

INDEX TO VOLUME 35, 2009

Skoliad *Lily Yen and Mogens Lemvig Hansen (*Editor for February)*

*February	No. 114	1
March	No. 115	65
April	No. 116	129
May	No. 117	194
September	No. 118	263
October	No. 119	354
November	No. 120	417
December	No. 121	481

Mathematical Mayhem *Ian VanderBurgh*

February	11
March	71
April	134
May	200
September	270
October	363
November	425
December	488

Mayhem Problems

February	M376–M381	11
March	M382–M387	71
April	M388–M393	134
May	M394–M400	200
September	Totten M1–Totten M10	270
October	M381, M401–M406	363
November	M407–M412	425
December	M413–M419	488

Mayhem Solutions

February	M338–M343	13
March	M344–M349	73
April	M350–M356	136
May	M357–M362	202
September	M363–M368	275
October	M369–M375	366
November	M376–M380	427
December	M382–M387	490

Problem of the Month *Ian VanderBurgh*

February	18
March	78
April	142
May	207
September	281
October	372
November	432
December	494

Mayhem Articles

The Tanker Problem	
<i>Ross Honsberger</i>	283

The Olympiad Corner *R. E. Woodrow*

February	No. 275	20
March	No. 276	80
April	No. 277	144
May	No. 278	211
September	No. 279	290
October	No. 280	375
November	No. 281	435
December	No. 282	497

Book Reviews *Amar Sodhi*

Putnam and Beyond , by Răzvan Gelca and Titu Adreescu	
<i>Reviewed by Jeff Hooper</i>	36
Mathematical Connections: A Companion for Teachers and Others ,	
by Al Cuoco	
<i>Reviewed by Peter S. Brouwer</i>	37
Benjamin Franklin's Numbers: An Unsung Mathematical Odyssey ,	
by Paul C. Pasles	
<i>Reviewed by Jeff Hooper</i>	102
Polynomia and Related Realms: Uncommon Mathematical Excursions ,	
by Dan Kalman	
<i>Reviewed by Edward J. Barbeau</i>	160
The Shape of Content: Creative Writings in Mathematics and Science ,	
Edited by Chandler Davis, Marjorie Wikler Senechal, and Jan Zwicky	
<i>Reviewed by Georg Gunther</i>	162
The Möbius Strip: Dr. August Möbius's Marvelous Band in	
Mathematics, Games, Literature, Art, Technology, and Cosmology ,	
by Clifford Pickover	
<i>Reviewed by Edward J. Barbeau</i>	230
The Contest Problem Book IX: American Mathematics Competitions	
(AMC 12) 2001-2007,	
Compiled and edited by David Wells and J. Douglas Faires	
<i>Reviewed by John Grant McLoughlin</i>	231
A Taste of Mathematics, Volume IX, The CAUT Problems ,	
by Edward J. Barbeau	
<i>Reviewed by Amar Sodhi</i>	232
All-Star Mathlete Puzzles , by Dick Hess	
<i>Reviewed by Andy Liu</i>	304
A Mathematical Mosaic: Patterns & Problem Solving (New	
Expanded Edition) , by Ravi Vakil	
<i>Reviewed by John Grant McLoughlin</i>	305
A Mathematical Mosaic , by Ravi Vakil	
<i>Reviewed by Jim Totten</i>	305
Sink or Float? Thought Problems in Math and Physics , by Keith Kendig	
<i>Reviewed by Nora Franzova</i>	390

