, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Ortega:1985:CMI**

- [454] James M. Ortega. Comment on: “Matrices with integer entries and integer eigenvalues” by J.-C. Renaud [Amer. Math. Monthly **90** (1983), no. 3, 202–203, MR 84c:15024] and “Generation of test matrices by similarity transformations” by Ortega [Comm. ACM **7** (1964), 377–378, MR **29** #5375]. *American Mathematical Monthly*, 92(7):526, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [822, 267].

**Chan:1985:HMI**

- [455] N. N. Chan and Man Kam Kwong. Hermitian matrix inequalities and a conjecture. *American Mathematical Monthly*, 92(8):533–541, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Dawson:1985:MS**

- [456] R. J. MacG. Dawson. Monostatic simplexes. *American Mathematical Monthly*, 92(8):541–546, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Veldkamp:1985:IPP**

- [457] G. R. Veldkamp. The isoperimetric point and the point(s) of equal detour in a triangle. *American Mathematical Monthly*, 92(8):546–558, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Isaacs:1985:SPR**

- [458] I. M. Isaacs. Solution of polynomials by real radicals. *American Mathematical Monthly*, 92(8):571–575, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Gupta:1985:TCW**

- [459] Haragauri N. Gupta. A theorem in combinatorics and Wilson’s theorem. *American Mathematical Monthly*, 92(8):575–576, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Alperin:1985:ABC**

- [460] Roger C. Alperin.  $p$ -adic binomial coefficients mod  $p$ . *American Mathematical Monthly*, 92(8):576–578, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hirschhorn:1985:SPJ**

- [461] Michael D. Hirschhorn. A simple proof of Jacobi’s two-square theorem. *American Mathematical Monthly*, 92(8):579–580, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Minassian:1985:SST**

- [462] Donald P. Minassian. A simple structure theorem for two-generator, one-relation groups. *American Mathematical Monthly*, 92(8):580–583, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Greenberg:1985:CNC**

- [463] Marvin Jay Greenberg. Correction to: “Note on the Cayley–Hamilton theorem” [Amer. Math. Monthly **91** (1984), no. 3, 193–195, MR 85c:15023]. *American Mathematical Monthly*, 92(8):583, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [337].

**Varberg:1985:PTR**

- [464] Dale E. Varberg. Pick's theorem revisited. *American Mathematical Monthly*, 92(8):584–587, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wall:1985:USE**

- [465] Charles R. Wall. Unbounded sequences of Euler-Dedekind means. *American Mathematical Monthly*, 92(8):587, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Turner:1985:RG**

- [466] Edward C. Turner and Karen F. Gold. Rubik's groups. *American Mathematical Monthly*, 92(9):617–629, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Spring:1985:SDT**

- [467] D. Spring. On the second derivative test for constrained local extrema. *American Mathematical Monthly*, 92(9):631–643, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Marden:1985:SRT**

- [468] Morris Marden. The search for a Rolle's theorem in the complex domain. *American Mathematical Monthly*, 92(9):643–650, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hilton:1985:ASA**

- [469] Peter Hilton. On all sorts of automorphisms. *American Mathematical Monthly*, 92(9):650–656, ???? 1985.

CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Shuchat:1985:GLS**

- [470] Alan Shuchat. Generalized least squares and eigenvalues. *American Mathematical Monthly*, 92(9):656–659, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Owings:1985:CPC**

- [471] James C. Owings, Jr. A combinatorial proof of a criterion for normality. *American Mathematical Monthly*, 92(9):662–663, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Giblin:1985:LSP**

- [472] P. J. Giblin and S. A. Brassett. Local symmetry of plane curves. *American Mathematical Monthly*, 92(10):689–707, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Gerla:1985:GP**

- [473] G. Gerla and R. Volpe. Geometry without points. *American Mathematical Monthly*, 92(10):707–711, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Weaver:1985:CCS**

- [474] James R. Weaver. Centrosymmetric (cross-symmetric) matrices, their basic properties, eigenvalues, and eigenvectors. *American Mathematical Monthly*, 92(10):711–717, ???? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- |   |  |
|---|--|
| <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Clark:1985:CTC</b></div> <p>[475] Dean S. Clark. A combinatorial theorem on circulant matrices. <i>American Mathematical Monthly</i>, 92(10):725–729, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Penney:1985:MRS</b></div> <p>[476] David E. Penney and Carl Pomerance. Multiplicative relations for sums of initial <math>k</math>th powers. <i>American Mathematical Monthly</i>, 92(10):729–731, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Grinberg:1985:SHS</b></div> <p>[477] Eric L. Grinberg. On the smoothness hypothesis in Sard’s theorem. <i>American Mathematical Monthly</i>, 92(10):733–734, ??? 1985. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Schoenberg:1986:CAR</b></div> <p>[478] I. J. Schoenberg. A conjectured analogue of Rolle’s theorem for polynomials with real or complex coefficients. <i>American Mathematical Monthly</i>, 93(1):8–13, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>DeVilliers:1986:ICL</b></div> <p>[479] J. M. De Villiers and P. N. Robinson. The interval of convergence and limiting functions of a hyperpower sequence. <i>American Mathematical Monthly</i>, 93(1):13–23, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> | <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Namias:1986:SDS</b></div> <p>[480] Victor Namias. A simple derivation of Stirling’s asymptotic series. <i>American Mathematical Monthly</i>, 93(1):25–29, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Beutelspacher:1986:CBT</b></div> <p>[481] Albrecht Beutelspacher. <math>21 - 6 = 15</math>: a connection between two distinguished geometries. <i>American Mathematical Monthly</i>, 93(1):29–41, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Krantz:1986:ASS</b></div> <p>[482] Steven G. Krantz and T. D. Parsons. Antisocial subcovers of self-centered coverings. <i>American Mathematical Monthly</i>, 93(1):45–48, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Kaufman:1986:LCB</b></div> <p>[483] Edwin H. Kaufman, Jr. and Terry D. Lenker. Linear convergence and the bisection algorithm. <i>American Mathematical Monthly</i>, 93(1):48–51, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Salama:1986:GIE</b></div> <p>[484] Ibrahim A. Salama and Lawrence L. Kupper. A geometric interpretation for the Eulerian numbers. <i>American Mathematical Monthly</i>, 93(1):51–52, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> |
|---|--|

- Straffin:1986:LED**
- [485] Philip D. Straffin, Jr. Letter to the editor: “The diameter of a graph and its complement” [Amer. Math. Monthly **92** (1985), no. 3, 211–212, MR 87j:05139a] by F. Harary and R. W. Robinson. *American Mathematical Monthly*, 93(1):76, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [412].
- Laforgia:1986:SCS**
- [486] Andrea Laforgia and Martin E. Muldoon. Some consequences of the Sturm comparison theorem. *American Mathematical Monthly*, 93(2):89–94, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chance:1986:GDD**
- [487] William A. Chance. A geometric derivation of the distribution of the correlation coefficient  $|r|$  when  $\rho = 0$ . *American Mathematical Monthly*, 93(2):94–98, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Allen:1986:POP**
- [488] Thomas Tracy Allen. Pólya’s orchard problem. *American Mathematical Monthly*, 93(2):98–104, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Leonard:1986:CRD**
- [489] Philip A. Leonard. Cyclic relative difference sets. *American Mathematical Monthly*, 93(2):106–111, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- McCoy:1986:CFX**
- [490] T. L. McCoy. On “ $\cos f(x) = f(\sin x)$ ”. *American Mathematical Monthly*, 93(2):111–115, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Robertson:1986:DBN**
- [491] Jack M. Robertson and Andrew F. Siegel. Designing Buffon’s needle for a given crossing distribution. *American Mathematical Monthly*, 93(2):116–119, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Searcoid:1986:TEG**
- [492] Mícheál Ó Searcoid and Desmond MacHale. Two elementary generalisations of Boolean rings. *American Mathematical Monthly*, 93(2):121–122, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Diaconis:1986:EPS**
- [493] P. Diaconis and D. Freedman. An elementary proof of Stirling’s formula. *American Mathematical Monthly*, 93(2):123–125, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Mattics:1986:BNM**
- [494] L. E. Mattics and F. W. Dodd. A bound for the number of multiplicative partitions. *American Mathematical Monthly*, 93(2):125–126, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cooper:1986:GSP**

- [495] Curtis Cooper. Geometric series and a probability problem. *American Mathematical Monthly*, 93(2):126–127, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Eidswick:1986:CPW**

- [496] J. A. Eidswick. Cubelike puzzles — what are they and how do you solve them. *American Mathematical Monthly*, 93(3):157–176, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Schmidt:1986:AAC**

- [497] E. J. P. Georg Schmidt. An alternative approach to canonical forms of matrices. *American Mathematical Monthly*, 93(3):176–184, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Grabiner:1986:TET**

- [498] Sandy Grabiner. The Tietze extension theorem and the open mapping theorem. *American Mathematical Monthly*, 93(3):190–191, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Keller:1986:PH**

- [499] Joseph B. Keller. The probability of heads. *American Mathematical Monthly*, 93(3):191–197, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Parsons:1986:ACR**

- [500] T. D. Parsons. Ancestors, cardinals, and representatives. *American Mathematical Monthly*, 93(3):197–200, ???? 1986.

CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Lenard:1986:NLT**

- [501] A. Lenard. A note on Liouville's theorem. *American Mathematical Monthly*, 93(3):200–201, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Eisemann:1986:SDC**

- [502] Kurt Eisemann. A self-dual card trick based on congruences and  $k$ -shuffles. *American Mathematical Monthly*, 93(3):201–205, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Knuth:1986:SPC**

- [503] Donald E. Knuth. Solution to problem 6480, A Catalanian sum. *American Mathematical Monthly*, 93(3):220, March 1986. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Ungar:1986:RTC**

- [504] Peter Ungar. Review of three calculus textbooks. *American Mathematical Monthly*, 93(3):221–230, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Axler:1986:HFC**

- [505] Sheldon Axler. Harmonic functions from a complex analysis viewpoint. *American Mathematical Monthly*, 93(4):246–258, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cleary:1986:NGN**

- [506] Joan Cleary, Sidney A. Morris, and David Yost. Numerical geometry —

- numbers for shapes. *American Mathematical Monthly*, 93(4):260–275, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Small:1986:STS**
- [507] Charles Small. Sums of three squares and levels of quadratic number fields. *American Mathematical Monthly*, 93(4):276–279, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lion:1986:SPD**
- [508] Georges A. Lion. A simple proof of the Dirichlet–Jordan convergence test. *American Mathematical Monthly*, 93(4):281–282, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Turk:1986:FDP**
- [509] Jan Turk. The fixed divisor of a polynomial. *American Mathematical Monthly*, 93(4):282–286, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Brandl:1986:IPR**
- [510] Rolf Brandl. Integer polynomials that are reducible modulo all primes. *American Mathematical Monthly*, 93(4):286–288, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lehmer:1986:CPS**
- [511] D. H. Lehmer. Coloring the Platonic solids. *American Mathematical Monthly*, 93(4):288–292, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See errata [816].
- Gessel:1986:LET**
- [512] Ira Gessel. Letter to the editor: “Trees and power-sums” [Amer. Math. Monthly 92 (1985), no. 5, 328–331, MR 87e:05016a] by A. H. Stone. *American Mathematical Monthly*, 93(4):323–324, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [425].
- Weintraub:1986:LET**
- [513] Steven H. Weintraub. Letter to the editor: “Tricks or treats with the Hilbert matrix” [Amer. Math. Monthly 90 (1983), no. 5, 301–312, MR 84h:47031] by M. D. Choi. *American Mathematical Monthly*, 93(4):324, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [276].
- Aldous:1986:SCS**
- [514] David Aldous and Persi Diaconis. Shuffling cards and stopping times. *American Mathematical Monthly*, 93(5):333–348, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Leader:1986:WDN**
- [515] Solomon Leader. What is a differential? A new answer from the generalized Riemann integral. *American Mathematical Monthly*, 93(5):348–356, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wilde:1986:TLD**
- [516] Alan C. Wilde. Transformations leaving the determinant of circulant matrices invariant. *American Mathematical Monthly*, 93(5):356–361, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hancl:1986:SPI**

- [517] Jaroslav Hancl. A simple proof of the irrationality of  $\pi^4$ . *American Mathematical Monthly*, 93(5):374–375, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cecil:1986:PCM**

- [518] Thomas E. Cecil and Patrick J. Ryan. The principal curvatures of the monkey saddle. *American Mathematical Monthly*, 93(5):380–382, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Gilmer:1986:ZDC**

- [519] Robert Gilmer. Zero divisors in commutative rings. *American Mathematical Monthly*, 93(5):382–387, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Ikebe:1986:EAF**

- [520] Yasuhiko Ikebe and Toshiyuki Inagaki. An elementary approach to the functional calculus for matrices. *American Mathematical Monthly*, 93(5):390–392, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Burgstahler:1986:ASP**

- [521] Sylvan Burgstahler. An algorithm for solving polynomial equations. *American Mathematical Monthly*, 93(6):421–430, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Kedem:1986:SCS**

- [522] Benjamin Kedem. A stochastic characterization of the sine function. *Amer-*

*ican Mathematical Monthly*, 93(6):430–440, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Macdonald:1986:CTP**

- [523] I. D. Macdonald. Commutators and their products. *American Mathematical Monthly*, 93(6):440–444, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Farwig:1986:VLP**

- [524] R. Farwig and D. Zwick. A variation on the Landau problem. *American Mathematical Monthly*, 93(6):444–451, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Edwards:1986:QRS**

- [525] A. W. F. Edwards. A quick route to sums of powers. *American Mathematical Monthly*, 93(6):451–455, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Walls:1986:AG**

- [526] Gary L. Walls. Automorphism groups. *American Mathematical Monthly*, 93(6):459–462, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Bosch:1986:FSM**

- [527] A. J. Bosch. The factorization of a square matrix into two symmetric matrices. *American Mathematical Monthly*, 93(6):462–464, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Benavides:1986:HMZ**

- [528] Tomás Domínguez Benavides. How many zeros does a continuous function have. *American Mathematical Monthly*, 93(6):464–466, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wimp:1986:QGM**

- [529] Jet Wimp. Quadrature with generalized means. *American Mathematical Monthly*, 93(6):466–468, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Smyth:1986:CPG**

- [530] C. J. Smyth. A coloring proof of a generalisation of Fermat’s little theorem. *American Mathematical Monthly*, 93(6):469–471, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hoare:1986:IBP**

- [531] A. H. M. Hoare. An involution of blocks in the partitions of  $n$ . *American Mathematical Monthly*, 93(6):475–476, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Anderson:1986:LES**

- [532] David F. Anderson. Letter to the editor: “Solvability of infinite systems of polynomial equations over the field of complex numbers” [Amer. Math. Monthly **92** (1985), no. 2, 94–98, MR 86c:12004] by A. Abian. *American Mathematical Monthly*, 93(6):496–497, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [395].

**Pelling:1986:LED**

- [533] M. J. Pelling. Letter to the editor: “Dimension type theorems on positive series” [Amer. Math. Monthly **92** (1985), no. 5, 347–349, MR 86m:40001] by P. Biler. *American Mathematical Monthly*, 93(6):497–498, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [429].

**Korevaar:1986:LBC**

- [534] J. Korevaar. Ludwig Bieberbach’s conjecture and its proof by Louis de Branges. *American Mathematical Monthly*, 93(7):505–514, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Bogart:1986:NSM**

- [535] Kenneth P. Bogart and Peter G. Doyle. Nonexist solution of the ménage problem. *American Mathematical Monthly*, 93(7):514–519, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Borwein:1986:NAS**

- [536] David Borwein and Jonathan M. Borwein. A note on alternating series in several dimensions. *American Mathematical Monthly*, 93(7):531–539, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Zivaljevic:1986:IME**

- [537] Rade T. Živaljević. Infinitesimals, microsimplices and elementary homology theory. *American Mathematical Monthly*, 93(7):540–544, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Barnett:1986:FRT**

- [538] S. Barnett. Forms of the resultant of two polynomials. *American Mathematical Monthly*, 93(7):551–552, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Jacobson:1986:IBP**

- [539] Eliot T. Jacobson and Alan E. Parks. Infinite branches of the phi-tree. *American Mathematical Monthly*, 93(7):552–554, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Aron:1986:H**

- [540] Richard M. Aron and Gerd H. Fricke. Homomorphisms on  $C(\mathbf{R})$ . *American Mathematical Monthly*, 93(7):555, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See comments [575, 616].

**Kueh:1986:NKA**

- [541] Ka-Lam Kueh. A note on Kronecker's approximation theorem. *American Mathematical Monthly*, 93(7):555–556, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hiriart-Urruty:1986:WPS**

- [542] J.-B. Hiriart-Urruty. When is a point  $x$  satisfying  $\nabla f(x) = 0$  a global minimum of  $f$ . *American Mathematical Monthly*, 93(7):556–558, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Howe:1986:NPE**

- [543] Everett Howe. A new proof of Erdős' theorem on monotone multiplica-

tive functions. *American Mathematical Monthly*, 93(8):593–595, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Savage:1986:GCM**

- [544] Richard P. Savage, Jr. Graphical constructions of means. *American Mathematical Monthly*, 93(8):595–603, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Farnsworth:1986:GM**

- [545] David Farnsworth and Richard Orr. Gini means. *American Mathematical Monthly*, 93(8):603–607, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Long:1986:RHP**

- [546] Robert L. Long. Remarks on the history and philosophy of mathematics. *American Mathematical Monthly*, 93(8):609–619, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Maltese:1986:SPF**

- [547] George Maltese. A simple proof of the fundamental theorem of finite Markov chains. *American Mathematical Monthly*, 93(8):629–630, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Allen:1986:CD**

