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$(0, 1)$ [19]. $(0, 1]$ [19]. $-3/2$ [352]. **$250** [414]. **$28.00** [441]. **$29.95** [347]. 2^c [209]. $2p + 1$ [351]. $3(1 + \phi - \phi^{-1}) = 3!$ [377]. **$31.95** [292]. **$34.95** [306]. **$45.00** [383]. **$65.00** [370]. **$99.00** [333]. $[0, 1]$ [19]. $a! + b!|(a + b)!$ [311]. $a^2 = b^2 + cd$ [510]. C^n [620]. $\cos(2\pi/d)$ [300]. e [13]. $F(\alpha^d) = F(\alpha)$ [290]. k [38]. l_2 [51]. $m = n$ [480]. **R** [4, 435, 317]. N [485, 616, 206, 36, 109]. p [75, 521, 82, 351]. p^2 [388]. p^m [521]. $\phi(m^2)/\phi(n^2)$ [125, 171]. π [597]. $R^m \approx R^n$ [480]. S [575]. $x + y$ [227]. $x = x^{-1}$ [479]. $Z[-5]$ [630]. $\zeta(2) = \pi^2/6$ [581].

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References

Colley:2020:LE

[1] Susan Jane Colley. Letter from the Editor. *American Mathematical Monthly*, 127(1):3, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Marko:2020:GFN

[2] Frantisek Marko and Semyon Litvinov. Geometry of figurate numbers and sums of powers of consecutive natural numbers. *American Mathematical*

Monthly, 127(1):4–22, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Campbell:2020:HP

[3] John M. Campbell, Jacopo D'Aurizio, and Jonathan Sondow. Hypergeometry of the parbelos. *American Mathematical Monthly*, 127(1):23–32, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bras-Amoros:2020:IES

[4] Maria Bras-Amorós. Increasingly enumerable submonoids of **R**: Music theory as a unifying theme. *American Mathematical Monthly*, 127(1): 33–44, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Johnson:2020:MPS

[5] Charles R. Johnson and Pietro Paparella. Matricial proofs of some classical results about critical point location. *American Mathematical Monthly*, 127(1):45–53, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sokal:2020:HGG

[6] Alan D. Sokal. How to generalize (and not to generalize) the Chu–Vandermonde Identity. *American Mathematical Monthly*, 127(1):54–62, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Vatter:2020:PPL

[7] Vincent Vatter. A probabilistic proof of a lemma that is not Burnside's. *American Mathematical Monthly*, 127(1):63, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Steinerberger:2020:BWR

[8] Stefan Steinerberger. The best way to reconcile your past is exponentially. *American Mathematical Monthly*, 127(1):64–69, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stoica:2020:CAM

[9] George Stoica. Collisions and angular momentum for singular potentials. *American Mathematical Monthly*, 127(1):70–71, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Zhang:2020:NPF

[10] Jingyuan Zhang and Weigen Yan. A new proof of Foster's First Theorem. *American Mathematical Monthly*, 127(1):72–74, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chin:2020:PPW

[11] Wooyoung Chin. A probabilistic proof of a Wallis-type formula for the gamma function. *American Mathematical Monthly*, 127(1):75–79, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rebak:2020:GRI

[12] Örs Rebák. Generalization of a Ramanujan identity. *American Mathematical Monthly*, 127(1):80–83, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Diao:2020:EPI

[13] ZiJian Diao. An elementary proof of the irrationality of e. *American Mathematical Monthly*, 127(1):84, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSa

[14] Daniel H. Ullman, Daniel J. Velleman, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 127(1):85–93, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Witmer:2020:R

[15] Jeff Witmer. Reviews. *American Mathematical Monthly*, 127(1):94–96, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stanley:2020:SLR

[16] Richard P. Stanley. Some linear recurrences motivated by Stern's diatomic array. *American Mathematical Monthly*, 127(2):99–111, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

ODorney:2020:VIP

[17] Evan O'Dorney. Visibly irreducible polynomials over finite fields. *American Mathematical Monthly*, 127(2):112–124, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Villarino:2020:GGQ

[18] Mark B. Villarino. Gauss on Gaussian quadrature. *American Mathematical Monthly*, 127(2):125–138, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Witkowski:2020:BB

[19] Alfred Witkowski. Bijections between $(0, 1)$, $(0, 1]$, and $[0, 1]$. *American Mathematical Monthly*, 127(2):139, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Walker:2020:APR

[20] Aled Walker and Alexander Walker. Arithmetic progressions with restricted digits. *American Mathematical Monthly*, 127(2):140–150, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Javaheri:2020:SCU

[21] Mohammad Javaheri. On sets closed under the cross product and a property of the octahedron. *American Mathematical Monthly*, 127(2):151–158, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Guillera:2020:WRM

[22] Jesus Guillera. When Ramanujan meets Fibonacci and Lucas. *American Mathematical Monthly*, 127(2):159, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Blinkiewicz:2020:MPP

[23] Dorota Blinkiewicz and Bogdan Szydło. Minimal perimeter parallelograms inscribed in a pair of confocal ellipses. *American Mathematical Monthly*, 127(2):160–165, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hu:2020:PPR

[24] Xibao Hu and Yumin Zhong. A probabilistic proof of a recursion formula for sums of powers. *American Mathematical Monthly*, 127(2):166–168, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Trujillo:2020:CPU

[25] Timothy Trujillo. Condorcet's Paradox and ultrafilters. *American Mathematical Monthly*, 127(2):169–174, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Borgo:2020:SPP

[26] Seth Borgo. Special properties of power functions. *American Mathematical Monthly*, 127(2):174, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ehrenborg:2020:WPH

[27] Richard Ehrenborg. The Wästlund partition in higher dimensions. *American Mathematical Monthly*, 127(2):175–178, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSb

[28] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, Paul Bracken, Ezra A. Brown, Zachary Franco, Christian Friesen, László Lipták, Rick Luttmann, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, Elizabeth Wilmer, Fuzhen Zhang, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 127(2):179–187, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Liu:2020:NPG

[29] Changjian Liu. New proof of a Gronwall-type trigonometric inequality. *American Mathematical Monthly*, 127(2):188, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Glass:2020:R

[30] Darren Glass. Reviews. *American Mathematical Monthly*, 127(2):189–192, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Neudauer:2020:YGG

[31] Nancy Ann Neudauer. Yueh-Gin Gung and Dr. Charles Y. Hu Award for 2020 to Gerald J. Porter for distinguished service to mathematics. *American Mathematical Monthly*, 127(3):195–198, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rosen:2020:AMA

[32] Zvi Rosen, Jessica Sidman, and Louis Theran. Algebraic matroids in action. *American Mathematical Monthly*, 127(3):199–216, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cai:2020:SAB

[33] Zhaodong Cai, Matthew Faust, A. J. Hildebrand, Junxian Li, and Yuan Zhang. The surprising accuracy of Benford's Law in mathematics. *Amer-*

ican Mathematical Monthly, 127(3):217–237, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Schwartz:2020:DCT

[34] Richard Evan Schwartz and Serge Tabachnikov. Descartes circle theorem, Steiner porism, and spherical designs. *American Mathematical Monthly*, 127(3):238–248, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kuczmarski:2020:EZT

[35] Fred Kuczmarski. Equal zones and tautochrones. *American Mathematical Monthly*, 127(3):249–256, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Trevino:2020:END

[36] Enrique Treviño. Expected number of dice rolls for the sum to reach n. *American Mathematical Monthly*, 127(3):257, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sanchez-Reyes:2020:MBR

[37] Javier Sánchez-Reyes. The midpoints between roots reveal the quartic equation. *American Mathematical Monthly*, 127(3):258–262, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Furedi:2020:EMT

[38] Zoltán Füredi and András Gyárfás. An extension of Mantel's Theorem to k-graphs. *American Mathematical Monthly*, 127(3):263–268, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hwang:2020:DPG

[39] Suk-Geun Hwang and Ki-Bong Nam. A determinant proof of a generalized Pythagorean theorem. *American Mathematical Monthly*, 127(3):269–272, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Aebi:2020:SEP

[40] Christian Aebi. A short and easy proof of Morley's congruence theorem. *American Mathematical Monthly*, 127(3):273, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSc

[41] Daniel H. Ullman, Daniel J. Velleman, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 127(3):274–282, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rosenhouse:2020:R

[42] Jason Rosenhouse. Reviews. *American Mathematical Monthly*, 127(3): 283–288, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Conway:2020:HCP

[43] J. H. Conway and M. S. Paterson. A headache-causing problem. *American Mathematical Monthly*, 127(4):291–296, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Klee:2020:LAT

[44] Steven Klee and Matthew T. Stamps. Linear algebraic techniques for spanning tree enumeration. *American Mathematical Monthly*, 127(4):297–307, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bardomero:2020:FCE

[45] Leonardo Bardomero and Matthias Beck. Frobenius coin-exchange generating functions. *American Mathematical Monthly*, 127(4):308–315, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dresden:2020:PRC

[46] Gregory Dresden, Saimon Islam, Prakriti Panthi, Anukriti Shrestha, and Jiahao Zhang. Polynomial roots with common tails. *American Mathematical Monthly*, 127(4):316–329, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sadhukhan:2020:APS

[47] Arpan Sadhukhan. An alternative proof of Steinhaus's theorem. *American Mathematical Monthly*, 127(4):330, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Condori:2020:MPM

[48] Alberto A. Condori. Maximum principles for matrix-valued analytic functions. *American Mathematical Monthly*, 127(4):331–343, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Fernandez-Sanchez:2020:NSR

[49] Juan Fernández-Sánchez and Wolfgang Trutschnig. Nested square roots of 2 revisited. *American Mathematical Monthly*, 127(4):344–351, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Geller:2020:SSG

[50] Sue Geller. Simply not a simple group. *American Mathematical Monthly*, 127(4):352–353, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ferrer:2020:SPS

[51] Jesús Ferrer and Enrique Llorens-Fuster. A short proof that some mappings of the unit ball of l_2 are never nonexpansive. *American Mathematical Monthly*, 127(4):354–358, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hirose:2020:CRP

[52] Kenichi Hirose. Continuity of the roots of a polynomial. *American Mathematical Monthly*, 127(4):359–363, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sadov:2020:GIZ

[53] Sergey Sadov. Gustafson's isomorphism and the Zassenhaus lemma via a common commutative diagram. *American Mathematical Monthly*, 127(4): 364–370, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Wyss:2020:PE

[54] Walter Wyss. Pythagoras extended. *American Mathematical Monthly*, 127(4):371, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSd

[55] Daniel H. Ullman, Daniel J. Velleman, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 127(4):372–380, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kontorovich:2020:R

[56] Alex Kontorovich. Reviews. *American Mathematical Monthly*, 127(4): 381–384, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hungerbuhler:2020:ICP

[57] Norbert Hungerbühler. The inverse caustic problem. *American Mathematical Monthly*, 127(5):387–400, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Buchanan:2020:SSM

[58] Steven W. Buchanan and Andrew J. Hetzel. On the success of *Seriously* mishandling Euclid's Lemma. *American Mathematical Monthly*, 127(5): 401–410, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Clark:2020:MTT

[59] David Clark, Sophia Mancini, and Jacob Van Hook. Misère tic-tac-toe on projective binary Steiner triple systems. *American Mathematical Monthly*, 127(5):411–426, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Plaza:2020:HLA

[60] Angel Plaza. Harmonic, logarithmic, and arithmetic means and corollaries. *American Mathematical Monthly*, 127(5):427, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tupan:2020:GSI

[61] Alexandru Tupan. A generalization of the Steiner inellipse. *American Mathematical Monthly*, 127(5):428–436, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Matheron:2020:TPT

[62] Étienne Matheron. Three proofs of Tychonoff's Theorem. *American Mathematical Monthly*, 127(5):437–443, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2020:PTN

[63] Vadim Ponomarenko. Proof techniques for the new Millennium. *American Mathematical Monthly*, 127(5):443, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Abramov:2020:EBM

[64] Vyacheslav M. Abramov. Extension of the Bertrand–De Morgan test and its application. *American Mathematical Monthly*, 127(5):444–448, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chamberland:2020:WAZ

[65] Marc Chamberland. When are all the zeros of a polynomial real and distinct? *American Mathematical Monthly*, 127(5):449–451, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Markovic:2020:RTL

[66] Marijan Marković. Riesz's Theorem for Lumer's Hardy spaces. *American Mathematical Monthly*, 127(5):452–455, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Singh:2020:GBI

[67] Jitender Singh and Sanjeev Kumar. A generalization of Bevelacqua's irreducibility criterion. *American Mathematical Monthly*, 127(5):456–459, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

deCamargo:2020:NPE

[68] André Pierro de Camargo. A new proof of the equivalence of the Cauchy Mean Value Theorem and the Mean Value Theorem. *American Mathematical Monthly*, 127(5):460, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSe

[69] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, Paul Bracken, Ezra A. Brown, Zachary Franco, Christian Friesen, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, Elizabeth Wilmer, Fuzhen Zhang, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 127(5):461–469, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Gouvea:2020:R

[70] Fernando Q. Gouvêa. Reviews. *American Mathematical Monthly*, 127(5): 470–477, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Colley:2020:EEa