Number Theory Through Inquiry, by David C. Marshall, Edward Odell, and Michael Starbird <i>Reviewed by Jeff Hooper</i>	391
Geometric Origami, by Robert Geretschläger <i>Reviewed by Georg Gunther</i>	393
Problems from Murray Klamkin: The Canadian Collection Edited by Andy Liu and Bruce Sawyer <i>Reviewed by Bill Sands</i>	452
Crocheting Adventures with Hyperbolic Planes, by Daina Taimiņa <i>Reviewed by J. Chris Fisher</i>	453
Mathematical Mindbenders, by Peter Winkler <i>Reviewed by Amar Sodhi</i>	455
A Certain Ambiguity: A Mathematical Novel, by Gaurav Suri and Hartosh Singh Bal <i>Reviewed by Mark Taylor</i>	513
Crux Articles <i>James Currie</i>	
Velocity Analysis: An Approach to Solving Geometry Problems <i>Peng YuChen</i>	38
Geometric Constructions of Mixtilinear Incircles <i>Cosmin Pohoată</i>	103
A Useful Inequality Revisited <i>Phạm Văn Thuận and Lê Vĩ</i>	164
Jim Totten's Reach <i>John Grant McLoughlin</i>	260
The British Columbia Secondary School Mathematics Contest <i>Clint Lee</i>	307
A Duality for Bicentric Quadrilaterals <i>Michel Bataille</i>	310
A Study of Knight's Tours on the Surface of a Cube <i>Awani Kumar</i>	313
Several Symmetric Inequalities of Exponential Kind <i>Arkady Alt</i>	457
Problems	
February 3401–3413	42
March 3393, 3414–3425	108
April 3426–3438	172
May 3419, 3424, 3439–3450	233
September TOTTEN 01–TOTTEN 12	320
3451–3462	325
October 3439, 3463–3474	395
November 3464, 3475–3487	463
December 3488–3500	515
Solutions	
February 3301–3312	47
March 3313–3325	113
April 3326–3329, 3331–3337	177
May 3330, 3338–3350	238
September 2557, 3351–3362	330
October 3363–3375	400
November 3376–3388	468
December 3389–3400	520

Miscellaneous

Editorial	193
A photo of Jim Totten in his office	257
In Memoriam: James Edward Totten, 1947-2008	258
Totten Commemorative Issue	259
Editorial	353
Year End Finale	356

Proposers and solvers appearing in the SOLUTIONS section in 2009:**Proposers**

Yakub N. Aliyev 3400	Virgil Nicula 3309, 3310
Arkady Alt 3319, 3329, 3330, 3341, 3342	Pham Huu Duc 3374
Michel Bataille 3311, 3312, 3320, 3321, 3336, 3337, 3360, 3361, 3383, 3384, 3385, 3391, 3392	Pantelimon George Popescu 3313
Mihály Bencze 3302, 3303, 3304, 3314, 3316, 3317, 3326, 3327, 3328, 3347, 3348, 3349, 3353, 3378, 3379, 3380, 3389, 3390	D. E. Prithwjit 3307, 3308, 3318
Manuel Benito Muñoz 3325	Stanley Rabinowitz 3305, 3306, 3315
Paul Bracken 3388	Vincentiu Rădulescu 3399
Shi Changwei 3381	Juan-Bosco Romero Márquez 3335
José Luis Díaz-Barrero 3313, 3331, 3354, 3362, 3382, 3397	Josep Rubió-Massegú 3382
Ovidiu Furdui 3301, 3334, 3357, 3366, 3375, 3386, 3387	Toshio Seimiya 3338, 3339, 3340, 3351, 3352, 3358, 3363, 3364, 3365, 3377
José Gibernans-Báguena 3331	Bruce Sawyer 3398
Neven Juric 3368, 3396	Gord Sinnamon 2557
Ray Kilgrove 3359	D. J. Smeenk 3376
Hung Pham Kim 3344, 3345	Panos E. Tsoulosoglou 3322, 3323, 3324, 3332, 3350
Václav Konečný 3333	George Tsintsifas 3369, 3370, 3371
Taichi Maekawa 3395	Vo Quoc Ba Canh 3372, 3373
Dragoljub Milišević 3393, 3394	Stan Wagon 3343
Cristinel Mortici 3356	Todor Yalamov 3355
	Bin Zhao 3346
	Li Zhou 3367