- [548] Charles S. Allen. A characterization of dimension. *American Mathematical Monthly*, 93(8):635–636, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Folland:1986:CA**
- [549] G. B. Folland. On characterizations of analyticity. *American Mathematical Monthly*, 93(8):640–641, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Byrd:1986:SCF**
- [550] Richard D. Byrd. Simultaneous complements in finite-dimensional vector spaces. *American Mathematical Monthly*, 93(8):641–642, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Markham:1986:OIP**
- [551] Thomas L. Markham. Oppenheim's inequality for positive definite matrices. *American Mathematical Monthly*, 93(8):642–644, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Blyth:1986:CCD**
- [552] Colin R. Blyth. Convolutions of Cauchy distributions. *American Mathematical Monthly*, 93(8):645–647, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Carchidi:1986:MFE**
- [553] M. Carchidi. A method for finding the eigenvectors of an  $n \times n$  matrix corresponding to eigenvalues of multiplicity one. *American Mathematical Monthly*, 93(8):647–649, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Williams:1986:FML**
- [554] H. P. Williams. Fourier's method of linear programming and its dual. *American Mathematical Monthly*, 93(9):681–695, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Clough:1986:MSG**
- [555] John Clough and Gerald Myerson. Musical scales and the generalized circle of fifths. *American Mathematical Monthly*, 93(9):695–701, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Simpson:1986:MTP**
- [556] James E. Simpson. More trees and power sums. *American Mathematical Monthly*, 93(9):701–708, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Valiaho:1986:EAJ**
- [557] H. Väliaho. An elementary approach to the Jordan form of a matrix. *American Mathematical Monthly*, 93(9):711–714, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chan:1986:AFD**
- [558] Beda Chan. An application of finite difference algebra. *American Mathematical Monthly*, 93(9):716–717, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Benson:1986:FLG**
- [559] David Benson, Walter Feit, and Roger Howe. Finite linear groups, the Commodore 64, Euler and Sylvester. *American Mathematical Monthly*, 93(9):717–719, ???? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Kleinfeld:1986:CRW**

- [560] Erwin Kleinfeld. A class of rings which are very nearly associative. *American Mathematical Monthly*, 93(9):720–722, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Parks:1986:OIN**

- [561] Alan E. Parks.  $\pi$ , and  $e$ , and other irrational numbers. *American Mathematical Monthly*, 93(9):722–723, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Botsko:1986:EGR**

- [562] Michael W. Botsko. An easy generalization of the Riemann integral. *American Mathematical Monthly*, 93(9):728–732, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hiller:1986:CCG**

- [563] Howard Hiller. Crystallography and cohomology of groups. *American Mathematical Monthly*, 93(10):765–779, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Brunson:1986:POI**

- [564] Barry W. Brunson. The partial order of iterated exponentials. *American Mathematical Monthly*, 93(10):779–786, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Silverman:1986:PFO**

- [565] Joseph H. Silverman. Points of finite order on elliptic curves. *American Mathematical Monthly*, 93(10):793–795, ???

1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Faber:1986:SCM**

- [566] V. Faber and J. Mycielski. The shortest curve that meets all the lines that meet a convex body. *American Mathematical Monthly*, 93(10):796–801, ??? 1986. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Knuth:1987:PRK**

- [567] Donald E. Knuth. Problem 86-2, a random knockout tournament (with solution). *American Mathematical Monthly*, 93(?):127–129, 1987. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wilf:1987:GVR**

- [568] Herbert S. Wilf. A greeting: and a view of Riemann’s hypothesis. *American Mathematical Monthly*, 94(1):3–6, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Bender:1987:NTD**

- [569] Edward A. Bender. The number of three-dimensional convex polyhedra. *American Mathematical Monthly*, 94(1):7–21, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See errata [639].

**Kalman:1987:CFI**

- [570] Dan Kalman and Abraham Ungar. Combinatorial and functional identities in one-parameter matrices. *American Mathematical Monthly*, 94(1):21–35, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Roy:1987:BIH**

- [571] Ranjan Roy. Binomial identities and hypergeometric series. *American Mathematical Monthly*, 94(1):36–46, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Beardon:1987:CCC**

- [572] Alan F. Beardon. Curvature, circles, and conformal maps. *American Mathematical Monthly*, 94(1):48–53, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Calhoun:1987:CSS**

- [573] William C. Calhoun. Counting the subgroups of some finite groups. *American Mathematical Monthly*, 94(1):54–59, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Johnson:1987:DE**

- [574] Wells Johnson. The Diophantine equation  $X^2 + 7 = 2^n$ . *American Mathematical Monthly*, 94(1):59–62, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Colley:1987:TB**

- [575] Susan Jane Colley. The tumbling box. *American Mathematical Monthly*, 94(1):62–68, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [540] and correction [615].

**Sarason:1987:MTF**

- [576] Donald Sarason. The multiplication theorem for Fredholm operators. *American Mathematical Monthly*, 94(1):68–70, ???? 1987. CODEN AMMYAE.

ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hwang:1987:TTC**

- [577] F. K. Hwang. A tale of two coins. *American Mathematical Monthly*, 94(2):121–129, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Althoen:1987:GJR**

- [578] Steven C. Althoen and Renate McLaughlin. Gauss–Jordan reduction: a brief history. *American Mathematical Monthly*, 94(2):130–142, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Pelletier:1987:MMS**

- [579] Don Pelletier. Merlin’s magic square. *American Mathematical Monthly*, 94(2):143–150, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Zaks:1987:NFC**

- [580] Joseph Zaks. Neighborly families of congruent convex polytopes. *American Mathematical Monthly*, 94(2):151–155, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Beck:1987:CFB**

- [581] Anatole Beck. Constructing a fair border. *American Mathematical Monthly*, 94(2):157–162, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**MacHale:1987:ACR**

- [582] Desmond MacHale. An anticommutativity consequence of a ring commutativity

- theorem of Herstein. *American Mathematical Monthly*, 94(2):162–165, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Searcoid:1987:RST**
- [583] Mícheál Ó Searcoid. A reordering of the Sylow theorems. *American Mathematical Monthly*, 94(2):165–168, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Erdos:1987:API**
- [584] P. Erdős, P. P. Pálfy, and M. Szegedy.  $a \pmod{p} \leq b \pmod{p}$  for all primes  $p$  implies  $a = b$ . *American Mathematical Monthly*, 94(2):169–170, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Saff:1987:EQM**
- [585] E. B. Saff and Jon C. Snader. The error for quadrature methods: a complex variables approach. *American Mathematical Monthly*, 94(2):175–180, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Knuth:1987:SPEa**
- [586] Donald E. Knuth. Solution to problem E3061, empty cells. *American Mathematical Monthly*, 94(2):189, February 1987. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Krantz:1987:WSC**
- [587] Steven G. Krantz. What is several complex variables. *American Mathematical Monthly*, 94(3):236–256, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Brualdi:1987:JCF**
- [588] Richard A. Brualdi. The Jordan canonical form: an old proof. *American Mathematical Monthly*, 94(3):257–267, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wilf:1987:FLO**
- [589] Herbert S. Wilf. Finite lists of obstructions. *American Mathematical Monthly*, 94(3):267–271, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Furuta:1987:CCH**
- [590] Takayuki Furuta. A counterexample to a conjectured Hermitian matrix inequality. *American Mathematical Monthly*, 94(3):271–272, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Paris:1987:AAC**
- [591] R. B. Paris. An asymptotic approximation connected with the golden number. *American Mathematical Monthly*, 94(3):272–278, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- vanderPloeg:1987:DNC**
- [592] C. E. van der Ploeg. Duality in non-normal quartic fields. *American Mathematical Monthly*, 94(3):279–284, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [729] and errata [641].
- Rozema:1987:RIT**
- [593] Edward R. Rozema. Romberg integration by Taylor series. *American Mathematical Monthly*, 94(3):284–288, ???? 1987.

1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rovnyak:1987:NCP**
- [594] James Rovnyak. Note on characteristic polynomials. *American Mathematical Monthly*, 94(3):289–290, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Herstein:1987:RFF**
- [595] I. N. Herstein. A remark on finite fields. *American Mathematical Monthly*, 94(3):290–291, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Taylor:1987:SGT**
- [596] Robert Lee Taylor and Tien Chung Hu. Sub-Gaussian techniques in proving strong laws of large numbers. *American Mathematical Monthly*, 94(3):295–299, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Epperson:1987:RE**
- [597] James F. Epperson. On the Runge example. *American Mathematical Monthly*, 94(4):329–341, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rosenthal:1987:RTL**
- [598] Peter Rosenthal. The remarkable theorem of Lévy and Steinitz. *American Mathematical Monthly*, 94(4):342–351, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Ikebe:1987:MTC**
- [599] Yasuhiko Ikebe, Toshiyuki Inagaki, and Sadaaki Miyamoto. The monotonicity theorem, Cauchy’s interlace theorem, and the Courant-Fischer theorem. *American Mathematical Monthly*, 94(4):352–354, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wilker:1987:DL**
- [600] J. B. Wilker. The  $n$ th derivative as a limit. *American Mathematical Monthly*, 94(4):354–356, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Choi:1987:LDG**
- [601] Bong Dae Choi. Limiting distribution for the generalized matching problem. *American Mathematical Monthly*, 94(4):356–360, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Roy:1987:EPC**
- [602] Nina M. Roy. Extreme points of convex sets in infinite-dimensional spaces. *American Mathematical Monthly*, 94(5):409–422, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Mauldon:1987:MAR**
- [603] J. G. Mauldon. A matrix with applications to random walk, Brownian motion, and ring theory. *American Mathematical Monthly*, 94(5):423–436, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wallen:1987:AWW**