[71] Susan Jane Colley. Editor's endnotes. *American Mathematical Monthly*, 127(5):478–480, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Thomson:2020:BCT

[72] Brian S. Thomson. The bounded convergence theorem. *American Mathematical Monthly*, 127(6):483–503, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Veerman:2020:NAC

[73] J. J. P. Veerman. Navigating around convex sets. *American Mathematical Monthly*, 127(6):504–517, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cohen:2020:PMF

[74] Marion Deutsche Cohen. Portrait of the mathematician as a first-year undergrad. *American Mathematical Monthly*, 127(6):518, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Lei:2020:CPP

[75] Antonio Lei and Antoine Poulin. On certain probabilistic properties of polynomials over the ring of p-adic integers. *American Mathematical Monthly*, 127(6):519–529, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chan:2020:FDM

[76] Shan Tai Chan and Yuan Yuan. Finding the determinant of a matrix via complex analysis. *American Mathematical Monthly*, 127(6):530–536, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Choi:2020:ILA

[77] Hyounggyu Choi. Invariance of the length and the area of cycloids. *American Mathematical Monthly*, 127(6):537–544, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Henle:2020:POW

[78] James Henle. Paying our way out of a crisis. *American Mathematical Monthly*, 127(6):544, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Graham:2020:EPA

[79] Cole Graham and Tadashi Tokieda. An entropy proof of the arithmetic mean-geometric mean inequality. *American Mathematical Monthly*, 127 (6):545–546, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Labora:2020:WCB

[80] Daniel Cao Labora. When is a continuous bijection a homeomorphism? *American Mathematical Monthly*, 127(6):547–553, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cohen:2020:PMN

[81] Marion Deutsche Cohen. Portrait of the mathematician as a new mother. *American Mathematical Monthly*, 127(6):553, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Nyblom:2020:IPP

[82] M. A. Nyblom. Integer part of the partial sums for the divergent p-series in closed form. *American Mathematical Monthly*, 127(6):554–557, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Herrmann:2020:STD

[83] Burghard Herrmann. The specified three distance theorem. *American Mathematical Monthly*, 127(6):558–562, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSf

[84] H. Daniel Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, Christian Friesen, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, Elizabeth Wilmer, Fuzhen Zhang, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 127(6):563–571, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Levi:2020:WBP

[85] Mark Levi. A water-based proof of the Cauchy–Schwarz Inequality. *American Mathematical Monthly*, 127(6):572, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chartier:2020:R

[86] Tim Chartier. Reviews. *American Mathematical Monthly*, 127(6):573–576, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Aamand:2020:DCB

[87] Anders Aamand, Mikkel Abrahamsen, and Mikkel Thorup. Disks in curves of bounded convex curvature. *American Mathematical Monthly*, 127(7): 579–593, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Fritsch:2020:MGP

[88] Kristin Fritsch, Janin Heuer, Raman Sanyal, and Nicole Schulz. The Martin Gardner polytopes. *American Mathematical Monthly*, 127(7):594–601, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ennis:2020:BCF

[89] Christopher Ennis. Between the cracks: Filling space with polygonal shapes. *American Mathematical Monthly*, 127(7):602–617, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Mittelstaedt:2020:SAE

[90] Kiana Mittelstaedt. A stochastic approach to Eulerian numbers. *American Mathematical Monthly*, 127(7):618–628, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Zimhoni:2020:FET

[91] Noam Zimhoni. A forest of Eisensteinian triangles. *American Mathematical Monthly*, 127(7):629–637, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sam:2020:SPF

[92] Northshield Sam. A short proof of Fermat's Two-square Theorem. *American Mathematical Monthly*, 127(7):638, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Elsholtz:2020:UPR

[93] Christian Elsholtz. Unconditional prime-representing functions, following Mills. *American Mathematical Monthly*, 127(7):639–642, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Alfred-Jones:2020:SPU

[94] Toby Alfred-Jones. A short proof of the uniform smoothness of certain Lebesgue spaces. *American Mathematical Monthly*, 127(7):643–648, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Johnson:2020:W

[95] Warren P. Johnson. Down with Weierstrass! *American Mathematical Monthly*, 127(7):649–653, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hopkins:2020:TPC

[96] Brian Hopkins and James A. Sellers. Turning the partition Crank. *American Mathematical Monthly*, 127(7):654–657, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2020:PRH

[97] Anonymous. The Paul R. Halmos–Lester R. Ford Awards for 2019. *American Mathematical Monthly*, 127(7):657, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stoica:2020:CUS

[98] George Stoica. Components used in the Stone–Weierstrass Theorem. *American Mathematical Monthly*, 127(7):658, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSg

[99] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, Christian Friesen, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, Elizabeth Wilmer, Fuzhen Zhang, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 127(7):659–667, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Greer:2020:R

[100] Meredith L. Greer. Reviews. *American Mathematical Monthly*, 127(7): 668–671, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2020:MAA

[101] Vadim Ponomarenko. The Mathematical Association of America prime. *American Mathematical Monthly*, 127(7):672, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Krusemeyer:2020:EWL

[102] Mark Krusemeyer and Daniel H. Ullman. The Eightieth William Lowell Putnam Mathematical Competition. *American Mathematical Monthly*, 127(8):675–687, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Blum-Smith:2020:CEL

[103] Ben Blum-Smith and Japheth Wood. Chords of an ellipse, Lucas polynomials, and cubic equations. *American Mathematical Monthly*, 127(8): 688–705, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Eaton:2020:NSG

[104] Rachel Eaton, Kurt Herzinger, Ian Pierce, and Jeremy Thompson. Numerical semigroups and the game of sylver coinage. *American Mathematical Monthly*, 127(8):706–715, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sun:2020:WIG

[105] Dennis L. Sun. Wald's Identity and geometric expectation. *American Mathematical Monthly*, 127(8):716, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Lawlor:2020:LRM

[106] Gary R. Lawlor. l'Hôpital's Rule for multivariable functions. *American Mathematical Monthly*, 127(8):717–725, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Crane:2020:TGA

[107] Louis Crane and David N. Yetter. Tetrahedal geometry from areas. *American Mathematical Monthly*, 127(8):726–733, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tupan:2020:SPS

[108] Alexandru Tupan. A simple proof of the Siebeck–Marden Theorem. *American Mathematical Monthly*, 127(8):734–736, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Wirth:2020:GFN

[109] Benedikt Wirth. Green's function for the Neumann–Poisson Problem on n-dimensional balls. *American Mathematical Monthly*, 127(8):737–743, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kainth:2020:NSA

[110] Surinder Pal Singh Kainth. Null subsets of all sizes inside Vitali sets. *American Mathematical Monthly*, 127(8):743, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Autry:2020:EAS

[111] Jackson Autry, Tara Gomes, Christopher O'Neill, and Vadim Ponomarenko. Elasticity in Apéry sets. *American Mathematical Monthly*, 127 (8):744–749, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chandrasekhar:2020:CPW

[112] Karthik Chandrasekhar, Richard Ehrenborg, and Frits Beukers. A counting proof for when 2 is a quadratic residue. *American Mathematical Monthly*, 127(8):750–751, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSh

[113] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, Christian Friesen, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, Elizabeth Wilmer, Fuzhen Zhang, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 127(8):752–761, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Xi:2020:FSN

[114] Gao-Wen Xi and Qiu-Ming Luo. A formula for the Stirling numbers of the second kind. *American Mathematical Monthly*, 127(8):762, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Knudson:2020:RDM

[115] Kevin P. Knudson. Review: *Discrete Morse Theory* by Nicholas Scoville. *American Mathematical Monthly*, 127(8):763–768, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Deaett:2020:MMR

[116] Louis Deaett. Matroids and the minimum rank problem for matrix patterns. *American Mathematical Monthly*, 127(9):771–788, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Nakandakari:2020:EPT

[117] Yuki Nakandakari and Shuichi Tsukuda. An elementary proof that the third finite subset space of the circle is the 3-sphere. *American Mathematical Monthly*, 127(9):789–805, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chin:2020:CPF

[118] Angelina Y. M. Chin. Counting pairs to find a finite field. *American Mathematical Monthly*, 127(9):806, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ciesielski:2020:DCM

[119] Krzysztof Chris Ciesielski and Yichen Liu. Distinct continuous maps with all Riemann sums equal. *American Mathematical Monthly*, 127(9):807–819, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kutsenko:2020:EFC

[120] Anton A. Kutsenko. An entire function connected with the approximation of the Golden Ratio. *American Mathematical Monthly*, 127(9):820–826, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sambale:2020:TLN

[121] Benjamin Sambale. On a theorem of Ledermann and Neumann. *American Mathematical Monthly*, 127(9):827–834, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Mandler:2020:QPO

[122] Michael Mandler. A quick proof of the order-extension principle. *American Mathematical Monthly*, 127(9):835, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Marklof:2020:DSG

[123] Jens Marklof. Delone sets generated by square roots. *American Mathematical Monthly*, 127(9):836–840, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Komornik:2020:SEI

[124] Vilmos Komornik. A short, elementary introduction to the exponential function. *American Mathematical Monthly*, 127(9):841–846, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Krachun:2020:EPR

[125] Dmitry Krachun and Zhi-Wei Sun. Each positive rational number has the form $\phi(m^2)/\phi(n^2)$. *American Mathematical Monthly*, 127(9):847–849, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

McGrath:2020:BSO

[126] Peter McGrath. Bases for second order linear ODEs. *American Mathematical Monthly*, 127(9):849, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Marinescu:2020:VSP

[127] Dan Stefan Marinescu and Mihai Monea. A very short proof of the Hermite–Hadamard Inequalities. *American Mathematical Monthly*, 127 (9):850–851, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSi

[128] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, Christian Friesen, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, Elizabeth Wilmer, Fuzhen Zhang, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 127(9):852–860, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Boaler:2020:MHF

[129] Jo Boaler. Mathematics for human flourishing. *American Mathematical Monthly*, 127(9):861–864, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dray:2020:UED

[130] Tevian Dray. Using embedding diagrams to visualize curvature. *American Mathematical Monthly*, 127(10):867–879, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Abrahamsen:2020:EIL

[131] Mikkel Abrahamsen, Jacob Holm, Eva Rotenberg, and Christian Wulff-Nilsen. Escaping an infinitude of lions. *American Mathematical Monthly*, 127(10):880–896, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Maehara:2020:TST

[132] Hiroshi Maehara and Horst Martini. Tangent spheres of tetrahedra and a theorem of Grace. *American Mathematical Monthly*, 127(10):897–910, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Coffman:2020:VFC

[133] Adam Coffman and Yuan Zhang. Vector fields with continuous curl but discontinuous partial derivatives. *American Mathematical Monthly*, 127 (10):911–917, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Abel:2020:RMI

[134] Ulrich Abel and Vitaliy Kushnirevych. Reducing multiple integrals of Beukers's type. *American Mathematical Monthly*, 127(10):918–926, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stoica:2020:TUT

[135] George Stoica. Two uniqueness theorems at work. *American Mathematical Monthly*, 127(10):927, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Yao:2020:NFD

[136] Bowen Yao. A note on fraction decompositions of integers. *American Mathematical Monthly*, 127(10):928–932, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Eydelzon:2020:NPS

[137] Anatoly Eydelzon. On a new property of the Steiner inellipse. *American Mathematical Monthly*, 127(10):933–935, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

MacHale:2020:TMF

[138] Desmond MacHale. Are there more finite rings than finite groups? *American Mathematical Monthly*, 127(10):936–938, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Mercer:2020:API

[139] Idris Mercer. Another proof of the infinitude of primes. *American Mathematical Monthly*, 127(10):938, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Li:2020:PSC

[140] Xiumei Li and Min Sha. A proof of Sondow's conjecture on the Smarandache function. *American Mathematical Monthly*, 127(10):939–943, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2020:PSj

[141] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, Christian Friesen, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, Elizabeth Wilmer, Fuzhen Zhang, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 127(10):944–952, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Pudwell:2020:RIU

[142] Lara Pudwell. Review: *An Introduction to Undergraduate Research in Computational and Mathematical Biology* Edited by Hannah Callender Highlander, Alex Capaldi, and Carrie Diaz Eaton; and A Project-Based Guide to Undergraduate Research in Mathematics. Edited by Pamela Harris, Erik Insko, and Aaron Wootton. *American Mathematical Monthly*, 127 (10):953–957, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Colley:2020:EEb

[143] Susan Jane Colley. Editor's endnotes. *American Mathematical Monthly*, 127(10):958–960, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2020:MR

[144] Anonymous. *Monthly* referees for 2020. *American Mathematical Monthly*, 127(10):i–iii, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Colley:2021:LEa

[145] Susan Jane Colley. Letter from the Editor. *American Mathematical Monthly*, 128(1):3, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Engen:2021:CAP

[146] Michael Engen and Vincent Vatter. Containing all permutations. *American Mathematical Monthly*, 128(1):4–24, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bowman:2021:GAD

[147] Joshua P. Bowman. Geometry and algebra of the deltoid map. *American Mathematical Monthly*, 128(1):25–39, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Pollack:2021:SPP