Featured Solvers — Individuals

Yakub N. Aliyev 3400	Václav Konečný 3343, 3391
Arkady Alt 3330(d), 3380	Kee-Wai Lau 3354, 3362
Miguel Amengual Covas 3318, 3351	Matti Lehtinen 3363, 3364
George Apostolopoulos 3313, 3318, 3324, 3326(a), 3327(a), 3339, 3341, 3350, 3354, 3370, 3372, 3378, 3389	Ralph Lozano 3343
Šefket Arslanagić 3370, 3385, 3393	Phil McCartney 3354
Dionne Bailey 3354	Taichi Maekawa 3351
Roy Barbara 3306, 3329, 3353	Salem Malikić 3324, 3352, 3370
Ricardo Barroso Campos 3318, 3363	Dung Nguyen Manh 3342, 3345, 3370
Michel Bataille 3302, 3304, 3310, 3315, 3320, 3327(a), 3338, 3343, 3346, 3353, 3354, 3357, 3370, 3377, 3379, 3380, 3383, 3389, 3395, 3399	Mahdavi R. Modak 3352, 3354, 3363, 3383
Mihály Bencze 3317, 3326(a), 3331, 3332	Cristinel Mortici 3367, 3373, 3375, 3385
Manuel Benito Muñoz 3301, 3303, 3305, 3307, 3370	Andrea Munaro 3318
Elsie Campbell 3354	Khanh Bao Nguyen 3350
Cao Minh Quang 3317, 3318, 3324, 3342, 3350, 3370	Virgil Nicula 3310
Li Chao 2557	Paolo Perfetti 3370, 3387, 3388
Oscar Ciaurri 3301, 3303, 3305, 3307, 3370	Gottfried Perz 3354
Chip Curtis 3303, 3327(a), 3354, 3366, 3370, 3385	Pantelimon George Popescu 3313
Apostolis K. Demis 3318	Daniel Reisz 3339
José Luis Díaz-Barrero 3313	Henry Ricardo 3313
Charles R. Diminnie 3335, 3354	Luz Roncal 3303, 3305, 3307, 3370
Emilio Fernandez 3301, 3303, 3305, 3307, 3370	Xavier Ros 3304, 3322, 3323, 3325(a), 3328, 3343, 3354
Ovidiu Furdui 3354, 3362	Joel Schlosberg 3336, 3370, 3371
Oliver Geupel 3310, 3311, 3314, 3316, 3319, 3330(abc), 3333, 3334, 3337, 3342, 3344, 3347, 3354, 3356, 3358, 3359, 3361, 3368, 3369, 3370, 3382, 3390, 3394, 3396, 3397, 3398	Toshio Seimiya 3358
José Hernández Santiago 3354	D. J. Smeenk 3340, 3391
Richard I. Hess 3343, 3354, 3363, 3384	Digby Smith 3343
John G. Heuver 3339, 3365	Albert Stadler 3387
Joe Howard 3307, 3308, 3354, 3370	Babis Stergiou 3350
Peter Hurthig 3354	Son Hong Ta 3350
Walther Janous 3304, 3328, 3354, 3370, 3386, 3399	Tran Thanh Nam 3349
Steven Karp 3304, 3312	Daniel Tsai 3304
Gerhard Kirchner 3386	George Tsapakidis 3307, 3309, 3318, 3332
	Peter Y. Woo 3321, 3336, 3340, 3343, 3348, 3354, 3355, 3363, 3364, 3374, 3381(a), 3392
	Titu Zvonaru 3310, 3322, 3350, 3361, 3370, 3385