- [604] Lawrence J. Wallen. All the way with Wirtinger: a short proof of Bonnesen's inequality. *American Mathematical Monthly*, 94(5):440–442, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Beer:1987:WFU**

- [605] Gerald Beer and Luzviminda Villar. When is a free union of regular measures regular. *American Mathematical Monthly*, 94(5):443–445, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Petro:1987:RDA**

- [606] John Petro. Real division algebras of dimension  $> 1$  contain **C**. *American Mathematical Monthly*, 94(5):445–449, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Miller:1987:MOE**

- [607] William Miller. The maximum order of an element of a finite symmetric group. *American Mathematical Monthly*, 94(6):497–506, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Zwicker:1987:PGG**

- [608] William S. Zwicker. Playing games with games: the hypergame paradox. *American Mathematical Monthly*, 94(6):507–514, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**McKay:1987:CD**

- [609] John McKay. On computing discriminants. *American Mathematical Monthly*,

94(6):523–527, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Zwick:1987:BAC**

- [610] D. Zwick. Best approximation by convex functions. *American Mathematical Monthly*, 94(6):528–534, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Laugwitz:1987:SCG**

- [611] Detlef Laugwitz and Bernd Rodewald. A simple characterization of the gamma function. *American Mathematical Monthly*, 94(6):534–536, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Wagon:1987:FPR**

- [612] Stan Wagon. Fourteen proofs of a result about tiling a rectangle. *American Mathematical Monthly*, 94(7):601–617, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Kidwell:1987:TET**

- [613] Mark E. Kidwell and R. Bruce Richter. Trees and Euler tours in a planar graph and its relatives. *American Mathematical Monthly*, 94(7):618–630, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Maurer:1987:RR**

- [614] Peter M. Maurer. A rose is a rose.... *American Mathematical Monthly*, 94(7):631–645, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Colley:1987:CTB**

- [615] Susan Jane Colley. Correction: “The tumbling box” [Amer. Math. Monthly **94** (1987), no. 1, 62–68, MR 88b:53010]. *American Mathematical Monthly*, 94(7):646, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [575].

**Pursell:1987:CHA**

- [616] Lyle E. Pursell. Comment: “Homomorphisms on  $C(\mathbf{R})$ ” [Amer. Math. Monthly **93** (1986), no. 7, 555, MR 87i:46109] by R. M. Aron and G. H. Fricke. *American Mathematical Monthly*, 94(7):646, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [540].

**Ferguson:1987:GSA**

- [617] Helaman Ferguson. Generalization of some algorithms of Euler. *American Mathematical Monthly*, 94(7):647–652, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**VandenEynden:1987:API**

- [618] Charles Vanden Eynden. Applications of a product identity to sums of squares and partitions. *American Mathematical Monthly*, 94(7):652–656, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cronin:1987:CMR**

- [619] T. M. Cronin. The construction of matrices with required properties over the integers. *American Mathematical Monthly*, 94(7):656–662, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Choe:1987:EP**

- [620] Boo Rim Choe. An elementary proof of  $\sum_{n=1}^{\infty} 1/n^2 = \pi^2/6$ . *American Mathematical Monthly*, 94(7):662–663, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hoffman:1987:IFA**

- [621] Michael Hoffman. An invariant of finite abelian groups. *American Mathematical Monthly*, 94(7):664–666, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**White:1987:RC**

- [622] Arthur T. White. Ringing the cosets. *American Mathematical Monthly*, 94(8):721–746, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Scott:1987:FE**

- [623] Paul R. Scott. The fascination of the elementary. *American Mathematical Monthly*, 94(8):759–768, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Nathanson:1987:GGS**

- [624] Melvyn B. Nathanson. A generalization of the Goldbach-Shnirel'man theorem. *American Mathematical Monthly*, 94(8):768–771, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Korec:1987:NP**

- [625] I. Korec and Š. Znám. A note on the  $3x + 1$  problem. *American Mathematical Monthly*, 94(8):771–772, ??? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

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|--|--|
| <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Mendes:1987:HMC</b></div> <p>[626] Claudio Martins Mendes and Maria Aparecida Soares Ruas. Hyperbolic motions of conics. <i>American Mathematical Monthly</i>, 94(9):825–845, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Kletzing:1987:RRF</b></div> <p>[627] Dennis Kletzing. Rational representations of finite groups: the story of <math>\gamma</math>. <i>American Mathematical Monthly</i>, 94(9):846–854, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Wilf:1987:ECS</b></div> <p>[628] Herbert S. Wilf. The editor’s corner: strings, substrings, and the “nearest integer” function. <i>American Mathematical Monthly</i>, 94(9):855–860, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Benjamin:1987:BMW</b></div> <p>[629] Arthur Benjamin. The bisection method: which root. <i>American Mathematical Monthly</i>, 94(9):861–863, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See errata [815].</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Villani:1987:SLC</b></div> <p>[630] Alfonso Villani. Spaces with locally compact completions are compact. <i>American Mathematical Monthly</i>, 94(9):863–865, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> | <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Simpson:1987:DCS</b></div> <p>[631] R. J. Simpson. Disjoint covering systems of congruences. <i>American Mathematical Monthly</i>, 94(9):865–868, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See comment [750].</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Johnson:1987:EP</b></div> <p>[632] C. Johnson, G. Wolkowicz, and H. Wolkowicz. Elem. prob. E. 3234. <i>American Mathematical Monthly</i>, 94(9):877, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Cipra:1987:IIM</b></div> <p>[633] Barry A. Cipra. An introduction to the Ising model. <i>American Mathematical Monthly</i>, 94(10):937–959, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Freund:1987:SES</b></div> <p>[634] David E. Freund. Selecting estimators for the standard deviation of a normal distribution. <i>American Mathematical Monthly</i>, 94(10):971–975, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Tondeur:1987:BRI</b></div> <p>[635] Philippe Tondeur. Barycentric representation for the incenter and excenters of a triangle. <i>American Mathematical Monthly</i>, 94(10):975–976, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).</p> <div style="border: 1px solid black; padding: 2px; text-align: center;"><b>Minassian:1987:AGM</b></div> <p>[636] Donald P. Minassian. The arithmetic-geometric mean inequality revisited: el-</p> |
|--|--|

- ementary calculus and negative numbers. *American Mathematical Monthly*, 94(10):977–978, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Heatherly:1987:MS**
- [637] Henry Heatherly. Matrices satisfying  $AB - BA = I$ . *American Mathematical Monthly*, 94(10):979–980, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Nelsen:1987:cmp**
- [638] Roger B. Nelsen. Consequences of the memoryless property for random variables. *American Mathematical Monthly*, 94(10):981–984, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bender:1987:ENT**
- [639] Edward A. Bender. Errata: “The number of three-dimensional convex polyhedra” [Amer. Math. Monthly **94** (1987), no. 1, 7–21, MR 88b:52010]. *American Mathematical Monthly*, 94(10):994, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [569].
- Bohn:1987:ESG**
- [640] S. Elwood Bohn and Jong Lee. Errata: “Semitopological groups” [Amer. Math. Monthly **72** (1965), 996–998, MR **32** #7672]. *American Mathematical Monthly*, 94(10):994, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [2].
- vanderPloeg:1987:EDN**
- [641] C. E. van der Ploeg. Errata: “Duality in nonnormal quartic fields” [Amer. Math. Monthly **94** (1987), no. 3, 279–284]. *American Mathematical Monthly*, 94(10):994, ???? 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [592] and letter to the editor [729].
- Alexanderson:1988:ADS**
- [642] Gerald L. Alexanderson. Award for distinguished service to Professor Murray Klamkin. *American Mathematical Monthly*, 95(1):1–4, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Grunbaum:1988:IF**
- [643] Branko Grünbaum and G. C. Shephard. Isonemal fabrics. *American Mathematical Monthly*, 95(1):5–30, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bloom:1988:CGD**
- [644] Gary S. Bloom, John W. Kennedy, and Louis V. Quintas. A characterization of graphs of diameter two. *American Mathematical Monthly*, 95(1):37–38, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lima:1988:JBS**
- [645] Elon L. Lima. The Jordan-Brouwer separation theorem for smooth hypersurfaces. *American Mathematical Monthly*, 95(1):39–42, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Fowler:1988:KBY**
- [646] Peter A. Fowler. The Königsberg bridges—250 years later. *American Mathematical Monthly*, 95(1):42–