[148] Paul Pollack and Enrique Treviño. Sums of proper powers. *American Mathematical Monthly*, 128(1):40, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Brandolini:2021:PTC

[149] L. Brandolini, L. Colzani, S. Robins, and G. Travaglini. Pick's Theorem and convergence of multiple Fourier series. *American Mathematical Monthly*, 128(1):41–49, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Lowry-Duda:2021:PMV

[150] David Lowry-Duda and Miles H. Wheeler. Perturbing the mean value theorem: Implicit functions, the Morse Lemma, and beyond. *American Mathematical Monthly*, 128(1):50–61, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:YAMa

[151] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 128(1):61, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Brown:2021:GQW

[152] Robert F. Brown. A good question won't go away: An example of mathematical research. *American Mathematical Monthly*, 128(1):62–68, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kainth:2021:PMS

[153] Surinder Pal Singh Kainth. Perfect metric spaces of increasingly large cardinality. *American Mathematical Monthly*, 128(1):69, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Klain:2021:PPS

[154] Daniel A. Klain. A probabilistic proof of the spherical excess formula. *American Mathematical Monthly*, 128(1):70–72, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chen:2021:FTN

[155] Xiaomin Chen, Fenglin Huang, Shuhan Zhou, Mingxuan Zou, and Junchi Zuo. Foster, Turán, and neighbors. *American Mathematical Monthly*, 128 (1):73–78, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hiller:2021:FBP

[156] Josh Hiller. Fibonacci's bunny-pocalypse! *American Mathematical Monthly*, 128(1):78, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Segal-Halevi:2021:HCC

[157] Erel Segal-Halevi and Warut Suksompong. How to cut a cake fairly: A generalization to groups. *American Mathematical Monthly*, 128(1):79–83, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Gorka:2021:SMS

[158] Przemysław Górka. Separability of a metric space is equivalent to the existence of a Borel measure. *American Mathematical Monthly*, 128(1): 84–86, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chu:2021:WSA

[159] Hùng Vi˙êt Chu. What's special about the perfect number 6? *American Mathematical Monthly*, 128(1):87, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSa

[160] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, Christian Friesen, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 128(1):88–96, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Flaten:2021:DDF

[161] Sonya Flaten, Paul D. Humke, Emily Olson, and Thong Vo. Delicate details of filling space. *American Mathematical Monthly*, 128(2):99–114, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Thompson:2021:ASPa

[162] Ian Thompson, Morris Davies, and Miren Karmele Urbikain. Analysis of series and products. Part 1: The Euler–Maclaurin formula. *American Mathematical Monthly*, 128(2):115–124, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tolosa:2021:LPD

[163] Juan Tolosa. Length-preserving directions and some Diophantine equations. *American Mathematical Monthly*, 128(2):125–139, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:YAMb

[164] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 128(2):139, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Moniot:2021:SOI

[165] Robert K. Moniot. Solution of an odds inversion problem. *American Mathematical Monthly*, 128(2):140–149, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Farhadian:2021:CST

[166] Reza Farhadian and Vadim Ponomarenko. A Cauchy–Schwarz type inequality for differences. *American Mathematical Monthly*, 128(2):150, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Nagy:2021:RCC

[167] Ben Nagy and David Michael Roberts. (Re)constructing code loops. *American Mathematical Monthly*, 128(2):151–161, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Plaza:2021:EIC

[168] Ángel Plaza. Exponential inequalities and corollaries. *American Mathematical Monthly*, 128(2):162, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Grinberg:2021:MTL

[169] Eric L. Grinberg and Mehmet Orhon. Morley trisectors and the law of sines with reflections. *American Mathematical Monthly*, 128(2):163–167, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Andrica:2021:AGD

[170] Dorin Andrica, Sorin Radulescu, and George C. Turcas. On the automorphism group of direct products of groups with finite exponent. *American Mathematical Monthly*, 128(2):168–173, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Li:2021:PRN

[171] Hongjian Li, Pingzhi Yuan, and Hairong Bai. Positive rational numbers of the form $\phi(m^2)/\phi(n^2)$. *American Mathematical Monthly*, 128(2):174–176, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Niemiro:2021:NLM

[172] Matthew A. Niemiro. The natural logarithm modulo 2. *American Mathematical Monthly*, 128(2):177, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSb

[173] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 128 (2):178–186, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Glass:2021:R

[174] Darren Glass, Béla Bajnok, Carolyn Yackel, Edray Goins, Jenna Carpenter, Stephen Kennedy, Jeanette Shakalli, Ursula Whitcher, Dave Kung, Kathryn Kozak, Robert Ghrist, and Andrew Gelman. Reviews. *American Mathematical Monthly*, 128(2):187–192, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Neudauer:2021:YGG

[175] Nancy Ann Neudauer, Tevian Dray, George Berzsenyi, John Harris, Diane Lussier, Amy Shell-Gellasch, James Álvarez, and Ruth Charney. Yueh-Gin Gung and Dr. Charles Y. Hu Award for 2021 to Deanna Haunsperger for distinguished service. *American Mathematical Monthly*, 128(3):195–197, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Thompson:2021:ASPb

[176] Ian Thompson, Morris Davies, and Miren Karmele Urbikain. Analysis of series and products. Part 2: The trapezoidal rule. *American Mathematical Monthly*, 128(3):198–213, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:YAMc

[177] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 128(3):213, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Holly:2021:MUP

[178] Jan E. Holly and David Krumm. Morikawa's unsolved problem. *American Mathematical Monthly*, 128(3):214–237, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Garcia:2021:CUS

[179] Stephan Ramon Garcia and Matthew A. Myers. Composites in the Ulam spiral. *American Mathematical Monthly*, 128(3):238, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stasinski:2021:UPF

[180] Alexander Stasinski. A uniform proof of the finiteness of the class group of a global field. *American Mathematical Monthly*, 128(3):239–249, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ritter:2021:PFT

[181] Howard L. Ritter Jr. A pi in the face of tau. *American Mathematical Monthly*, 128(3):249, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Elsholtz:2021:FLT

[182] Christian Elsholtz. Fermat's Last Theorem implies Euclid's infinitude of primes. *American Mathematical Monthly*, 128(3):250–257, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Saunders:2021:BBG

[183] Arnold Saunders and Hosam Mahmoud. Bar bets and generating functions: The distribution of the separation of two distinct card ranks. *American Mathematical Monthly*, 128(3):258–264, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dashiell:2021:CMS

[184] Frederick K. Dashiell Jr. Countable metric spaces without isolated points. *American Mathematical Monthly*, 128(3):265–267, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chu:2021:APP

[185] Hùng Vi˙êt Chu. On arithmetic progressions of powers in cyclotomic polynomials. *American Mathematical Monthly*, 128(3):268–272, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bradley:2021:NDS

[186] David M. Bradley. Note on Dirichlet's sinc integral. *American Mathematical Monthly*, 128(3):273–274, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stoica:2021:WSR

[187] George Stoica. Widder-style real analytic functions. *American Mathematical Monthly*, 128(3):275, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSc

[188] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 128 (3):276–284, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Reese:2021:R

[189] Margaret Reese. Reviews. *American Mathematical Monthly*, 128(3):285–288, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dunham:2021:ECB

[190] William Dunham. Euler and the Cubic Basel Problem. *American Mathematical Monthly*, 128(4):291–301, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chapman:2021:WPM

[191] Scott T. Chapman, Felix Gotti, and Marly Gotti. When is a Puiseux monoid atomic? *American Mathematical Monthly*, 128(4):302–321, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Melman:2021:ZES

[192] Aaron Melman. Zero exclusion sectors for some polynomials with structured coefficients. *American Mathematical Monthly*, 128(4):322–336, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bissell:2021:CNR

[193] J. J. Bissell. Complex numbers as real continued fractions. *American Mathematical Monthly*, 128(4):336, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anderson:2021:PVD

[194] Jacqueline Anderson, Brian Camara, and John Pike. Positional voting and doubly stochastic matrices. *American Mathematical Monthly*, 128(4): 337–351, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:YAMd

[195] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 128(4):351, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hammack:2021:NVH

[196] Richard H. Hammack and Paul C. Kainen. A new view of hypercube genus. *American Mathematical Monthly*, 128(4):352–359, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Boulanger:2021:EPT

[197] Jacques Boulanger and Jean-Luc Chabert. An elementary proof of the two-generator property for the ring of integer-valued polynomials. *American Mathematical Monthly*, 128(4):360–366, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Komornik:2021:LNC

[198] Vilmos Komornik and Reinhard Schäfke. Leibniz, Newton, and Cauchy: A complex relationship. *American Mathematical Monthly*, 128(4):367–369, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Levi:2021:CVP

[199] Mark Levi and Tadashi Tokieda. A communicating-vessels proof of Hölder's Inequality. *American Mathematical Monthly*, 128(4):370, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Leinster:2021:PON

[200] Tom Leinster. The probability that an operator is nilpotent. *American Mathematical Monthly*, 128(4):371–375, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSd

[201] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 128 (4):376–384, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rowlett:2021:CGS

[202] Julie Rowlett, Max Blom, Henrik Nordell, Oliver Thim, and Jack Vahnberg. Crystallographic groups, strictly tessellating polytopes, and analytic eigenfunctions. *American Mathematical Monthly*, 128(5):387–406, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bockting-Conrad:2021:SP

[203] Sarah Bockting-Conrad, Yevgenia Kashina, T. Kyle Petersen, and Bridget Eileen Tenner. Sós permutations. *American Mathematical Monthly*, 128(5):407–422, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:YAMe

[204] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 128(5):422, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Komisarski:2021:NRV

[205] Andrzej Komisarski. Nontransitive random variables and nontransitive dice. *American Mathematical Monthly*, 128(5):423–434, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Samet:2021:ECT

[206] Dov Samet. An extension of Ceva's Theorem to n-simplices. *American Mathematical Monthly*, 128(5):435–445, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bajo:2021:CMP

[207] Ignacio Bajo. Computing Moore–Penrose inverses with polynomials in matrices. *American Mathematical Monthly*, 128(5):446–456, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Crenshaw:2021:BOR

[208] Aaron Crenshaw and Dalibor Froncek. Box-object redistribution problem. *American Mathematical Monthly*, 128(5):456, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hola:2021:TQN

[209] Lubica Holá. There are 2^c quasicontinuous non–Lebesgue measurable functions. *American Mathematical Monthly*, 128(5):457–460, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Marko:2021:NGF

[210] Frantisek Marko and José L. Cereceda. A note on the geometry of figurate numbers. *American Mathematical Monthly*, 128(5):461–463, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Conlon:2021:ENC

[211] David Conlon. Extremal numbers of cycles revisited. *American Mathematical Monthly*, 128(5):464–466, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSe

[212] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 128 (5):467–475, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Nacin:2021:R

[213] David Nacin. Reviews. *American Mathematical Monthly*, 128(5):476–478, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Colley:2021:EE

[214] Susan Jane Colley. Editor's endnotes. *American Mathematical Monthly*, 128(5):479–480, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sagan:2021:BPP

[215] Bruce Sagan and Vincent Vatter. Bijective proofs of proper coloring theorems. *American Mathematical Monthly*, 128(6):483–499, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:YAMf

[216] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 128(6):499, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Simoson:2021:FCS

[217] Andrew J. Simoson. Ford circles strike gold. *American Mathematical Monthly*, 128(6):500–512, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Brooks:2021:PIM

[218] Cara D. Brooks, Alberto A. Condori, and Nicholas Seguin. Polynomially isometric matrices in low dimensions. *American Mathematical Monthly*, 128(6):513–524, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:GM

[219] Vadim Ponomarenko. Grades are not money. *American Mathematical Monthly*, 128(6):524, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Johnston:2021:CNB

[220] William Johnston and Chloe M. Makdad. A comparison of norms: Bicomplex root and ratio tests and an extension theorem. *American Mathematical Monthly*, 128(6):525–533, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bezdek:2021:CBR

[221] András Bezdek, Zhenyue Guan, Mihály Hujter, and Antal Joós. Cubes and boxes have Rupert's passages in every nontrivial direction. *American Mathematical Monthly*, 128(6):534–542, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Barany:2021:HCY

[222] Imre Bárány and Péter Frankl. How (not) to cut your cheese. *American Mathematical Monthly*, 128(6):543–552, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Mora:2021:SPS

[223] Edward Coto Mora and Francesco Viganò. 169 and sums of positive squares. *American Mathematical Monthly*, 128(6):553, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Pollack:2021:QRU

[224] Paul Pollack and Noah Snyder. A quick route to unique factorization in quadratic orders. *American Mathematical Monthly*, 128(6):554–558, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Leonetti:2021:CCC

[225] Paolo Leonetti. A characterization of Cesàro convergence. *American Mathematical Monthly*, 128(6):559–562, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSf

[226] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 128(6):563–571, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Borkovitz:2021:XMM

[227] Debra K. Borkovitz. $x + y$: A mathematician's manifesto for rethinking gender. *American Mathematical Monthly*, 128(6):572–576, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hammond:2021:SLS

[228] Christopher N. B. Hammond and Edward Omey. A second look at the second ratio test. *American Mathematical Monthly*, 128(7):579–596, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dawson:2021:DR