Featured Solvers — Groups

Missouri State University Problem Solving Group 3354, 3360, 3362

Other Solvers — Individuals

- Mohammed Aassila 3304, 3306, 3308, 3323, 3325(a), 3334
Arkady Alt 3302, 3303, 3304, 3307, 3308, 3309, 3317, 3319, 3323, 3324, 3329, 3330(abc), 3341, 3342, 3349, 3371, 3379, 3381(a), 3382, 3384, 3389, 3390, 3394, 3395
Miguel Amengual Covas 3321, 3340, 3352, 3358, 3377
George Apostolopoulos 3302, 3303, 3304, 3307, 3308, 3309, 3310, 3316, 3321, 3322, 3323, 3331, 3332, 3335, 3336, 3337, 3340, 3342, 3344, 3345, 3346, 3351, 3352, 3353(a), 3358, 3362, 3363, 3364, 3365, 3371, 3373, 3374, 3376, 3377, 3379, 3380, 3381(a), 3382, 3388, 3390, 3391, 3395, 3399
Sefket Arslanagic 3302, 3303, 3304, 3305, 3307, 3308, 3313, 3316, 3318, 3323, 3324, 3331, 3332, 3338, 3340, 3341, 3342, 3345, 3350, 3351, 3352, 3358, 3363, 3364, 3365, 3373, 3376, 3377, 3378, 3380, 3382, 3394, 3395
Dionne T. Bailey 3303, 3323, 3324, 3362, 3390
Roy Barbara 3302, 3304, 3308, 3309, 3312, 3321, 3322, 3323, 3324, 3331, 3336, 3340, 3341, 3351, 3351, 3352, 3358, 3359, 3360, 3361, 3363, 3364, 3365, 3367, 3389, 3390, 3399
Ricardo Barroso Campos 3336, 3337, 3351, 3352, 3358, 3361, 3365, 3376
Michel Bataille 3303, 3305, 3307, 3309, 3311, 3312, 3313, 3316, 3318, 3321, 3322, 3323, 3324, 3326(a), 3331, 3332, 3336, 3337, 3339, 3340, 3341, 3342, 3345, 3347, 3350, 3351, 3352, 3355, 3356(a), 3358, 3359, 3360, 3361, 3362, 3363, 3364, 3365, 3371, 3373, 3375, 3376, 3378, 3382, 3384, 3385, 3390, 3391, 3392, 3394, 3397
Brian D. Beasley 3306, 3359, 3390
Francisco Bellot Rosada 3339
Mihály Benze 3302, 3303, 3304, 3314, 3316, 3327(a), 3332, 3348, 3349, 3379, 3380, 3389, 3390, 3394, 3395
Manuel Benito Muñoz 3304, 3306, 3308, 3309, 3310, 3311, 3312, 3325(a), 3375
Paul Bracken 3334, 3335, 3350, 3381(a), 3388
Scott Brown 3342
Chris Broyles 3351
Elsie M. Campbell 3303, 3323, 3324, 3362, 3390
Cao Minh Quang 3303, 3304, 3313, 3316, 3322, 3323, 3331, 3332, 3338, 3341, 3345, 3352, 3358, 3376, 3379, 3380, 3394, 3395
Oscar Ciaurri 3304, 3306, 3308, 3309, 3310, 3311, 3312, 3375
Chip Curtis 3302, 3306, 3307, 3308, 3309, 3310, 3312, 3316, 3318, 3320, 3321, 3322, 3323, 3324, 3326(a), 3328(a), 3329, 3331, 3332, 3336, 3341, 3342, 3344, 3348, 3350, 3351, 3352, 3353, 3358, 3360, 3361, 3363, 3364, 3365, 3371, 3373, 3374, 3375, 3376, 3377, 3378, 3379, 3380, 3382, 3383, 3384, 3388, 3389, 3390, 3391, 3395, 3396, 3397
Apostolis K. Demis 3305, 3307, 3320, 3321, 3391, 3392, 3399
José Luis Díaz-Barrero 3307, 3331, 3362, 3382, 3397
Charles R. Diminnie 3302, 3303, 3304, 3308, 3316, 3322, 3323, 3324, 3331, 3343, 3362, 3389, 3390
Joseph DiMuro 3333
Gerald Edgcomb 3363
Rebecca Everding 3350, 3390
Oleh Faynshteyn 3394, 3395
Emilio Fernandez 3304, 3306, 3308, 3309, 3310, 3311, 3312, 3375
Ovidiu Furdulii 3301, 3304, 3334, 3357, 3366, 3375, 3386, 3387
Ian June L. Garces 3308, 3318, 3340, 3350, 3351
Francisco Javier García Capitán 3308
Oliver Geupel 3302, 3303, 3304, 3307, 3308, 3309, 3315, 3318, 3320, 3321, 3322, 3323, 3324, 3325(a), 3328(a), 3329, 3331, 3332, 3335, 3336, 3338, 3340, 3341, 3343, 3348, 3350, 3351, 3353(a), 3355, 3360, 3362, 3363, 3364, 3365, 3366, 3367, 3371, 3372(a), 3373, 3375, 3376, 3377, 3378, 3379, 3380, 3381, 3383, 3384, 3385, 3387, 3388, 3389, 3391, 3392, 3395, 3400
José Gbergans-Báguena 3331
Douglass L. Grant 3343
Cody Guinan 3390
Karl Havlak 3362
John Hawkins 3305, 3307, 3311, 3312