- 43, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Newman:1988:MS**
- [647] Donald J. Newman and T. D. Parsons. On monotone subsequences. *American Mathematical Monthly*, 95(1):44–45, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kopperman:1988:ATC**
- [648] Ralph Kopperman. All topologies come from generalized metrics. *American Mathematical Monthly*, 95(2):89–97, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Polites:1988:PDT**
- [649] George W. Polites. Prime desert  $n$ -tuplets. *American Mathematical Monthly*, 95(2):98–104, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Eldridge:1988:DKC**
- [650] Klaus E. Eldridge and Seok Sagong. The determination of Kaprekar convergence and loop convergence of all three-digit numbers. *American Mathematical Monthly*, 95(2):105–112, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bouwer:1988:QP**
- [651] I. Bouwer and Z. Star. A question of protocol. *American Mathematical Monthly*, 95(2):118–121, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Beebee:1988:EII**
- [652] John Beebee. Examples of infinite, incongruent exact covers. *American Mathematical Monthly*, 95(2):121–123, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See errata [814].
- Hallenbeck:1988:AUC**
- [653] David J. Hallenbeck and Katarzyna Tkaczyńska. The absolute and uniform convergence of infinite improper integrals. *American Mathematical Monthly*, 95(2):124–126, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Arora:1988:SIT**
- [654] Ashok K. Arora, Sudhir K. Goel, and Dennis M. Rodriguez. Special integration techniques for trigonometric integrals. *American Mathematical Monthly*, 95(2):126–130, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [745].
- Gleason:1988:ATH**
- [655] Andrew M. Gleason. Angle trisection, the heptagon, and the triskaidecagon. *American Mathematical Monthly*, 95(3):185–194, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See addenda [711].
- Kauffman:1988:NIT**
- [656] Louis H. Kauffman. New invariants in the theory of knots. *American Mathematical Monthly*, 95(3):195–242, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Gallian:1988:HW**

- [657] Joseph A. Gallian and Douglas S. Jungreis. Homomorphisms from  $Z_m[i]$  into  $Z_n[i]$  and  $Z_m[\rho]$  into  $Z_n[\rho]$ , where  $i^2 + 1 = 0$  and  $\rho^2 + \rho + 1 = 0$ . *American Mathematical Monthly*, 95(3):247–249, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Botsko:1988:EPB**

- [658] Michael W. Botsko. An elementary proof that a bounded a.e. continuous function is Riemann integrable. *American Mathematical Monthly*, 95(3):249–252, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Froemke:1988:AAS**

- [659] Jon Froemke and Jerrold W. Grossman. An algebraic approach to some number-theoretic problems arising from paper-folding regular polygons. *American Mathematical Monthly*, 95(4):289–307, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Vardi:1988:IIA**

- [660] Ilan Vardi. Integrals, an introduction to analytic number theory. *American Mathematical Monthly*, 95(4):308–315, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Robertson:1988:DFS**

- [661] Lewis C. Robertson, Rae Michael Shortt, and Stephen G. Landry. Dice with fair sums. *American Mathematical Monthly*, 95(4):316–328, ???? 1988.

CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Stout:1988:TDF**

- [662] Lawrence Neff Stout. Two discrete forms of the Jordan curve theorem. *American Mathematical Monthly*, 95(4):332–336, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Ashraf:1988:SPI**

- [663] Mohd. Ashraf, Murtaza A. Quadri, and Daniel Zelinsky. Some polynomial identities that imply commutativity for rings. *American Mathematical Monthly*, 95(4):336–339, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Trotter:1988:OEN**

- [664] Hale F. Trotter. An overlooked example of nonunique factorization. *American Mathematical Monthly*, 95(4):339–342, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Krishnaiah:1988:TCG**

- [665] P. V. Krishnaiah. Two counterexamples in general topology. *American Mathematical Monthly*, 95(4):342–343, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Artmann:1988:SPS**

- [666] Benno Artmann. A simple proof for the simplicity of  $A_5$ . *American Mathematical Monthly*, 95(4):344–349, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Lalley:1988:PNT**

- [667] S. P. Lalley. The “prime number theorem” for the periodic orbits of a Bernoulli flow. *American Mathematical Monthly*, 95(5):385–398, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Withers:1988:FPT**

- [668] Wm. Douglas Withers. Folding polynomials and their dynamics. *American Mathematical Monthly*, 95(5):399–413, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Leonard:1988:MFI**

- [669] I. E. Leonard. More on Fresnel integrals. *American Mathematical Monthly*, 95(5):431–433, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Martin:1988:CAG**

- [670] Gary A. Martin. A class of abelian groups arising from an analysis of a proof. *American Mathematical Monthly*, 95(5):433–436, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Schue:1988:WTF**

- [671] John Schue. The Wedderburn theorem of finite division rings. *American Mathematical Monthly*, 95(5):436–437, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hill:1988:CHM**

- [672] Theodore P. Hill. Common hyperplane medians for random vectors. *American Mathematical Monthly*, 95(5):437–441, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

441, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cox:1988:QRC**

- [673] David A. Cox. Quadratic reciprocity: its conjecture and application. *American Mathematical Monthly*, 95(5):442–448, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hayes:1988:EPE**

- [674] Barry Hayes, Donald E. Knuth, and Carlos Subi. Elementary problem E3267, a solitaire game. *American Mathematical Monthly*, 95(5):456–457, May 1988. ISSN 0002-9890 (print), 1930-0972 (electronic). Solutions in [820].

**Day:1988:GGE**

- [675] Jane Day and Brian Peterson. Growth in Gaussian elimination. *American Mathematical Monthly*, 95(6):489–513, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Fisher:1988:MG1**

- [676] Stephen D. Fisher. The Möbius group and invariant spaces of analytic functions. *American Mathematical Monthly*, 95(6):514–527, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Conrey:1988:ZTP**

- [677] Brian Conrey and Amit Ghosh. On the zeros of the Taylor polynomials associated with the exponential function. *American Mathematical Monthly*, 95(6):528–533, ???? 1988. CODEN AM-

- MYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Boyd:1988:DE**
- [678] J. G. Wendel. Shanks' identity is elementary. *American Mathematical Monthly*, 95(6):534, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wendel:1988:SIE**
- [679] M. J. Pelling. Letter to the editor. *American Mathematical Monthly*, 95(6):535–536, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Pelling:1988:LE**
- [680] J. Fabrykowski. On continued fractions and a certain example of a sequence of continuous functions. *American Mathematical Monthly*, 95(6):537–539, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See errata [712].
- Fabrykowski:1988:CFC**
- [681] W. S. Anglin. Using Pythagorean triangles to approximate angles. *American Mathematical Monthly*, 95(6):540–541, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Anglin:1988:UPT**
- [682] Gerald Wildenberg. Convergence-preserving functions. *American Mathematical Monthly*, 95(6):542–544, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wildenberg:1988:CPF**
- [683] David W. Boyd. The Diophantine equation  $x^2 + y^m = z^{2n}$ . *American Mathematical Monthly*, 95(6):544–547, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See addendum [813].
- Almkvist:1988:GLR**
- [684] Gert Almkvist and Bruce Berndt. Gauss, Landen, Ramanujan, the arithmetic-geometric mean, ellipses,  $\pi$ , and the *ladies diary*. *American Mathematical Monthly*, 95(7):585–608, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kingston:1988:SPT**
- [685] John G. Kingston and John L. Synge. The sequence of pedal triangles. *American Mathematical Monthly*, 95(7):609–620, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Small:1988:MSF**
- [686] Charles Small. Magic squares over fields. *American Mathematical Monthly*, 95(7):621–625, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Tremain:1988:JTP**
- [687] Janet Crandell Tremain. The Jerusalem ticket problem. *American Mathematical Monthly*, 95(7):626–630, ??? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Chilakamarri:1988:DBG**
- [688] Kiran B. Chilakamarri. Decomposition of bipartite graphs into paths. *Amer-*

- American Mathematical Monthly*, 95(7):634–636, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Guy:1988:SLS**
- [689] W. V. Quine. Fermat’s last theorem in combinatorial form. *American Mathematical Monthly*, 95(7):636, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Quine:1988:FLT**
- [690] Andrew Simoson. A difference equation for strings of ones. *American Mathematical Monthly*, 95(7):636–638, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Simoson:1988:DES**
- [691] Alec Norton. Continued fractions and differentiability of functions. *American Mathematical Monthly*, 95(7):639–643, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Norton:1988:CFD**
- [692] Donald E. Knuth. Solution to problem E3166, A polynomial identity. *American Mathematical Monthly*, 95(7):662–663, August–September 1988. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Knuth:1988:SPE**
- [693] Nicholas D. Kazarinoff. Special functions and the Bieberbach conjecture. *American Mathematical Monthly*, 95(8):689–696, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kazarinoff:1988:SFB**
- [694] Richard K. Guy. The strong law of small numbers. *American Mathematical Monthly*, 95(8):697–712, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Guy:1988:SLS**
- [695] John Mitchell and Lee A. Rubel. Every smooth map of Euclidean space into itself is an expansion followed by a contraction. *American Mathematical Monthly*, 95(8):713–716, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Mitchell:1988:ESM**
- [696] G. L. Cohen and G. H. Smith. A simple verification of Ilieff’s conjecture for polynomials with three zeros. *American Mathematical Monthly*, 95(8):734–737, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cohen:1988:SVI**
- [697] Gerald Beer. UC spaces revisited. *American Mathematical Monthly*, 95(8):737–739, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Beer:1988:USR**
- [698] G. N. Hile and R. Z. Yeh. Line integrals of higher-order derivatives. *American Mathematical Monthly*, 95(8):739–744, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Hile:1988:LIH**