[229] Robert Dawson. The digital Rubáiyát. *American Mathematical Monthly*, 128(7):597, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Witmer:2021:SPV

[230] Jeff Witmer. Simpson's Paradox, visual displays, and causal diagrams. *American Mathematical Monthly*, 128(7):598–610, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Holly:2021:WTA

[231] Jan E. Holly. What type of Apollonian circle packing will appear? *American Mathematical Monthly*, 128(7):611–629, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Shapira:2021:QGP

[232] Asaf Shapira and Mykhaylo Tyomkyn. Quasirandom graphs and the pantograph equation. *American Mathematical Monthly*, 128(7):630–639, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2021:PRH

[233] Anonymous. The Paul R. Halmos–Lester R. Ford Awards for 2020. *American Mathematical Monthly*, 128(7):639, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Gurtas:2021:DQG

[234] Yusuf Z. Gürtas. Discriminants of quadratics generalized. *American Mathematical Monthly*, 128(7):640–647, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:YAMg

[235] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 128(7):647, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Choi:2021:CTA

[236] Hyounggyu Choi and Kyeonghoon Jeong. Concurrence of three area-bisecting cevians of a triangle in three geometries. *American Mathematical Monthly*, 128(7):648–651, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Studer:2021:AVF

[237] Luca Studer. An asymptotic version of Frankl's Conjecture. *American Mathematical Monthly*, 128(7):652–654, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Amster:2021:PHP

[238] Pablo Amster. The power of the half power. *American Mathematical Monthly*, 128(7):655–657, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSg

[239] Daniel H. Ullman, Daniel J. Velleman, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 128(7):658–666, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Calkin:2021:R

[240] Neil Calkin and Colm Mulcahy. Reviews. *American Mathematical Monthly*, 128(7):667–672, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Krusemeyer:2021:EFW

[241] Mark Krusemeyer, Daniel H. Ullman, and Paul Zeitz. The Eighty-First William Lowell Putnam Mathematical Competition. *American Mathematical Monthly*, 128(8):675–686, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Klyve:2021:PTA

[242] Dominic Klyve and Erik R. Tou. A prime testing algorithm from leonhard Euler. *American Mathematical Monthly*, 128(8):687–700, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bergelson:2021:SPL

[243] Vitaly Bergelson, Andrew Best, and Alex Iosevich. Sums of powers in large finite fields: A mix of methods. *American Mathematical Monthly*, 128(8): 701–718, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Freyberg:2021:MMM

[244] Bryan J. Freyberg. March madness magic: Constructing a tournament with a magic cube. *American Mathematical Monthly*, 128(8):719–725, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Moran:2021:EDE

[245] Tomer Moran, Shay Moran, and Shlomo Moran. Elementary derivations of the Euclidean Hurwitz algebras adapted from Gadi Moran's last paper. *American Mathematical Monthly*, 128(8):726–736, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bostan:2021:II

[246] Alin Bostan, Fernando Chamizo, and Mikael Persson Sundqvist. On an integral identity. *American Mathematical Monthly*, 128(8):737–743, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:YAMh

[247] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 128(8):743, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Antonir:2021:EMB

[248] Asaf Cohen Antonir and Asaf Shapira. On Erdős's method for bounding the partition function. *American Mathematical Monthly*, 128(8):744–747, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cairns:2021:PTH

[249] Hannah Cairns. Perron's Theorem in an hour. *American Mathematical Monthly*, 128(8):748–752, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Weintraub:2021:TPE

[250] Steven H. Weintraub. The theorem of the primitive element. *American Mathematical Monthly*, 128(8):753–754, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSh

[251] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, Christian Friesen, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, Elizabeth Wilmer, Fuzhen Zhang, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 128(8):755–763, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Corvino:2021:CST

[252] Reviewed by Justin Corvino. Curvature of space and time, with an introduction to geometric analysis. *American Mathematical Monthly*, 128(8): 764–768, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bailey:2021:ISI

[253] David H. Bailey and Scott Chapman. Introduction to the special issue. *American Mathematical Monthly*, 128(9):772, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bailey:2021:JBR

[254] David H. Bailey. Jonathan Borwein: Renaissance mathematician. *American Mathematical Monthly*, 128(9):773–779, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dilcher:2021:ACC

[255] Karl Dilcher. Analytic continuations of character and alternating Tornheim zeta functions. *American Mathematical Monthly*, 128(9):780–795, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bauschke:2021:EAA

[256] Heinz H. Bauschke, Sylvain Gretchko, Walaa M. Moursi, and Matthew Saurette. Edelstein's astonishing affine isometry. *American Mathematical Monthly*, 128(9):796–809, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stoica:2021:ICC

[257] George Stoica and Yousef Wardat. An inequality can change everything .... *American Mathematical Monthly*, 128(9):810, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chamberland:2021:ALE

[258] Marc Chamberland and Armin Straub. Apéry limits: Experiments and proofs. *American Mathematical Monthly*, 128(9):811–824, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

dePrado:2021:FST

[259] Marcos López de Prado and David H. Bailey. The false strategy theorem: A financial application of experimental mathematics. *American Mathematical Monthly*, 128(9):825–831, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Jungic:2021:EMM

[260] Veselin Jungić and Andrijana Burazin. On experimental mathematics and mathematics education. *American Mathematical Monthly*, 128(9): 832–844, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Calkin:2021:WNM

[261] Neil J. Calkin, Killian Davis, Evan Haithcock, Catherine M. Kenyon, and Sylvia Wu. What Newton might have known: Experimental mathematics in the classroom. *American Mathematical Monthly*, 128(9):845–855, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:YAMi

[262] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 128(9):855, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSi

[263] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, Paul Bracken, Ezra A. Brown, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 128(9):856–864, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Colley:2021:LEb

[264] Susan Jane Colley. Letter from the Editor. *American Mathematical Monthly*, 128(10):867, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Alvarado:2021:GC

[265] Ryan Alvarado, Maia Averett, Benjamin Gaines, Christopher Jackson, Mary Leah Karker, Małgorzata Aneta Marciniak, Francis Su, and Shanise Walker. The game of cycles. *American Mathematical Monthly*, 128(10): 868–887, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Nathanson:2021:SFS

[266] Melvyn B. Nathanson. Sums of finite sets of integers, II. *American Mathematical Monthly*, 128(10):888–896, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Zhou:2021:ADY

[267] Li Zhou. Area division of the yellow brick road on the regular dodecahedron. *American Mathematical Monthly*, 128(10):897, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Garcia:2021:NPT

[268] Ronaldo Garcia, Dan Reznik, and Jair Koiller. New properties of triangular orbits in elliptic billiards. *American Mathematical Monthly*, 128(10): 898–910, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dawson:2021:GHD

[269] Robert Dawson, Pietro Milici, and Frédérique Plantevin. Gardener's hyperbolas and the dragged-point principle. *American Mathematical Monthly*, 128(10):911–921, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2021:PGT

[270] Vadim Ponomarenko. Pollock's generalized tetrahedral numbers conjecture. *American Mathematical Monthly*, 128(10):921, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Varona:2021:CTP

[271] Juan Luis Varona. A couple of transcendental prime-representing constants. *American Mathematical Monthly*, 128(10):922–928, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Burrin:2021:IMT

[272] Claire Burrin and Matthew Issac. Infinitely many twin prime polynomials of odd degree. *American Mathematical Monthly*, 128(10):929–935, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Campbell:2021:MVI

[273] Paul J. Campbell. Much virtue in "If". *American Mathematical Monthly*, 128(10):936, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Pongsriiam:2021:APV

[274] Prapanpong Pongsriiam and Kittipong Subwattanachai. Arithmetic progressions in the values of a quadratic polynomial. *American Mathematical Monthly*, 128(10):937–941, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Farzadfard:2021:FTA

[275] Hojjat Farzadfard. The fundamental theorem of algebra via Newton's identities. *American Mathematical Monthly*, 128(10):942–945, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2021:PSj

[276] Daniel H. Ullman, Daniel J. Velleman, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Stan Wagon, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 128(10):946–954, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Torrence:2021:TMA

[277] Bruce Torrence. Tessellations: Mathematics, art, and recreation. *American Mathematical Monthly*, 128(10):955–959, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2021:EE

[278] Anonymous. Editor's endnotes. *American Mathematical Monthly*, 128 (10):960, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2021:MR

[279] Anonymous. *Monthly* referees for 2021. *American Mathematical Monthly*, 128(10):i–iii, 2021. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dumbaugh:2022:LE

[280] Della Dumbaugh. Letter from the Editor. *American Mathematical Monthly*, 129(1):3, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tupan:2022:ICP

[281] Alexandru Tupan. Inellipses of convex polygons, Brianchon's theorem, and Bradley's theorem. *American Mathematical Monthly*, 129(1):4–23, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Blagouchine:2022:AAA

[282] Iaroslav V. Blagouchine. Another alternating analogue of Euler's constant. *American Mathematical Monthly*, 129(1):24–34, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:YAMa

[283] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(1):34, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Franz:2022:RSA

[284] Reinhard O. W. Franz and David G. Long. Reconstructing signals from aperture-filtered samples. *American Mathematical Monthly*, 129(1):35–51, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Coutinho:2022:CTC

[285] S. C. Coutinho. Catching tangent curves in fields of lines. *American Mathematical Monthly*, 129(1):52–65, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Zhou:2022:CSI

[286] Submitted by Li Zhou. Cauchy–Schwarz inequality for differences revisited. *American Mathematical Monthly*, 129(1):65, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bezhanishvili:2022:NAK

[287] Guram Bezhanishvili, Patrick J. Morandi, and Bruce Olberding. A new approach to the Katetov–Tong Theorem. *American Mathematical Monthly*, 129(1):66–74, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Javaheri:2022:DFN

[288] Mohammad Javaheri and Stephanie Cambrea. The distribution of Fibonacci numbers modulo primes. *American Mathematical Monthly*, 129 (1):75–79, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stoica:2022:PIF

[289] George Stoica. Polynomials and integration in finite terms. *American Mathematical Monthly*, 129(1):80–81, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Jones:2022:WDF

[290] Lenny Jones. When does $F(\alpha^d) = F(\alpha)$? *American Mathematical Monthly*, 129(1):82–85, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSa

[291] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 129(1):86–95, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Braun:2022:BRI

[292] Benjamin Braun. Book review: *Inventing the Mathematician: Gender, Race, and Our Cultural Understanding of Mathematics* By Sara Hottinger. SUNY Press, Albany, NY, 2017. 216 pp., ISBN 1-4384-6010-4, \$31.95. *American Mathematical Monthly*, 129(1):96–100, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

deLaGrandville:2022:CPC

[293] Olivier de La Grandville. On a classic problem in the calculus of variations: Setting straight key properties of the catenary. *American Mathematical Monthly*, 129(2):103–115, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chaobankoh:2022:PTP

[294] T. Chaobankoh and P. Chomchit. A product of two primes with difference 2. *American Mathematical Monthly*, 129(2):115, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Fernandez-Breton:2022:UUP

[295] David J. Fernández-Bretón. Using ultrafilters to prove Ramsey-type theorems. *American Mathematical Monthly*, 129(2):116–131, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:YAMb

[296] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(2):132, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Benardete:2022:CMB

[297] Diego M. Benardete. Complex methods for bounds on the number of periodic solutions with an application to a neural model. *American Mathematical Monthly*, 129(2):133–150, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Carrillo:2022:CPD

[298] Sergio A. Carrillo. The composition of polynomials is a determinant. *American Mathematical Monthly*, 129(2):151–165, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Klazar:2022:CNL

[299] Martin Klazar and Richard Horský. Are the Catalan numbers a linear recurrence sequence? *American Mathematical Monthly*, 129(2):166–171, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Wolfram:2022:FVC

[300] D. A. Wolfram. Factoring variants of Chebyshev polynomials of the first and second kinds with minimal polynomials of $\cos(2\pi/d)$. *American Mathematical Monthly*, 129(2):172–176, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Garcia:2022:PRM

[301] Stephan Ramon Garcia, Roger A. Horn, Florian Luca, and Kuldeep Sarma. Powers of rational matrices. *American Mathematical Monthly*, 129(2):177, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Mishra:2022:PCQ

[302] Bhawesh Mishra. Polynomials consisting of quadratic factors with roots modulo any positive integer. *American Mathematical Monthly*, 129(2): 178–182, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sasane:2022:LCS

[303] Amol J. Sasane. A law of conservation of symbols. *American Mathematical Monthly*, 129(2):182, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chin:2022:GBF

[304] Calvin Wooyoung Chin. A gambler that bets forever and the Strong Law of Large Numbers. *American Mathematical Monthly*, 129(2):183–185, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSb

[305] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, George

Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 129(2):186–195, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Klyve:2022:BRB

[306] Dominic Klyve. Book review: *Bernoulli's Fallacy*. By Aubrey Clayton, Columbia University Press, New York, 2021. 347 pp., ISBN 978-0-231-19994-0, $34.95. *American Mathematical Monthly*, 129(2):196–200, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bogart:2022:PPT

[307] Tristram Bogart and Kevin Woods. A plethora of polynomials: a toolbox for counting problems. *American Mathematical Monthly*, 129(3):203–222, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Krantz:2022:LMM