- Chew:1988:NCC**
- [699] James Chew. A note on closure continuity. *American Mathematical Monthly*, 95(8):744–745, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Knuth:1988:APA**
- [700] Donald E. Knuth and Ilan Vardi. Advanced problem 6581, the asymptotic expansion of the middle binomial coefficient. *American Mathematical Monthly*, 95(8):774, October 1988. ISSN 0002-9890 (print), 1930-0972 (electronic). Solutions in [819].
- Taussky:1988:HBT**
- [701] Olga Taussky. How I became a torch-bearer for matrix theory. *American Mathematical Monthly*, 95(9):801–812, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Morgan:1988:AMS**
- [702] Frank Morgan. Area-minimizing surfaces, faces of Grassmannians, and calibrations. *American Mathematical Monthly*, 95(9):813–822, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Brooks:1988:CIM**
- [703] Robert Brooks. Constructing isospectral manifolds. *American Mathematical Monthly*, 95(9):823–839, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Baston:1988:SCG**
- [704] V. J. Baston and F. A. Bostock. A simple cover-up game. *American Mathematical Monthly*, 95(9):850–854, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Liu:1988:NPP**
- [705] Fa Sheng Liu. A note on probabilities in proofreading. *American Mathematical Monthly*, 95(9):854, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rosen:1988:PLL**
- [706] Michael I. Rosen. A proof of the Lucas-Lehmer test. *American Mathematical Monthly*, 95(9):855–856, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Aczél:1988:BMU**
- [707] J. Aczél and Zs. Páles. The behaviour of means under equal increments of their variables. *American Mathematical Monthly*, 95(9):856–860, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Andrews:1988:CS**
- [708] Peter Andrews. The classification of surfaces. *American Mathematical Monthly*, 95(9):861–867, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Campoli:1988:PID**
- [709] Oscar A. Cámpoli. A principal ideal domain that is not a Euclidean domain. *American Mathematical Monthly*, 95(9):868–871, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Lehmer:1988:NAB**

- [710] D. H. Lehmer. A new approach to Bernoulli polynomials. *American Mathematical Monthly*, 95(10):905–911, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [769].

**Gleason:1988:AAT**

- [711] Andrew M. Gleason. Addenda: “Angle trisection, the heptagon, and the triskaidecagon” [Amer. Math. Monthly **95** (1988), no. 3, 185–194, MR 89d:51028]. *American Mathematical Monthly*, 95(10):911, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [655].

**Hensley:1988:ECF**

- [712] Doug Hensley. Errata: “On continued fractions and a certain example of a sequence of continuous functions” [Amer. Math. Monthly **95** (1988), no. 6, 537–539, MR 89i:40001] by J. Fabrykowski. *American Mathematical Monthly*, 95(10):911, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [680].

**Llewellyn:1988:FST**

- [713] Donna Crystal Llewellyn, Craig Tovey, and Michael Trick. Finding saddlepoints of two-person, zero sum games. *American Mathematical Monthly*, 95(10):912–918, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Book:1988:DAC**

- [714] Ronald V. Book. Dehn’s algorithm and the complexity of word problems. *American Mathematical Monthly*, 95(10):919–925, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

*American Mathematical Monthly*, 95(10):919–925, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Lin:1988:ABP**

- [715] X.-B. Lin. Another brief proof of the Sylvester theorem. *American Mathematical Monthly*, 95(10):932–933, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Furuta:1988:ESC**

- [716] Takayuki Furuta.  $A \geq B \geq 0$  ensures  $(BA^2B)^{1/2} \geq B^2$ —solution to a conjecture on operator inequalities. *American Mathematical Monthly*, 95(10):933–934, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Landy:1988:GCT**

- [717] Steven Landy. A generalization of Ceva’s theorem to higher dimensions. *American Mathematical Monthly*, 95(10):936–939, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Ramakrishnan:1988:SCT**

- [718] S. Ramakrishnan and W. D. Suderth. A sequence of coin toss variables for which the strong law fails. *American Mathematical Monthly*, 95(10):939–941, ???? 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Lewin:1988:STT**

- [719] Jonathan Lewin and Myrtle Lewin. A simple test for the  $n$ th term of a series to approach zero. *American Mathematical Monthly*, 95(10):942, ???? 1988.

- CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Magill:1988:UTS**
- [720] K. D. Magill, Jr. Universal topological spaces. *American Mathematical Monthly*, 95(10):942–946, ????, 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See errata [817].
- Gilbert:1988:CMI**
- [721] Richard C. Gilbert. Companion matrices with integer entries and integer eigenvalues and eigenvectors. *American Mathematical Monthly*, 95(10):947–950, ????, 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Gerstein:1988:NAC**
- [722] Larry J. Gerstein. A new algorithm for computing the rank of a matrix. *American Mathematical Monthly*, 95(10):950–952, ????, 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Knuth:1989:EPEb**
- [723] Donald E. Knuth. Elementary problem E3303, a binary summation. *American Mathematical Monthly*, 96(??):54, 1989. ISSN 0002-9890 (print), 1930-0972 (electronic). Solutions in [809].
- Knuth:1989:EPEc**
- [724] Donald E. Knuth. Elementary problem E3309, a binomial coefficient inequality. *American Mathematical Monthly*, 96(??):154, 1989. ISSN 0002-9890 (print), 1930-0972 (electronic). Solutions in [810].
- Knuth:1989:EPEa**
- [725] Donald E. Knuth. Elementary problem E3335, a deranged recurrence. *American Mathematical Monthly*, 96(??):525, 1989. ISSN 0002-9890 (print), 1930-0972 (electronic). Solutions in [811].
- Knuth:1989:SEP**
- [726] Donald E. Knuth. Solution to elementary problem E2982, a double infinite sum for  $|x|$ . *American Mathematical Monthly*, 96(??):525–526, 1989. ISSN 0002-9890 (print), 1930-0972 (electronic). Original problem in [250].
- Ross:1989:ADS**
- [727] Kenneth Ross. Award for distinguished service to Ivan Niven. *American Mathematical Monthly*, 96(1):3–4, ????, 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Busenberg:1989:MPD**
- [728] Stavros Busenberg, David Fisher, and Mario Martelli. Minimal periods of discrete and smooth orbits. *American Mathematical Monthly*, 96(1):5–17, ????, 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lazarus:1989:LED**
- [729] Andrew J. Lazarus. Letter to the editor: “Duality in nonnormal quartic fields” [Amer. Math. Monthly 94 (1987), no. 3, 279–284, MR 88j:11064 and errata, MR 89c:11156] by C. E. van der Ploeg. *American Mathematical Monthly*, 96(1):17, ????, 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [592] and errata [641].

**Gamelin:1989:IIR**

- [730] T. W. Gamelin and D. Khavinson. The isoperimetric inequality and rational approximation. *American Mathematical Monthly*, 96(1):18–30, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Hupert:1989:SRI**

- [731] Lillian E. Peters Hupert and Anne Leggett. On the square roots of infinite matrices. *American Mathematical Monthly*, 96(1):34–38, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Pakula:1989:NVD**

- [732] Lewis Pakula. A note on Venn diagrams. *American Mathematical Monthly*, 96(1):38–39, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Ligh:1989:DSR**

- [733] Steve Ligh and Jiang Luh. Direct sum of  $J$ -rings and zero rings. *American Mathematical Monthly*, 96(1):40–41, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Patin:1989:VSP**

- [734] J. M. Patin. A very short proof of Stirling's formula. *American Mathematical Monthly*, 96(1):41–42, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [770].

**Mader:1989:EME**

- [735] Adolf Mader. A Euclidean model for Euclidean geometry. *American Mathematical Monthly*, 96(1):43–49, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

*American Mathematical Monthly*, 96(1):43–49, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Osborne:1989:OBI**

- [736] Anthony Osborne and Hans Liebeck. Orthogonal bases of  $\mathbf{R}^3$  with integer coordinates and integer lengths. *American Mathematical Monthly*, 96(1):49–53, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Strang:1989:PLA**

- [737] Gilbert Strang. Patterns in linear algebra. *American Mathematical Monthly*, 96(2):105–117, February 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Cooper:1989:CIN**

- [738] Curtis N. Cooper and Robert E. Kennedy. Chebyshev's inequality and natural density. *American Mathematical Monthly*, 96(2):118–124, February 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

**Bateman:1989:NMC**

- [739] P. T. Bateman, J. L. Selfridge, and S. S. Wagstaff, Jr. The new Mersenne conjecture. *American Mathematical Monthly*, 96(2):125–128, February 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See letter to the editor [771]. The authors state: NEW MERSENNE CONJECTURE. *If two of the following statements about an odd positive integer  $p$  are true, then the third one is also true.* (a)  $p = 2^k \pm 1$  or  $p = 4^k \pm 3$ . (b)  $M_p (= 2^p - 1)$  is prime. (c)  $(2^p + 1)/3$  is prime.