[308] Steven G. Krantz. Life in the Montel Motel. *American Mathematical Monthly*, 129(3):223–230, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Clark:2022:WKM

[309] L. Jeneva Clark. When I knew math was mine. *American Mathematical Monthly*, 129(3):230, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ramond:2022:ART

[310] Paul Ramond. The Abel–Ruffini Theorem: Complex but not complicated. *American Mathematical Monthly*, 129(3):231–245, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Nath:2022:D

[311] Ayan Nath. On the divisibility $a! + b!|(a + b)!$. *American Mathematical Monthly*, 129(3):246–254, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Betz:2022:CGS

[312] Alexander Betz and David A. Nash. Classifying groups with a small number of subgroups. *American Mathematical Monthly*, 129(3):255–267, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:YAMc

[313] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(3):267, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chavez:2022:FTF

[314] Anastasia Chavez and Christopher O'Neill. The fundamental theorem of finite fields: a proof from first principles. *American Mathematical Monthly*, 129(3):268–275, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Melman:2022:PWZ

[315] Aaron Melman. Polynomials whose zeros are powers of a given Polynomial's zeros. *American Mathematical Monthly*, 129(3):276–280, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Krejcirik:2022:SFD

[316] David Krejcirík and Frantisek Stampach. A sharp form of the discrete Hardy inequality and the Keller–Pinchover–Pogorzelski Inequality. *American Mathematical Monthly*, 129(3):281–283, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stoica:2022:BCF

[317] George Stoica. Bounded convex functions on $\mathbf{R}$ — an extension. *American Mathematical Monthly*, 129(3):284, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSc

[318] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 129(3):285–294, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dumbaugh:2022:TLM

[319] Della Dumbaugh and Colin Fenster. Transforming literature into meaningful experiences in mathematics. *American Mathematical Monthly*, 129 (3):295–300, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Iwama:2022:BH

[320] Kazuo Iwama and Mike Paterson. Bounded Hanoi. *American Mathematical Monthly*, 129(4):303–319, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dilcher:2022:PCN

[321] Karl Dilcher and Kurt Girstmair. The powers of certain number-theoretic matrices. *American Mathematical Monthly*, 129(4):320–335, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dukes:2022:NCC

[322] Peter J. Dukes and Joanna Niezen. Number cubes with consecutive line sums. *American Mathematical Monthly*, 129(4):336–343, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Buhovsky:2022:FQT

[323] Lev Buhovsky. On Fabry's quotient theorem. *American Mathematical Monthly*, 129(4):344–351, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Brandenberg:2022:RSC

[324] René Brandenberg, Katherina von Dichter, and Bernardo González Merino. Relating symmetrizations of convex bodies: Once more the Golden ratio. *American Mathematical Monthly*, 129(4):352–362, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Mercer:2022:JIS

[325] A. McD. Mercer and Peter R. Mercer. Jordan's Inequality — as sharp as you please. *American Mathematical Monthly*, 129(4):363, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Grinberg:2022:GPR

[326] Eric L. Grinberg. A gauche perspective on row reduced echelon form and its uniqueness. *American Mathematical Monthly*, 129(4):364–373, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:YAMd

[327] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(4):373, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chin:2022:SEP

[328] Calvin Wooyoung Chin. A short and elementary proof of the Central Limit Theorem by individual swapping. *American Mathematical Monthly*, 129 (4):374–380, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Plaza:2022:SAG

[329] Submitted by Ángel Plaza. Sum of an alternating geometric series via self-similarity. *American Mathematical Monthly*, 129(4):380, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sokal:2022:EPT

[330] Alan D. Sokal. An elementary proof of Takagi's theorem on the differential composition of polynomials. *American Mathematical Monthly*, 129(4): 381–384, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Farhadian:2022:GEL

[331] Reza Farhadian. A generalization of Euler's limit. *American Mathematical Monthly*, 129(4):384, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSd

[332] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 129(4):385–394, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Torres:2022:BRB

[333] Marcella Torres. Book review: *Biology in Time and Space: a Partial Differential Equation Modeling Approach*. James Keener, American Mathematical Society, 2021. 308 pp., ISBN 978-1-4704-5428-9, \$99.00. *American Mathematical Monthly*, 129(4):395–400, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Segal-Halevi:2022:GRH

[334] Erel Segal-Halevi. Generalized rental harmony. *American Mathematical Monthly*, 129(5):403–414, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2022:YAM

[335] Anonymous. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(5):414, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Patchell:2022:MNA

[336] Gregory Patchell and Sam Spiro. The maximum number of appearances of a word in a grid. *American Mathematical Monthly*, 129(5):415–434, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Korf:2022:JCD

[337] Richard E. Korf. A jeep crossing a desert of unknown width. *American Mathematical Monthly*, 129(5):435–444, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Berele:2022:PPC

[338] Allan Berele and Stefan Catoiu. The pentagonal pizza conjecture. *American Mathematical Monthly*, 129(5):445–453, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Higham:2022:OFW

[339] Nicholas J. Higham and Matthew C. Lettington. Optimizing and factorizing the Wilson matrix. *American Mathematical Monthly*, 129(5):454–465, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ciaurri:2022:EPG

[340] Óscar Ciaurri. An "Esoteric" proof of Gelin–Cesàro identity. *American Mathematical Monthly*, 129(5):465, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chebolu:2022:GBC

[341] Sunil K. Chebolu and Keir Lockridge. Gaussian binomial coefficients in group theory, field theory, and topology. *American Mathematical Monthly*, 129(5):466–473, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:SGT

[342] Vadim Ponomarenko. Sums of generalized tetrahedral numbers. *American Mathematical Monthly*, 129(5):474, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Petrunin:2022:MPF

[343] Anton Petrunin, Sergio Zamora Barrera, and with artwork by Ana Cristina Chávez Cáliz. Moon in a puddle and the four-vertex theorem. *American Mathematical Monthly*, 129(5):475–479, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Fraser:2022:PED

[344] Jonathan M. Fraser. The Poincaré exponent and the dimensions of Kleinian limit sets. *American Mathematical Monthly*, 129(5):480–484, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dursun:2022:GRI

[345] Submitted by Ali Dursun. Generalized repeated integration by parts. *American Mathematical Monthly*, 129(5):485, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSe

[346] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 129(5):486–495, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Haensch:2022:BRR

[347] Reviewed by Anna Haensch. Book review: *Data Feminism*. By Catherine D'Ignazio and Lauren F. Klein, MIT Press, Cambridge, MA, 2020. 328 pp., ISBN 978-0-262-04400-4, $29.95. *American Mathematical Monthly*, 129(5):496–500, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Calkin:2022:FE

[348] Neil J. Calkin, Eunice Y. S. Chan, Robert M. Corless, David J. Jeffrey, and Piers W. Lawrence. A fractal eigenvector. *American Mathematical Monthly*, 129(6):503–523, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:YAMe

[349] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(6):523, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Young:2022:MLL

[350] Paul Thomas Young. From Madhava–Leibniz to Lehmer's limit. *American Mathematical Monthly*, 129(6):524–538, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ramesh:2022:PPR

[351] V. P. Ramesh and M. Makeshwari. A prime primitive root p of $2p + 1$ is a Sophie Germain prime. *American Mathematical Monthly*, 129(6):538, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rossi:2022:NSB

[352] Lucía Rossi and Jörg M. Thuswaldner. A number system with base $-3/2$. *American Mathematical Monthly*, 129(6):539–553, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tupan:2022:PCP

[353] Alexandru Tupan. Pentagram configurations for pentagons and hexagons. *American Mathematical Monthly*, 129(6):554–565, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Berger:2022:ACP

[354] Marc Berger and Peter Winkler. An ancient combinatorial problem. *American Mathematical Monthly*, 129(6):566–575, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:FPI

[355] Vadim Ponomarenko. Factorization of perplex integers. *American Mathematical Monthly*, 129(6):576–581, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Jameson:2022:EUH

[356] G. J. O. Jameson. An equality underlying Hardy's Inequality. *American Mathematical Monthly*, 129(6):582–586, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSf

[357] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence

Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 129(6):587–596, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Buckmire:2022:SHG

[358] Ron Buckmire. Shape: The hidden geometry of information, biology, strategy, democracy, and everything else. *American Mathematical Monthly*, 129(6):597–600, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Berzsenyi:2022:YGG

[359] George Berzsenyi, Tevian Dray, Frank Farris, John Harris, Diane Lussier, Nancy Ann Neudauer, Amy Shell-Gellasch, and Derek Smith. Yueh-Gin Gung and Dr. Charles Y. Hu Award for 2022 to Barbara Faires for Distinguished Service to Mathematics. *American Mathematical Monthly*, 129(7): 603–606, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Diaconis:2022:GAG

[360] Persi Diaconis, Ron Graham, and Sam Spiro. Guessing about guessing: Practical strategies for card guessing with feedback. *American Mathematical Monthly*, 129(7):607–622, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2022:FS

[361] Anonymous. Faculty seminar. *American Mathematical Monthly*, 129(7): 622, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Beeson:2022:EAC

[362] Michael Beeson. Euclid after computer proof-checking. *American Mathematical Monthly*, 129(7):623–646, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ciesielski:2022:CMA

[363] Krzysztof Chris Ciesielski. Continuous maps admitting no tangent lines: a centennial of Besicovitch functions. *American Mathematical Monthly*, 129(7):647–659, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cohen:2022:TTC

[364] Jonathan Cohen and Alan Roche. A tale of two cyclicities: Counting in finite cyclic groups and finite fields. *American Mathematical Monthly*, 129

(7):660–676, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:SGO

[365] Vadim Ponomarenko. Sums of generalized octahedral numbers. *American Mathematical Monthly*, 129(7):677, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Zhao:2022:EPR

[366] Yufei Zhao. Exploring a planet, revisited. *American Mathematical Monthly*, 129(7):678–680, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2022:PRH

[367] Anonymous. The Paul R. Halmos–Lester R. Ford Awards for 2021. *American Mathematical Monthly*, 129(7):680, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Fontana:2022:NSA

[368] Luigi Fontana and Enrico Laeng. A nonzero sequence all of whose discrete moments are equal to zero. *American Mathematical Monthly*, 129(7): 681–684, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSg

[369] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 129(7):685–694, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Taylor:2022:BRR

[370] Krystal Taylor. Book review: *The Finite Field Distance Problem*. By David Covert, MAA Press, Washington DC, 2021. 181 pp., ISBN 978-1-4704-6031-0, $65.00. *American Mathematical Monthly*, 129(7):695–700, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:YAMf

[371] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(7):700, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:ESW

[372] Daniel H. Ullman and Paul Zeitz. The Eighty-Second William Lowell Putnam Mathematical Competition. *American Mathematical Monthly*, 129(8):703–716, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cohen:2022:WFR

[373] Jonathan Cohen and Alan Roche. Which finite rings have the most or fewest units? *American Mathematical Monthly*, 129(8):717–733, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

David:2022:BCF

[374] Lorenzo David. The binomial coefficient as an (in)finite sum of sinc functions. *American Mathematical Monthly*, 129(8):734–742, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:YAMg

[375] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(8):742, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Villarino:2022:LSM

[376] Mark B. Villarino. Legendre's singular modulus. *American Mathematical Monthly*, 129(8):743–761, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Demers:2022:YPW

[377] Simon Demers. You probably won't believe it, but $3(1 + \phi - \phi^{-1}) = 3!$. *American Mathematical Monthly*, 129(8):762, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Deka:2022:CCS

[378] Konrad Deka and Marin Varivoda. Convexity of Chebyshev sets revisited. *American Mathematical Monthly*, 129(8):763–774, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Park:2022:EDF

[379] Bryan Park. An elementary derivation of finite cotangent sums. *American Mathematical Monthly*, 129(8):775–780, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rosen:2022:HTH

[380] Julian Rosen. How to tee a hyperplane. *American Mathematical Monthly*, 129(8):781–784, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

deCamargo:2022:SPV

[381] André Pierro de Camargo. A short proof for the volume of square pyramids. *American Mathematical Monthly*, 129(8):784, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSh

[382] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Hongwei Chen, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 129(8):785–794, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Shonkwiler:2022:BRV

[383] Clayton Shonkwiler. Book review: *Visual Differential Geometry and Forms: a Mathematical Drama in Five Acts* By Tristan Needham, Princeton University Press, Princeton, NJ, 2021. 584 pp., ISBN 978-0-691-20370-6, $45.00. *American Mathematical Monthly*, 129(8):795–800, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stillwell:2022:MFA

[384] John Stillwell. My friend Abe Shenitzer. *American Mathematical Monthly*, 129(9):803–804, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dougherty-Bliss:2022:IRZ

[385] Robert Dougherty-Bliss. Integral recurrences from A to Z. *American Mathematical Monthly*, 129(9):805–815, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chen:2022:FCS

[386] Tongtong Chen and Edward Scheinerman. Finding a compositional square root of sine. *American Mathematical Monthly*, 129(9):816–830, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Singh:2022:BDH

[387] Satvik Singh. A brief discourse on Hausdorff dimension and self-similarity. *American Mathematical Monthly*, 129(9):831–845, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rowland:2022:LTM