- Bockman:1989:GFA**
- [740] S. F. Bockman. Generalizing the formula for areas of polygons to moments. *American Mathematical Monthly*, 96(2):131–132, February 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Kappe:1989:ETG**
- [741] Luise-Charlotte Kappe and Bette Warren. An elementary test for the Galois group of a quartic polynomial. *American Mathematical Monthly*, 96(2):133–137, February 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bapat:1989:CSR**
- [742] R. B. Bapat. Comparing the spectral radii of two nonnegative matrices. *American Mathematical Monthly*, 96(2):137–139, February 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Borwein:1989:RME**
- [743] J. M. Borwein, P. B. Borwein, and D. H. Bailey. Ramanujan, modular equations, and approximations to pi, or How to compute one billion digits of pi. *American Mathematical Monthly*, 96(3):201–219, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See also [824] for a significance advance in this work, and [821] for further simplifications and derivations of families of series for  $\pi$ .
- Lawrence:1989:EDR**
- [744] J. Lawrence and G. E. Simons. Equations in division rings — a survey. *American Mathematical Monthly*, 96(3):220–232, ???? 1989. CODEN AMMYAE.
- ISSN 0002-9890 (print), 1930-0972 (electronic).
- Leibowitz:1989:LES**
- [745] Gerald Leibowitz. Letters to the editor: “Special integration techniques for trigonometric integrals” [Amer. Math. Monthly **95** (1988), no. 2, 126–130, MR 89e:26004] by A. K. Arora, S. K. Goel and D. M. Rodriguez. *American Mathematical Monthly*, 96(3):232, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [654].
- Sangwine-Yager:1989:MBB**
- [746] J. R. Sangwine-Yager. The missing boundary of the Blaschke diagram. *American Mathematical Monthly*, 96(3):233–237, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Blank:1989:GIP**
- [747] S. J. Blank, Nishan Krikorian, and David Spring. A geometrically inspired proof of the singular value decomposition. *American Mathematical Monthly*, 96(3):238–239, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bailey:1989:SZM**
- [748] Craig Bailey and R. Bruce Richter. Sum zero (mod  $n$ ), size  $n$  subsets of integers. *American Mathematical Monthly*, 96(3):240–242, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Crowe:1989:OM**
- [749] John Crowe and Dominick Samperi. On open maps. *American Mathematical*

- Monthly*, 96(3):242–243, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Zeilberger:1989:CRJ**
- [750] Doron Zeilberger. On a conjecture of R. J. Simpson about exact covering congruences: “Disjoint covering systems of congruences” [Amer. Math. Monthly **94** (1987), no. 9, 865–868, MR 89b:11006]. *American Mathematical Monthly*, 96(3):243, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [631].
- Gupta:1989:GWE**
- [751] Narain Gupta. On groups in which every element has finite order. *American Mathematical Monthly*, 96(4):297–308, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Adhikari:1989:SPA**
- [752] Ani Adhikari and Jim Pitman. The shortest planar arc of width 1. *American Mathematical Monthly*, 96(4):309–327, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Botsko:1989:UFC**
- [753] Michael W. Botsko. The use of full covers in real analysis. *American Mathematical Monthly*, 96(4):328–333, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Diaconis:1989:FD**
- [754] Persi Diaconis and Joseph B. Keller. Fair dice. *American Mathematical Monthly*, 96(4):337–339, ???? 1989. CODEN AM-
- MYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cosgrave:1989:REP**
- [755] John B. Cosgrave. A remark on Euclid’s proof of the infinitude of primes. *American Mathematical Monthly*, 96(4):339–341, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cucker:1989:APC**
- [756] Felipe Cucker and Antonio Gonzalez Corbalan. An alternate proof of the continuity of the roots of a polynomial. *American Mathematical Monthly*, 96(4):342–345, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Thompson:1989:TTU**
- [757] H. B. Thompson. Taylor’s theorem using the generalized Riemann integral. *American Mathematical Monthly*, 96(4):346–350, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Andrews:1989:MPR**
- [758] George E. Andrews and R. J. Baxter. A motivated proof of the Rogers–Ramanujan identities. *American Mathematical Monthly*, 96(5):401–409, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See comment [812].
- McCleary:1989:HPF**
- [759] John McCleary. How not to prove Fermat’s last theorem. *American Mathematical Monthly*, 96(5):410–420, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Rubel:1989:ECS**
- [760] Lee A. Rubel. The editor's corner: summability theory: a neglected tool of analysis. *American Mathematical Monthly*, 96(5):421–423, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- David:1989:PC**
- [761] Guy David and Carlos Tomei. The problem of the calissons. *American Mathematical Monthly*, 96(5):429–431, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rosay:1989:AAT**
- [762] Jean-Pierre Rosay and Walter Rudin. Arakelian's approximation theorem. *American Mathematical Monthly*, 96(5):432–434, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Maddox:1989:NLF**
- [763] I. J. Maddox. The norm of a linear functional. *American Mathematical Monthly*, 96(5):434–436, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bradley:1989:ETR**
- [764] Richard C. Bradley. An elementary treatment of the Radon–Nikodým derivative. *American Mathematical Monthly*, 96(5):437–440, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wilansky:1989:PRN**
- [765] Albert Wilansky. On the proof of the Radon–Nikodým theorem. *American Mathematical Monthly*, 96(5):441, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Thompson:1989:NCU**
- [766] Christopher L. Thompson. Nonstandard continuity and uniform convergence. *American Mathematical Monthly*, 96(5):443–444, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Anderson:1989:DBW**
- [767] Richard Anderson, László Lovász, Peter Shor, Joel Spencer, Éva Tardos, and Shmuel Winograd. Disks, balls, and walls: analysis of a combinatorial game. *American Mathematical Monthly*, 96(6):481–493, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Goodman:1989:MCL**
- [768] Jacob E. Goodman, János Pach, and Chee-K. Yap. Mountain climbing, ladder moving, and the ring-width of a polygon. *American Mathematical Monthly*, 96(6):494–510, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Callan:1989:LEN**
- [769] David Callan. Letter to the editor: “A new approach to Bernoulli polynomials” [Amer. Math. Monthly **95** (1988), no. 10, 905–911, MR 90c:11014] by D. H. Lehmer. *American Mathematical Monthly*, 96(6):510, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [710].
- Nelsen:1989:LEV**
- [770] Roger B. Nelsen. Letter to the editor: “A very short proof of Stirling’s formula” [Amer. Math. Monthly **95** (1988), no. 10, 905–911, MR 90c:11014] by D. H. Lehmer. *American Mathematical Monthly*, 96(6):510, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- mula" [Amer. Math. Monthly **96** (1989), no. 1, 41–42, MR 90e:33005a] by J. M. Patin. *American Mathematical Monthly*, 96(6):510–511, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [734].
- Mullin:1989:LEN**
- [771] Albert A. Mullin. Letter to the editor: "The new Mersenne conjecture" [Amer. Math. Monthly **96** (1989), no. 2, 125–128, MR 90c:11009] by P. T. Bateman, J. L. Selfridge and S. S. Wagstaff, Jr. *American Mathematical Monthly*, 96(6):511, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [739]. Conjectures that " $M_n (= 2^n - 1)$  is the product of two distinct primes only if  $n$  is either a prime  $p$  or the square of a prime  $q$ , in which case precisely one prime factor of  $M_n$  is Mersenne, vis.  $M_q$ ".
- Pinkham:1989:LES**
- [772] Roger Pinkham. Letter to the editor: "A simple test for the  $n$ th term of a series to approach zero" [Amer. Math. Monthly **95** (1988), no. 10, 942] by J. Lewin and M. Lewin. *American Mathematical Monthly*, 96(6):511, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cohen:1989:MMF**
- [773] Joel M. Cohen. Monotone multiplicative functions. *American Mathematical Monthly*, 96(6):512–513, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wong:1989:PPD**
- [774] W. J. Wong. Powers of a prime dividing binomial coefficients. *American Mathematical Monthly*, 96(6):513–517, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [734].
- Wang:1989:PDM**
- [775] Derming Wang. The polar decomposition and a matrix inequality. *American Mathematical Monthly*, 96(6):517–519, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Erdos:1989:PLM**
- [776] Paul Erdős, Dean Hickerson, and János Pach. A problem of Leo Moser about repeated distances on the sphere. *American Mathematical Monthly*, 96(7):569–575, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Abi-Khuzam:1989:SRG**
- [777] Faruk F. Abi-Khuzam and Artin B. Boghossian. Some recent geometric inequalities. *American Mathematical Monthly*, 96(7):576–589, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Zeilberger:1989:KOC**
- [778] Doron Zeilberger. Kathy O'Hara's constructive proof of the unimodality of the Gaussian polynomials. *American Mathematical Monthly*, 96(7):590–602, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Arterburn:1989:CSN**
- [779] David R. Arterburn and William Dean Stone. A Cantor set of nonconvergence. *American Mathematical Monthly*, 96(7):604–608, ???? 1989. CODEN AM-

- MYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Stock:1989:MMS**
- [780] Daniel L. Stock. Merlin's magic square revisited. *American Mathematical Monthly*, 96(7):608–610, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Fisher:1989:NWL**
- [781] David C. Fisher. The number of words of length  $n$  in a graph monoid. *American Mathematical Monthly*, 96(7):610–614, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Edelsbrunner:1989:NFN**
- [782] Herbert Edelsbrunner and Steven S. Skiena. On the number of furthest neighbour pairs in a point set. *American Mathematical Monthly*, 96(7):614–618, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lee:1989:RDD**
- [783] E. T. Y. Lee. A remark on divided differences. *American Mathematical Monthly*, 96(7):618–622, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Borwein:1989:PEN**
- [784] J. M. Borwein, P. B. Borwein, and K. Dilcher. Pi, Euler numbers, and asymptotic expansions. *American Mathematical Monthly*, 96(8):681–687, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Irwin:1989:GCF**
- [785] M. C. Irwin. Geometry of continued fractions. *American Mathematical Monthly*, 96(8):696–703, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Wilf:1989:ECW**
- [786] Herbert S. Wilf. The editor's corner: the white screen problem. *American Mathematical Monthly*, 96(8):704–707, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Zoll:1989:LE**
- [787] Peter F. Zoll. Letter to the editor. *American Mathematical Monthly*, 96(8):709–710, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Cusick:1989:FPT**
- [788] Larry W. Cusick and Peter Tannenbaum. Fixed points of the twisted cyclic shift operator. *American Mathematical Monthly*, 96(8):713–717, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Douwen:1989:FTN**
- [789] Eric K. van Douwen. Fubini's theorem for null sets. *American Mathematical Monthly*, 96(8):718–721, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bassein:1989:OP**
- [790] Richard Bassein. An optimization problem. *American Mathematical Monthly*, 96(8):721–725, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- Lewkowicz:1989:CCC**
- [791] R. E. Lewkowicz. A characterization of a class of composition operators. *American Mathematical Monthly*, 96(8):725–726, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rubel:1989:STT**
- [792] Lee A. Rubel. A survey of transcendently transcendental functions. *American Mathematical Monthly*, 96(9):777–788, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bezdek:1989:CCT**
- [793] K. Bezdek and R. Connelly. Covering curves by translates of a convex set. *American Mathematical Monthly*, 96(9):789–806, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Horwitz:1989:RFS**
- [794] Alan Horwitz. Reconstructing a function from its set of tangent lines. *American Mathematical Monthly*, 96(9):807–813, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Thurston:1989:CGB**
- [795] Hugh Thurston. Can a graph be both continuous and discontinuous. *American Mathematical Monthly*, 96(9):814–815, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rosset:1989:NSF**
- [796] Shmuel Rosset. Normalized symmetric functions, Newton’s inequalities and a new set of stronger inequalities. *American Mathematical Monthly*, 96(9):815–819, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Alon:1989:RS**
- [797] N. Alon, I. Krasikov, and Y. Peres. Reflection sequences. *American Mathematical Monthly*, 96(9):820–823, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Sagher:1989:CR**
- [798] Yoram Sagher. Counting the rationals. *American Mathematical Monthly*, 96(9):823, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Herron:1989:RCP**
- [799] Isom H. Herron. The radius of convergence of power series solutions to linear differential equations. *American Mathematical Monthly*, 96(9):824–827, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Epperson:1989:UIM**
- [800] James F. Epperson. On the use of iteration methods for approximating the natural logarithm. *American Mathematical Monthly*, 96(9):831–835, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Dowling:1989:TNS**
- [801] William F. Dowling. There are no safe virus tests. *American Mathematical Monthly*, 96(9):836–837, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

- cal Monthly*, 96(9):835–836, ???? 1989.  
CODEN AMMYAE. ISSN 0002-9890  
(print), 1930-0972 (electronic).
- Ash:1989:URT**
- [802] J. Marshall Ash. Uniqueness of representation by trigonometric series. *American Mathematical Monthly*, 96(10):873–885, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Lew:1989:OIP**
- [803] John S. Lew and Donald A. Quarles, Jr. Optimal inscribed polygons in convex curves. *American Mathematical Monthly*, 96(10):886–902, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Tsarpalias:1989:VRT**
- [804] A. Tsarpalias. A version of Rouché’s theorem of continuous functions. *American Mathematical Monthly*, 96(10):911–913, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Pambuccian:1989:AEE**
- [805] Victor Pambuccian. Another example of an exotic function. *American Mathematical Monthly*, 96(10):913–914, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Bogart:1989:FMT**
- [806] Kenneth P. Bogart. A fresh(man) treatment of determinants. *American Mathematical Monthly*, 96(10):915–920, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Rushanan:1989:VM**
- [807] Joseph J. Rushanan. On the Vandermonde matrix. *American Mathematical Monthly*, 96(10):921–924, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Leary:1989:RIR**
- [808] F. C. Leary. Rings with invertible regular elements. *American Mathematical Monthly*, 96(10):924–926, ???? 1989. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Knuth:1990:SEPB**
- [809] Donald E. Knuth. Solution to elementary problem E3303, a binary summation. *American Mathematical Monthly*, 97(?):348–349, 1990. ISSN 0002-9890 (print), 1930-0972 (electronic). Original problem in [723].
- Knuth:1990:SEPC**
- [810] Donald E. Knuth. Solution to elementary problem E3309, a binomial coefficient inequality. *American Mathematical Monthly*, 97(?):614, 1990. ISSN 0002-9890 (print), 1930-0972 (electronic). Original problem in [724].
- Knuth:1990:SEPA**
- [811] Donald E. Knuth. Solution to elementary problem E3335, a deranged recurrence. *American Mathematical Monthly*, 97(?):927, 1990. ISSN 0002-9890 (print), 1930-0972 (electronic). Original problem in [725].
- Robinson:1990:CMP**
- [812] Raphael M. Robinson. Comment to: “A motivated proof of the Rogers-Ramanujan identities” [Amer. Math.

- Monthly **96** (1989), no. 5, 401–409, MR 90e:11147] by G. E. Andrews and R. J. Baxter. With a reply by Andrews. *American Mathematical Monthly*, 97(3): 214–215, March 1990. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [758].
- Boyd:1990:ADE**
- [813] David W. Boyd. Addendum: “The Diophantine equation  $x^2 + y^m = z^{2n}$ ” [Amer. Math. Monthly **95** (1988), no. 6, 544–547, MR 89f:11046]. *American Mathematical Monthly*, 97(5):411–412, May 1990. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [683].
- Beebee:1990:EEI**
- [814] John Beebee. Errata: “Examples of infinite, incongruent exact covers” [Amer. Math. Monthly **95** (1988), no. 2, 121–123, MR 89g:11013]. *American Mathematical Monthly*, 97(5):412, May 1990. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [652].
- Benjamin:1990:EBM**
- [815] Arthur T. Benjamin. Errata: “The bisection method: which root?” [Amer. Math. Monthly **94** (1987), no. 9, 861–863, MR 89c:26016]. *American Mathematical Monthly*, 97(5):412, May 1990. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [629].
- Kleiner:1990:ECP**
- [816] Hans-J. Kleiner. Errata: “Coloring the Platonic solids” [Amer. Math. Monthly **93** (1986), no. 4, 288–292, MR 87e:05072] by D. H. Lehmer. *American Mathematical Monthly*, 97(5):412, May 1990. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [511].
- Magill:1990:EUT**
- [817] K. D. Magill, Jr. Errata: “Universal topological spaces” [Amer. Math. Monthly **95** (1988), no. 10, 942–946, MR 89m:54018]. *American Mathematical Monthly*, 97(5):412, May 1990. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [720].
- Wong:1990:EMV**
- [818] Jingcheng Wong. Errata: “On the mean value theorem for integrals” [Amer. Math. Monthly **89** (1982), no. 5, 300–301, MR 83g:26002] by B. Jacobson. *American Mathematical Monthly*, 97(5):412, May 1990. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). See [213].
- Knuth:1990:SAP**
- [819] Donald E. Knuth. Solution to advanced problem 6581, the asymptotic expansion of the middle binomial coefficient. *American Mathematical Monthly*, 97(7):629–630, August/September 1990. ISSN 0002-9890 (print), 1930-0972 (electronic). Original problem in [700].
- Nijenhuis:1993:SEP**
- [820] Albert Nijenhuis. Solution to elementary problem E3267, a solitaire game. *American Mathematical Monthly*, 100(3):292–294, March 1993. ISSN 0002-9890 (print), 1930-0972 (electronic). Original problem in [674].

**Adamchik:1997:SF**

- [821] Victor Adamchik and Stan Wagon. A simple formula for  $\pi$ . *American Mathematical Monthly*, 104(9):852–855, November 1997. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). The authors employ Mathematica to extend earlier work of Bailey, Borwein [743], and Plouffe, [824], done in 1995, but only just published, that discovered an amazing formula for  $\pi$  as is a power series in  $16^{-k}$ , enabling any base-16 digit of  $\pi$  to be computed without knowledge of any prior digits. In this paper, Mathematica is used to find several simpler formulas having powers of  $4^{-k}$ . They also note that it has been proven that their methods cannot be used to exhibit similar formulas in powers of  $10^{-k}$ .

**Ortega:1964:GTM**

- [822] James M. Ortega. Generation of test matrices by similarity transformations. *Communications of the ACM*, 7(6):377–378, June 1964. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic). See comment [454].

**Knuth:1981:AMM**

- [823] Donald E. Knuth. Algorithms in modern mathematics and computer science. *Lecture Notes in Computer Science*, 122: 82–99, 1981. ISSN 0302-9743. Russian translation by G. S. Tseitin in *Algoritmy v Sovremennoi Matematike i Ee Prilozheniiakh*, Chast' I (Novosibirsk: Akademiiâ Nauk SSSR, Sibirskoe Otdelenie, Vychislitel'nyi Tsentr, 1982), 64–98. Revised version in [407].

**Bailey:1997:RCV**

- [824] David Bailey, Peter Borwein, and Simon Plouffe. On the rapid computa-

tation of various polylogarithmic constants. *Mathematics of Computation*, 66(218):903–913, April 1997. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic). URL <http://www.ams.org/mcom/1997-66-218>. See [821, 743].