[388] Eric Rowland. Lucas' Theorem modulo p^2. *American Mathematical Monthly*, 129(9):846–855, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponce:2022:RES

[389] Mario Ponce. Reflections on equidistant sets. *American Mathematical Monthly*, 129(9):856–864, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Huynh:2022:SRT

[390] Edward Huynh. A second Raabe's Test and other series tests. *American Mathematical Monthly*, 129(9):865–875, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tupan:2022:CDC

[391] Alexandru Tupan. On the complex Descartes circle theorem. *American Mathematical Monthly*, 129(9):876–879, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:YAMh

[392] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(9):879, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Pinelis:2022:LDS

[393] Iosif Pinelis. Large deviations of sums mainly due to just one summand. *American Mathematical Monthly*, 129(9):880–884, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hilmer:2022:OIP

[394] Submitted by Kieran Hilmer, Ron Lycan, and Vadim Ponomarenko. Odds inversion problem with replacement. *American Mathematical Monthly*, 129(9):885, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSi

[395] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Hongwei Chen, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 129(9):886–895, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Glass:2022:R

[396] Darren Glass. Reviews. *American Mathematical Monthly*, 129(9):896–900, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rice:2022:RSC

[397] Alex Rice. Reciprocal sums and counting functions. *American Mathematical Monthly*, 129(10):903–912, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Farhadian:2022:MCS

[398] Reza Farhadian. More on the Cauchy–Schwarz inequality. *American Mathematical Monthly*, 129(10):912, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Geller:2022:TID

[399] William Geller and Michał Misiurewicz. Travel in an infinite desert. *American Mathematical Monthly*, 129(10):913–923, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Farhadian:2022:SUE

[400] Reza Farhadian and Vadim Ponomarenko. Summation using an expected value identity. *American Mathematical Monthly*, 129(10):923, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tyler:2022:FIP

[401] Helene R. Tyler. A friendly introduction to path algebras and quiver representations. *American Mathematical Monthly*, 129(10):924–932, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sahoo:2022:EVP

[402] Nikhil Henry Bukowski Sahoo. Extremal values of pi. *American Mathematical Monthly*, 129(10):933–951, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sharma:2022:RPC

[403] Rajesh Sharma and Manish Pal. Regular polygons and central moments. *American Mathematical Monthly*, 129(10):951, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cocke:2022:CNS

[404] William Cocke, I. M. Isaacs, and Ryan McCulloch. Chains of normalizers of subnormal subgroups. *American Mathematical Monthly*, 129(10): 952–961, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Marcus:2022:DIP

[405] Adam W. Marcus. A determinantal identity for the permanent of a rank 2 matrix. *American Mathematical Monthly*, 129(10):962–971, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ramesh:2022:LPR

[406] V. P. Ramesh and M. Makeshwari. Least primitive root of any safe prime is prime. *American Mathematical Monthly*, 129(10):971, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Curien:2022:YAP

[407] Nicolas Curien. Yet another proof of the strong law of large numbers. *American Mathematical Monthly*, 129(10):972–974, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tonelli-Cueto:2022:GSG

[408] Josué Tonelli-Cueto. A geometric summation of the geometric series. *American Mathematical Monthly*, 129(10):974, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tran:2022:NLT

[409] Quang Hung Tran. A Napoleon-like theorem for quadrilaterals. *American Mathematical Monthly*, 129(10):975–978, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2022:YAMi

[410] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 129(10):978, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Barthel:2022:CPA

[411] Jim Barthel and Volker Müller. A conjecture on primes in arithmetic progressions and geometric intervals. *American Mathematical Monthly*, 129 (10):979–983, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hasselblatt:2022:LED

[412] Boris Hasselblatt. Laws of exponents by differentiation. *American Mathematical Monthly*, 129(10):984, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2022:PSj

[413] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Hongwei Chen, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 129(10):985–994, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Price:2022:BRE

[414] Candice Price. Book review: *Encyclopedia of Knot Theory*. Edited by Colin Adams, Erica Flapan, Allison Henrich, Louis H. Kauffman, Lewis D. Ludwig, & Sam Nelson. Chapman and Hall/CRC Press, Boca Raton, FL, 2020. 953 pp., ISBN 978-1-138-29784-5, $250. *American Mathematical Monthly*, 129(10):995–999, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Editor:2022:EE

[415] Della Dumbaugh Editor. Editor's endnotes. *American Mathematical Monthly*, 129(10):1000, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2022:MR

[416] Anonymous. Monthly referees for 2022. *American Mathematical Monthly*, 129(10):i–iii, 2022. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dumbaugh:2023:LEP

[417] Della Dumbaugh. Letter from the Editor: The power of book reviews. *American Mathematical Monthly*, 130(1):3–4, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Frick:2023:WCY

[418] Florian Frick and Fei Peng. What can you draw? *American Mathematical Monthly*, 130(1):5–19, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2023:YAMa

[419] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 130(1):19, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Diaz:2023:ACL

[420] Maiyu Diaz. Asymptotics on a class of Legendre formulas. *American Mathematical Monthly*, 130(1):20–34, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Longoria:2023:FIC

[421] Iris Stephanie Arenas Longoria and James A. Mingo. Freely independent coin tosses, standard Young tableaux, and the Kesten–McKay Law. *American Mathematical Monthly*, 130(1):35–48, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Choi:2023:IAV

[422] Hyounggyu Choi. Invariance of the area and volume of cycloid surfaces and trochoid surfaces. *American Mathematical Monthly*, 130(1):49–62, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Farhadian:2023:RJI

[423] Reza Farhadian. Remark on Jensen's inequality. *American Mathematical Monthly*, 130(1):62, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Veerman:2023:RSF

[424] J. J. P. Veerman, L. S. Fox, and P. J. Oberly. A remarkable summation formula, lattice tilings, and fluctuations. *American Mathematical Monthly*, 130(1):63–75, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Carrillo:2023:PBQ

[425] Sergio A. Carrillo. Pythagorean boxes and quotients of Gaussian integers. *American Mathematical Monthly*, 130(1):76–82, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

He:2023:FVW

[426] B. He, Y. L. Mao, and A. Togbé. A Fibonacci version of Wolstenholme's harmonic series congruence. *American Mathematical Monthly*, 130(1): 83–85, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSa

[427] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Hongwei Chen, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 130(1):86–95, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Salerno:2023:R

[428] Adriana Salerno. Reviews. *American Mathematical Monthly*, 130(1):96–100, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Selg:2023:GSD

[429] Matti Selg. Galileo's swiftest descent problem revisited: Complete analytic solution. *American Mathematical Monthly*, 130(2):103–113, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Goral:2023:GTT

[430] Haydar Göral, Hikmet Burak Özcan, and Doga Can Sertbas. The Green–Tao Theorem and the infinitude of primes in domains. *American Mathematical Monthly*, 130(2):114–125, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Vigna:2023:BPF

[431] Alessio Del Vigna. The Basel Problem and the fundamental theorem of calculus. *American Mathematical Monthly*, 130(2):126, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Gingell:2023:RWD

[432] Kate Gingell and Franklin Mendivil. Random walks, directed cycles, and Markov chains. *American Mathematical Monthly*, 130(2):127–144, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Schlesinger:2023:MTR

[433] Michail Schlesinger and Valerii Krygin. Minimax theorem revisited. *American Mathematical Monthly*, 130(2):145–157, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chahal:2023:WDN

[434] Jasbir S. Chahal. What do networks and elliptic curves have in common? *American Mathematical Monthly*, 130(2):158–175, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sadhukhan:2023:CPE

[435] Submitted by Arpan Sadhukhan. A combinatorial proof of the existence of dense subsets in **R** without the "Steinhaus" like property. *American Mathematical Monthly*, 130(2):175, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cermak:2023:NFP

[436] Jan Cermák and Lucie Fedorková. On a nearly forgotten polynomial result by P. Bohl. *American Mathematical Monthly*, 130(2):176–181, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2023:YAMb

[437] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 130(2):181, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Teixeira:2023:TPS

[438] Katiuscia C. B. Teixeira. On the topology of punctured spaces. *American Mathematical Monthly*, 130(2):182–185, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stoica:2023:SFS

[439] George Stoica and Yousef Wardat. A special form of slower divergent series. *American Mathematical Monthly*, 130(2):186, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSb

[440] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Hongwei Chen, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and

solutions. *American Mathematical Monthly*, 130(2):187–196, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Honner:2023:BRM

[441] Patrick Honner. Book review: *Math Games With Bad Drawings: 75 Simple, Challenging, Go-Anywhere Games-And Why They Matter*. By Ben Orlin, Black Dog & Leventhal, 2022. 368 pp., ISBN 978-0-7624-9986-1, $28.00. *American Mathematical Monthly*, 130(2):197–200, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Segal-Halevi:2023:CCF

[442] Erel Segal-Halevi and Warut Suksompong. Cutting a cake fairly for groups revisited. *American Mathematical Monthly*, 130(3):203–213, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2023:YAMc

[443] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 130(3):213, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bruckner:2023:COV

[444] Andrew M. Bruckner, Judith B. Bruckner, and Brian S. Thomson. Can one visualize a continuous nowhere differentiable function? *American Mathematical Monthly*, 130(3):214–221, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Lopez:2023:WSC

[445] Rafael López. What is the shape of a cupola? *American Mathematical Monthly*, 130(3):222–238, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Berger:2023:BIS

[446] Arno Berger. A beautiful inequality by Saint-Venant and Pólya revisited. *American Mathematical Monthly*, 130(3):239–250, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hicks:2023:FIA

[447] Elim Hicks, R. Andrew Hicks, Ron Perline, and Sarah G. Rody. Frobenius integrability, automotive blind spots, non-reversing mirrors, and panoramic mirrors. *American Mathematical Monthly*, 130(3):251–266, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Nica:2023:NAV

[448] Bogdan Nica and Dacota Sprague. Non-Archimedean views on Gershgorin's Theorem and diagonal dominance. *American Mathematical Monthly*, 130(3):267–275, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Jameson:2023:SIP

[449] G. J. O. Jameson. Some inequalities for power means; a problem from "The Logarithmic Mean Revisited". *American Mathematical Monthly*, 130 (3):276–278, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dasgupta:2023:STG

[450] Aneesh Dasgupta and Roland Roeder. Symmetries of the three-gap theorem. *American Mathematical Monthly*, 130(3):279–284, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSc

[451] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Hongwei Chen, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 130(3):285–294, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rosenhouse:2023:R

[452] Jason Rosenhouse. Reviews. *American Mathematical Monthly*, 130(3): 295–300, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Aldous:2023:GUU

[453] David J. Aldous and F. Thomas Bruss. Gambling under unknown probabilities as proxy for real world decisions under uncertainty. *American Mathematical Monthly*, 130(4):303–320, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Farhadian:2023:RCS

[454] Reza Farhadian. Remark on Cauchy–Schwarz inequality for differences. *American Mathematical Monthly*, 130(4):320, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Yekutieli:2023:PTC

[455] Amnon Yekutieli. Pythagorean triples, complex numbers, Abelian groups and prime numbers. *American Mathematical Monthly*, 130(4):321–334, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Warren:2023:NPN

[456] Benjamin Lee Warren. A new polygonal number theorem. *American Mathematical Monthly*, 130(4):334, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kolay:2023:KCC

[457] Sudipta Kolay. Knot colorings: Coloring and goeritz matrices. *American Mathematical Monthly*, 130(4):335–354, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Griffin:2023:AJS

[458] Michael J. Griffin, Ken Ono, Neelam Saikia, and Wei-Lun Tsai. AGM and jellyfish swarms of elliptic curves. *American Mathematical Monthly*, 130(4):355–369, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Solan:2023:BTT

[459] Eilon Solan and Omri N. Solan. Browder's Theorem through Brouwer's Fixed Point Theorem. *American Mathematical Monthly*, 130(4):370–374, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Jiang:2023:NTM

[460] Qiaofen Jiang and Hongwei Lou. A new theorem for mixed partial derivatives. *American Mathematical Monthly*, 130(4):375–378, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Troubetzkoy:2023:VVG

[461] Serge Troubetzkoy. Vertex to vertex geodesics on platonic solids. *American Mathematical Monthly*, 130(4):379–382, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Aebi:2023:RPQ

[462] Christian Aebi. Regular patterns of quadratic residues. *American Mathematical Monthly*, 130(4):383–384, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Weintraub:2023:OAV

[463] Steven H. Weintraub. An observation on average velocity. *American Mathematical Monthly*, 130(4):384, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSd

[464] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Hongwei Chen, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 130(4):385–394, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sullivan:2023:R

[465] Brendan W. Sullivan. Reviews. *American Mathematical Monthly*, 130(4): 395–400, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Simon:2023:SUP

[466] Burton Simon. The simplest unlimited-player game of skill. *American Mathematical Monthly*, 130(5):403–420, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Zhou:2023:SHT

[467] Li Zhou. Six houses and three utilities on a coffee mug. *American Mathematical Monthly*, 130(5):420, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Purcell:2023:USS

[468] Michael Purcell. Using a SAT solver to find interesting sets of nonstandard dice. *American Mathematical Monthly*, 130(5):421–436, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Balogh:2023:UBS

[469] József Balogh, Zoltán Füredi, and Souktik Roy. An upper bound on the size of Sidon sets. *American Mathematical Monthly*, 130(5):437–445, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2023:YAMd

[470] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 130(5):445, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Avigad:2023:IA

[471] Jeremy Avigad, Seulkee Baek, Alexander Bentkamp, Marijn Heule, and Wojciech Nawrocki. An impossible asylum. *American Mathematical Monthly*, 130(5):446–453, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bor:2023:CCR

[472] Gil Bor and Serge Tabachnikov. On cusps of caustics by reflection: Billiard variations on the four vertex theorem and on Jacobi's last geometric statement. *American Mathematical Monthly*, 130(5):454–467, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chu:2023:TSD

[473] Wenchang Chu. Three symmetric double series by telescoping. *American Mathematical Monthly*, 130(5):468–477, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Gorni:2023:GPH

[474] Gianluca Gorni and Gaetano Zampieri. The geodesics for Poincaré's halfplane: a nonstandard derivation. *American Mathematical Monthly*, 130 (5):478–481, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Wooley:2023:FAG

[475] Trevor D. Wooley. Finite Abelian groups via congruences. *American Mathematical Monthly*, 130(5):482–484, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSe

[476] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, Douglas B. West, with the collaboration of Paul Bracken, Ezra A. Brown, Hongwei Chen, Zachary Franco, George Gilbert, László Lipták, Rick Luttmann, Hosam Mahmoud, Frank B. Miles, Lenhard Ng, Rajesh Pereira, Kenneth Stolarsky, Richard Stong, Lawrence Washington, and Li Zhou. Problems and solutions. *American Mathematical Monthly*, 130(5):485–494, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Austin:2023:MCW

[477] David Austin. The mathematical community working to create better (and free!) textbooks. *American Mathematical Monthly*, 130(5):495–500, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anshelevich:2023:CPE

[478] Michael Anshelevich and Austin Pritchett. The concentration of the product of exponentials around the exponential of the sum. *American Mathematical Monthly*, 130(6):503–514, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Scheinerman:2023:TRS

[479] Ed Scheinerman. A third real solution to $x = x^{-1}$, not really. *American Mathematical Monthly*, 130(6):514, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Crisp:2023:IRR

[480] Tyrone Crisp. If $R^m \approx R^n$ must $m = n$? *American Mathematical Monthly*, 130(6):515–521, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Warren:2023:ISF

[481] Benjamin Lee Warren. Integers as sums of four tetrahedral numbers and eight pentatope numbers in one identity. *American Mathematical Monthly*, 130(6):522, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Villarino:2023:LTQ

[482] Mark B. Villarino. Legendre–Teege quadratic reciprocity. *American Mathematical Monthly*, 130(6):523–540, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Farhadian:2023:WIV

[483] Reza Farhadian and Vadim Ponomarenko. Wald's identity vs. tail sum formula. *American Mathematical Monthly*, 130(6):540, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

DeLoera:2023:MBO

[484] Jesús A. De Loera, Edgar Jaramillo-Rodriguez, Deborah Oliveros, and Antonio J. Torres. A model for birdwatching and other chronological sampling activities. *American Mathematical Monthly*, 130(6):541–558, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Powers:2023:PFO

[485] Brian R. Powers. N-player final-offer arbitration: Harmonic numbers in equilibrium. *American Mathematical Monthly*, 130(6):559–576, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Fang:2023:GIN

[486] Guojun Fang. Ghostly irrational numbers. *American Mathematical Monthly*, 130(6):576, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Beck:2023:NED

[487] Dominik Beck. New elementary derivation of Fresnel integrals. *American Mathematical Monthly*, 130(6):577–582, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2023:YAMe

[488] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 130(6):582, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ding:2023:SAM

[489] Yuchen Ding and Guang-Liang Zhou. Some applications of the Maynard–Tao Theorem. *American Mathematical Monthly*, 130(6):583–586, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSf

[490] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 130(6):587–596, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Karaali:2023:R

[491] Gizem Karaali. Reviews. *American Mathematical Monthly*, 130(6):597–600, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Coufal:2023:YGG

[492] Vesta Coufal, Suzanne Dorée, Tevian Dray, Frank Farris, Amy Shell-Gellasch, and Derek Smith. Yueh-Gin Gung and Dr. Charles Y. Hu Award for 2023 to Victor J. Katz for Distinguished Service to Mathematics. *American Mathematical Monthly*, 130(7):603–605, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Blanchard:2023:NMD

[493] Jeffrey D. Blanchard and Marc Chamberland. Newton's method without division. *American Mathematical Monthly*, 130(7):606–617, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2023:YAMf

[494] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 130(7):617, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Aguillon:2023:PFT

[495] Yasmin Aguillon, Dylan Alvarenga, Pamela E. Harris, Surya Kotapati, J. Carlos Martínez Mori, Casandra D. Monroe, Zia Saylor, Camelle Tieu, and Dwight Anderson Williams Ii. On parking functions and the Tower of Hanoi. *American Mathematical Monthly*, 130(7):618–624, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Nicolaescu:2023:CZR

[496] Liviu I. Nicolaescu. Counting zeros of random functions. *American Mathematical Monthly*, 130(7):625–646, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2023:PRH

[497] Anonymous. The Paul R. Halmos–Lester R. Ford Awards for 2022. *American Mathematical Monthly*, 130(7):646, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Matis:2023:DIA

[498] Anton Matis and Antonín Slavík. Duelling idiots and Abel sums. *American Mathematical Monthly*, 130(7):647–655, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

delaCerda:2023:PAC

[499] Sofia de la Cerda. Polynomial approximations to continuous functions. *American Mathematical Monthly*, 130(7):655, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Auel:2023:SDT

[500] Asher Auel, Owen Biesel, and John Voight. Stickelberger's discriminant theorem for algebras. *American Mathematical Monthly*, 130(7):656–670, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Krupowies:2023:CCC

[501] Adam Krupowies and Franciszek Prus-Wiśniowski. The character of convergence of the Cauchy product. *American Mathematical Monthly*, 130(7): 671–677, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bhattacharya:2023:PPP

[502] Soumya Bhattacharya. The probabilistic pigeonhole principle. *American Mathematical Monthly*, 130(7):678, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSg

[503] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 130(7):679–688, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Drucker:2023:R

[504] Thomas Drucker. Reviews. *American Mathematical Monthly*, 130(7): 689–692, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:ETW

[505] Daniel H. Ullman and Paul Zeitz. The Eighty-Third William Lowell Putnam Mathematical Competition. *American Mathematical Monthly*, 130 (8):695–707, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tuenter:2023:SCA

[506] Hans J. H. Tuenter. In search of Comrade Agronomof: Some Tribonacci history. *American Mathematical Monthly*, 130(8):708–719, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Moshkovitz:2023:SEF

[507] Guy Moshkovitz and Jeffery Yu. Sharp effective finite-field Nullstellensatz. *American Mathematical Monthly*, 130(8):720–727, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Daners:2023:FTA

[508] Daniel Daners and Laurentiu Paunescu. The fundamental theorem of algebra via real polynomials. *American Mathematical Monthly*, 130(8):727, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Acton:2023:MMM

[509] Reed Acton, T. Kyle Petersen, Blake Shirman, and Daniel Toal. A more malicious Maitre d'. *American Mathematical Monthly*, 130(8):728–745, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Laudano:2023:BCE

[510] Francesco Laudano. $a^2 = b^2 + cd$, an extended Pythagorean formula. *American Mathematical Monthly*, 130(8):746, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Banaji:2023:MSW

[511] Amlan Banaji. Metric spaces where geodesics are never unique. *American Mathematical Monthly*, 130(8):747–754, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Knox:2023:BCQ

[512] Katherine Knox. Billiard circuits in quadrilaterals. *American Mathematical Monthly*, 130(8):755–759, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cocke:2023:I

[513] W. Cocke. i nd uct ion! *American Mathematical Monthly*, 130(8):759, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Williams:2023:APT

[514] Kenneth S. Williams. An arithmetic proof of a theorem of Chan, Long, and Yang. *American Mathematical Monthly*, 130(8):760–763, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chakraborty:2023:SGS

[515] Bikash Chakraborty. Sum of a geometric series via the integral. *American Mathematical Monthly*, 130(8):764, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSh

[516] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 130(8):765–778, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hopkins:2023:R

[517] Brian Hopkins. Reviews. *American Mathematical Monthly*, 130(8):779–784, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Haunsperger:2023:CBM

[518] Deanna B. Haunsperger. Community and belonging in mathematics*. *American Mathematical Monthly*, 130(9):787–794, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Domokos:2023:CSD

[519] Gábor Domokos and Flórián Kovács. Conway's spiral and a discrete Gömböc with 21 point masses. *American Mathematical Monthly*, 130(9): 795–807, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hyman:2023:NPI

[520] Ross Hyman and Nicolaus Tideman. A new perspective on impartial and unbiased apportionment. *American Mathematical Monthly*, 130(9): 808–822, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Moshaiov:2023:DMC

[521] Tom Moshaiov. The determinant mod p of a circulant matrix of order p^m. *American Mathematical Monthly*, 130(9):823, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bacher:2023:QPF

[522] Roland Bacher. A quixotic proof of Fermat's two squares theorem for prime numbers. *American Mathematical Monthly*, 130(9):824–836, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kalman:2023:TTT

[523] Dan Kalman and Robert Mena. A tale of two by two matrices. *American Mathematical Monthly*, 130(9):837–854, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Renteln:2023:CPS

[524] Paul Renteln. A combinatorial proof of a symmetric group character involution. *American Mathematical Monthly*, 130(9):855–858, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2023:YAMg

[525] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 130(9):858, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Liu:2023:GNS

[526] Shibo Liu. Gagliardo–Nirenberg–Sobolev inequality: an induction proof. *American Mathematical Monthly*, 130(9):859–861, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSi

[527] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 130(9):862–872, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kennedy:2023:R

[528] Stephen Kennedy. Reviews. *American Mathematical Monthly*, 130(9): 873–876, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Halbeisen:2023:HTM

[529] Lorenz Halbeisen, Norbert Hungerbühler, and Vanessa Loureiro. The hidden twin of Morley's five circles theorem. *American Mathematical Monthly*, 130(10):879–891, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Vatter:2023:EPE

[530] Vincent Vatter. On Erdős's proof of the existence of cages. *American Mathematical Monthly*, 130(10):892, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Baeth:2023:IBP

[531] Nicholas R. Baeth and Scott T. Chapman. The importance of being prime, a nontrivial generalization for nonunique factorizations. *American Mathematical Monthly*, 130(10):893–914, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Puljiz:2023:PDC

[532] Mate Puljiz, Stjepan Sebek, and Josip Zubrinić. Packing density of combinatorial settlement planning models. *American Mathematical Monthly*,

130(10):915–928, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ramesh:2023:IBP

[533] V. P. Ramesh and R. Gowtham. The inverse of a bad primitive root is not bad. *American Mathematical Monthly*, 130(10):928, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Calvis:2023:OPC

[534] David Calvis. Odd-period cycles of the logistic map. *American Mathematical Monthly*, 130(10):929–943, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Surya:2023:LIF

[535] Erlang Surya and Lutz Warnke. Lagrange inversion formula by induction. *American Mathematical Monthly*, 130(10):944–948, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Naghipour:2023:NMP

[536] Ali Reza Naghipour. A note on minimal prime submodules. *American Mathematical Monthly*, 130(10):949–951, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2023:YAMh

[537] Vadim Ponomarenko (Edited by). 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 130(10): 951, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2023:PSj

[538] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 130(10):952–962, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Richardson:2023:R

[539] Pamela Richardson. Reviews. *American Mathematical Monthly*, 130(10): 963–967, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2023:EE

[540] Anonymous. Editor's endnotes. *American Mathematical Monthly*, 130 (10):968, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2023:MR

[541] Anonymous. Monthly referees for 2023. *American Mathematical Monthly*, 130(10):i–ii, 2023. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sun:2024:CRC

[542] Timothy Sun. Commutators in the Rubik's cube group. *American Mathematical Monthly*, 131(1):3–19, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Greene:2024:FRS

[543] John Greene and Weizhi Jing. The factor ring structure of quadratic principal ideal domains. *American Mathematical Monthly*, 131(1):20–29, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Banchoff:2024:DTE

[544] Thomas F. Banchoff and Felix Günther. The discrete theorema egregium. *American Mathematical Monthly*, 131(1):30–47, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Schinazi:2024:CEU

[545] Rinaldo B. Schinazi. Collective evolution under catastrophes. *American Mathematical Monthly*, 131(1):48–59, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2024:YAMa

[546] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 131(1):59, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Tomon:2024:TMP

[547] István Tomon. Tiling with monotone polyominos. *American Mathematical Monthly*, 131(1):60–65, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Pasten:2024:DIP

[548] Hector Pasten. A derivation of the infinitude of primes. *American Mathematical Monthly*, 131(1):66–73, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kager:2024:SSP

[549] Wouter Kager. A short simple proof of closedness of convex cones and Farkas' lemma. *American Mathematical Monthly*, 131(1):74–75, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2024:PSa

[550] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 131(1):76–86, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Malmskog:2024:R

[551] Beth Malmskog. Reviews. *American Mathematical Monthly*, 131(1):87–92, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Johnston:2024:DMP

[552] Daniel Johnston, P. Mark Kayll, and Cory Palmer. Deranged matchings: Proofs and conjectures. *American Mathematical Monthly*, 131(2):95–111, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Traves:2024:TPC

[553] Will Traves and David Wehlau. Ten points on a cubic. *American Mathematical Monthly*, 131(2):112–130, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Mortini:2024:YAI

[554] Raymond Mortini. Yet another integral representation of Catalan's constant. *American Mathematical Monthly*, 131(2):130, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Lebensztayn:2024:RWG

[555] Elcio Lebensztayn and Vicenzo Pereira. On random walks with geometric lifetimes. *American Mathematical Monthly*, 131(2):131–144, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2024:YAMb

[556] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 131(2):144, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Siegert:2024:ADM

[557] Jeremy Siegert. Abbott dimension, mathematics inspired by *Flatland*. *American Mathematical Monthly*, 131(2):145–161, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Mandelkern:2024:AT

[558] Mark Mandelkern. The altitudes of a triangle. *American Mathematical Monthly*, 131(2):162–163, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Feghali:2024:APE

[559] Carl Feghali. Another proof of Euler's circuit theorem. *American Mathematical Monthly*, 131(2):164, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Zucker:2024:ABT

[560] Marc Zucker. From Abel's binomial theorem to Cayley's tree formula. *American Mathematical Monthly*, 131(2):165–169, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ishii:2024:SCP

[561] Katsumasa Ishii. A sufficient condition for a prime to be a Sophie Germain prime. *American Mathematical Monthly*, 131(2):169, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2024:PSb

[562] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 131(2):170–180, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Piercey:2024:R

[563] Victor Piercey. Reviews. *American Mathematical Monthly*, 131(2):181–184, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Gomez:2024:FPC

[564] Mario Gómez and Facundo Mémoli. The four point condition: an elementary tropicalization of Ptolemy's inequality. *American Mathematical Monthly*, 131(3):187–203, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Pach:2024:WAG

[565] János Pach and Gábor Tardos. Where have all the grasshoppers gone? *American Mathematical Monthly*, 131(3):204–212, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ratcliffe:2024:GPP

[566] John G. Ratcliffe and Steven T. Tschantz. On a geometry problem in Plato's *Meno*. *American Mathematical Monthly*, 131(3):213–224, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Farhadian:2024:SPC

[567] Reza Farhadian and Vadim Ponomarenko. A statistical proof of Chebyshev's sum inequality. *American Mathematical Monthly*, 131(3):224, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Borgers:2024:BSB

[568] Christoph Börgers, Bruce Boghosian, Natasa Dragovic, and Anna Haensch. A blue sky bifurcation in the dynamics of political candidates. *American Mathematical Monthly*, 131(3):225–238, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Petrunin:2024:SPF

[569] Anton Petrunin and Stephan Stadler. Six proofs of the Fáry–Milnor theorem. *American Mathematical Monthly*, 131(3):239–251, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Edgar:2024:OME

[570] Tom Edgar. Ohm my: an electrifying method of summing arithmetic sequences. *American Mathematical Monthly*, 131(3):252–254, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2024:YAMc

[571] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 131(3):254, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Fredriksson:2024:ORP

[572] Albin Fredriksson. Optimizing for the Rupert property. *American Mathematical Monthly*, 131(3):255–261, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2024:PSc

[573] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 131(3):262–272, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Thompson:2024:R

[574] Lola Thompson. Reviews. *American Mathematical Monthly*, 131(3):273–276, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hammer:2024:ERI

[575] Kyle Hammer, Kevin McGown, and Skip Moses. Euclidean rings of S-integers in complex quadratic fields. *American Mathematical Monthly*, 131(4):279–293, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Macauley:2024:DQ

[576] Matthew Macauley. Dihedralizing the quaternions. *American Mathematical Monthly*, 131(4):294–308, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Teets:2024:LPJ

[577] Donald Teets. Lagrange points and the James Webb Space Telescope. *American Mathematical Monthly*, 131(4):309–318, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Perucca:2024:DGM

[578] Antonella Perucca, Tim Seuré, and Vincent Wolff. Divisibility graphs and modular multiplication tables. *American Mathematical Monthly*, 131(4): 319–334, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Hazarika:2024:SLT

[579] Nawal Kishor Hazarika and Pijush Pratim Sarmah. On some localizations and their relation to quotients. *American Mathematical Monthly*, 131(4):

335–342, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Slavik:2024:LCE

[580] Antonín Slavík and Marie Vestenická. Lucky cars: Expected values and generating functions. *American Mathematical Monthly*, 131(4):343–348, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Campbell:2024:PIF

[581] John M. Campbell. A proof of $\zeta(2) = \pi^2/6$ involving a Fourier–Legendre expansion. *American Mathematical Monthly*, 131(4):349–352, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2024:YAMd

[582] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 131(4):352, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2024:PSd

[583] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 131(4):353–363, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Gordon:2024:R

[584] Gary Gordon and Liz McMahon. Reviews. *American Mathematical Monthly*, 131(4):364–368, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bradley:2024:IUS

[585] David M. Bradley, Albert Natian, and Seán M. Stewart. Integration using Schwinger parametrization. *American Mathematical Monthly*, 131(5): 371–389, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Li:2024:PMW

[586] Renyuan Li and Shenglong Zhu. Playing mastermind with Wordle-like feedback. *American Mathematical Monthly*, 131(5):390–399, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bradshaw:2024:DIV

[587] Zachary P. Bradshaw and Christophe Vignat. Dubious identities: a visit to the Borwein zoo. *American Mathematical Monthly*, 131(5):400–416, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Harris:2024:LCQ

[588] Pamela E. Harris, Jan Kretschmann, and J. Carlos Martínez Mori. Lucky cars and the Quicksort algorithm. *American Mathematical Monthly*, 131 (5):417–423, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Filho:2024:EIC

[589] Wagner Oliveira Costa Filho. Euler's inequality for circumradius and inradius. *American Mathematical Monthly*, 131(5):424, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Gurtas:2024:NGD

[590] Yusuf Z. Gürtas. On nonnegativity of the generalized discriminants of quadratics. *American Mathematical Monthly*, 131(5):425–431, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Vatter:2024:CPP

[591] Vincent Vatter. Counting parity palindrome compositions. *American Mathematical Monthly*, 131(5):432, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Axler:2024:PCF

[592] Christian Axler. On the primorial counting function. *American Mathematical Monthly*, 131(5):433–439, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2024:YAMe

[593] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 131(5):439, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sun:2024:UPD

[594] Golden Sun and Vladyslav Yaskin. On a uniqueness problem in discrete tomography. *American Mathematical Monthly*, 131(5):440–444, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2024:PSe

[595] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 131(5):445–455, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Otero:2024:R

[596] Daniel E. Otero. Reviews. *American Mathematical Monthly*, 131(5):456–460, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rice:2024:RAJ

[597] Adrian Rice. "The riddle of the ages": James Joseph Sylvester and the transcendence of π. *American Mathematical Monthly*, 131(6):463–478, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Berele:2024:DBQ

[598] Allan Berele and Stefan Catoiu. Double balanced quadrilaterals. *American Mathematical Monthly*, 131(6):479–490, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Alekseyev:2024:EPP

[599] Max A. Alekseyev. Enumeration of payphone permutations. *American Mathematical Monthly*, 131(6):491–500, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Halbeisen:2024:WGG

[600] Lorenz Halbeisen and Norbert Hungerbühler. A worked out Galois group for the classroom. *American Mathematical Monthly*, 131(6):501–510, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Koninck:2024:TFI

[601] Jean-Marie De Koninck and William Verreault. On the tower factorization of integers. *American Mathematical Monthly*, 131(6):511–518, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Davis:2024:HCS

[602] Diana Davis and Serge Troubetzkoy. The horizontal chord set. *American Mathematical Monthly*, 131(6):519–525, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Liu:2024:SCF

[603] Jian-Guo Liu and Robert L. Pego. A simple construction of fat Cantor sets. *American Mathematical Monthly*, 131(6):525, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Aebi:2024:FYF

[604] Christian Aebi and Grant Cairns. Following in Yiu's footsteps but on the Eisenstein lattice. *American Mathematical Monthly*, 131(6):526–529, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2024:YAMf

[605] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 131(6):529, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Dubno:2024:ZCG

[606] Elias Dubno. Zaremba's conjecture for geometric sequences: an algorithm. *American Mathematical Monthly*, 131(6):530–535, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2024:PSf

[607] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 131(6):536–546, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Weir:2024:R

[608] Rachel Weir. Reviews. *American Mathematical Monthly*, 131(6):547–552, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Coufal:2024:YGG

[609] Vesta Coufal, Elizabeth Denne, Suzanne Doree, Frank A. Farris, Perla Myers, and Derek Smith. Yueh-Gin Gung and Dr. Charles Y. Hu Award for 2024 to Michael Dorff for distinguished service to mathematics. *American Mathematical Monthly*, 131(7):555–557, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Banerjee:2024:STS

[610] Ishan Banerjee and Amites Sarkar. Sums of two squares visualized. *American Mathematical Monthly*, 131(7):558–565, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2024:PRH

[611] Anonymous. The Paul R. Halmos–Lester R. Ford Awards for 2023. *American Mathematical Monthly*, 131(7):565, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Rubino:2024:DKC

[612] Nick Rubino, Maya Rebholz, and Klaus Volpert. A dynamic Kelly criterion for games with a maximum payout. *American Mathematical Monthly*, 131(7):566–580, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Sonnleitner:2024:UYB

[613] Mathias Sonnleitner. Unlocking your bike the easy way. *American Mathematical Monthly*, 131(7):581–594, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2024:YAMg

[614] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 131(7):594, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Purcell:2024:BSP

[615] Michael Purcell. Building sets of permutation-fair dice. *American Mathematical Monthly*, 131(7):595–607, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Asgarli:2024:FSH

[616] Shamil Asgarli, Michael Hartglass, Daniel Ostrov, and Byron Walden. A fair shake: How close can the sum of n-sided dice be to a uniform distribution? *American Mathematical Monthly*, 131(7):608–617, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Laudano:2024:TLE

[617] Francesco Laudano. A Thabit-like extension of the Pythagorean Theorem. *American Mathematical Monthly*, 131(7):618, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Kushelman:2024:LTC

[618] Mathew Kushelman and Peter McGrath. On Liouville's theorem for conformal maps. *American Mathematical Monthly*, 131(7):619–623, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Bougoffa:2024:GWM

[619] Lazhar Bougoffa. A generalization of Wayment's mean value theorem for integrals. *American Mathematical Monthly*, 131(7):624–626, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Pinelis:2024:EBI

[620] Iosif Pinelis. An exact bound for the inner product of vectors in C^n. *American Mathematical Monthly*, 131(7):627–628, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2024:PSg

[621] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 131(7):629–639, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Glass:2024:R

[622] Darren Glass. Reviews. *American Mathematical Monthly*, 131(7):640–644, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2024:EFW

[623] Daniel H. Ullman and Paul Zeitz. The Eighty-Fourth William Lowell Putnam Mathematical Competition. *American Mathematical Monthly*, 131(8):647–661, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Demichel:2024:WIK

[624] Yann Demichel. Who invented von Koch's snowflake curve? *American Mathematical Monthly*, 131(8):662–668, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chalebgwa:2024:TMN

[625] Taboka Prince Chalebgwa and Sidney A. Morris. Topology meets number theory. *American Mathematical Monthly*, 131(8):669–689, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Stewart:2024:IGS

[626] Ian Stewart. Intrinsic geometries of the simple group of order 168. *American Mathematical Monthly*, 131(8):690–703, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Cocke:2024:AN

[627] W. Cocke. Add nihilo. *American Mathematical Monthly*, 131(8):703, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Liao:2024:GTL

[628] Sophia Liao and Harold Polo. A Goldbach Theorem for Laurent polynomials with positive integer coefficients. *American Mathematical Monthly*, 131(8):704–711, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ponomarenko:2024:YAMh

[629] Vadim Ponomarenko. 100 years ago this month in *The American Mathematical Monthly*. *American Mathematical Monthly*, 131(8):711, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Pollack:2024:HUF

[630] Paul Pollack. $Z[-5]$: Halfway to unique factorization. *American Mathematical Monthly*, 131(8):712–717, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Chamizo:2024:DPC

[631] Fernando Chamizo and Dulcinea Raboso. Digits, primes and, of course, pi. *American Mathematical Monthly*, 131(8):718–721, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Ullman:2024:PSh

[632] Daniel H. Ullman, Daniel J. Velleman, Stan Wagon, and Douglas B. West. Problems and solutions. *American Mathematical Monthly*, 131(8):722–731, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Scoville:2024:R

[633] Nicholas A. Scoville. Reviews. *American Mathematical Monthly*, 131(8): 732–736, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Anonymous:2024:C

[634] Anonymous. Correction. *American Mathematical Monthly*, 131(8):I, 2024. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).