Richard I. Hess 3352, 3353(a), 3358, 3361, 3362, 3366, 3375, 3378, 3381, 3385, 3388, 3398
John G. Heuver 3318, 3331, 3338, 3351, 3352, 3358, 3363, 3376, 3377, 3379, 3391, 3395
Joe Howard 3302, 3304, 3331, 3332, 3341, 3342, 3345, 3350, 3352, 3358, 3362, 3373, 3395
Peter Hurthig 3351, 3358
Walther Janous 3302, 3306, 3307, 3312, 3313, 3316, 3318, 3319, 3320, 3321, 3322, 3323, 3324, 3325(a), 3327(a), 3329, 3331, 3332, 3333, 3334(a), 3335, 3336, 3337, 3341, 3342, 3343, 3344, 3346, 3350, 3351, 3352, 3353(a), 3358, 3359, 3362, 3363, 3365, 3366, 3367, 3371, 3373, 3374, 3375, 3376, 3377, 3378, 3379, 3380, 3381, 3382, 3384, 3385, 3387, 3388, 3389, 3390, 3391, 3393, 3394, 3395, 3397
Wei-Dong Jiang 3350
Neven Juric 3368, 3396
Giannis G. Kalogerakis 3351, 3358
Steven Karp 3289, 3292, 3294, 3296, 3297, 3298, 3300, 3308, 3309, 3311
Ray Killgrove 3359
Hung Pham Kim 3344, 3345
John Klassen 3343
Václav Konečný 3308, 3315, 3318, 3321, 3336, 3351, 3352, 3363, 3364, 3365, 3376, 3377, 3392
- David Koster 3359
Rodolfo Larrea 3353(b)
Kee-Wai Lau 3302, 3308, 3324, 3331, 3340, 3342, 3351, 3358, 3363, 3364, 3374, 3377, 3386, 3397
Kathleen E. Lewis 3343
Phil McCartney 3362
William McNeary 3390
Taichi Maekawa 3338, 3340, 3352, 3358, 3361, 3363, 3376, 3377, 3395
Thanos Magkos 3302, 3308, 3341, 3342, 3350, 3363, 3364
Salem Malikić 3302, 3303, 3304, 3308, 3311, 3313, 3318, 3321, 3323, 3331, 3332, 3337, 3338, 3339, 3340, 3341, 3342, 3344, 3345, 3348, 3351, 3358, 3359, 3363, 3364, 3365, 3373, 3379, 3380, 3382
David E. Manes 3307, 3311, 3312, 3331, 3385
Dung Nguyen Manh 3303, 3304, 3344, 3350, 3376, 3379, 3380, 3386
D.P. Mehendale 3350
Dragoljub Milosevic 3393, 3394, 3395
M. R. Modak 3338, 3340, 3341, 3350, 3351, 3353(a), 3356(a), 3358, 3365, 3366, 3376, 3377, 3386, 3389, 3390, 3391
Cristinel Mortici 3356, 3367, 3370, 3379, 3390
Nancy Mueller 3358, 3390
Andrea Munaro 3302, 3303, 3307, 3308, 3323
Nguyen Thanh Liem 3350
Khanh Bao Nguyen 3347, 3373
Nguyen Van Vinh 3386
Virgil Nicula 3309
Moubinool Omarjee 3386
Jennifer Pajda 3350, 3390
Michael Parmenter 3340
Ricard Peiro 3318
Paolo Perfetti 3301, 3303, 3304, 3307, 3309, 3362, 3366, 3373, 3378, 3379, 3380, 3386, 3388
Pham Huu Duc 3374
D. E. Prithwiji 3307, 3308, 3318, 3365, 3376, 3384, 3385, 3390, 3391, 3392, 3395, 3398
Stanley Rabinowitz 3306, 3315
Vincentiu Rădulescu 3399
Henry Ricardo 3304
Juan-Bosco Romero Márquez 3335, 3342
Luz Roncal 3304, 3306, 3308, 3309, 3310, 3311, 3312, 3353(b), 3375
Xavier Ros 3307, 3329, 3331, 3342, 3362
Josep Rubió-Massegú 3382
K.C. Sandeep 3358
Joel Schlossberg 3308, 3311, 3312, 3318, 3321, 3348, 3352, 3358, 3359, 3365, 3376, 3384, 3385, 3390, 3391, 3392, 3395, 3398
Robert P. Sealy 3385
Toshio Seimiya 3338, 3339, 3340, 3351, 3352, 3363, 3364, 3365, 3377
Bob Serkey 3307, 3340
Bikram Kumar Sitoula 3358
D.J. Smeenk 3318, 3321, 3337, 3352, 3358, 3361, 3365, 3376, 3395
“Solver X” 3340
Son Hong Ta 3338, 3340
Alex Song 3351
Albert Stadler 3376, 3377, 3379, 3381, 3382, 3384, 3385, 3386, 3388, 3389, 3390, 3395, 3397, 3398, 3399
Seth Stahlheber 3358, 3390
Julie Steele 3363
Matthew Stein 3351
David R. Stone 3305, 3307, 3311, 3312
Adam Strzebonski 3329
Tran Thanh Nam 3345, 3350
Daniel Tsai 3303, 3308, 3309
Panos E. Tsoussoglou 3302, 3303, 3304, 3307, 3308, 3316, 3322, 3323, 3324, 3332, 3350
George Tsapakidis 3302, 3303, 3308, 3310, 3321, 3322, 3323, 3331, 3352, 3358, 3363, 3364
George Velisaris 3323, 3324
Vo Quoc Ba Can 3372(a), 3373
Stan Wagon 3322, 3323, 3324, 3325(a), 3329, 3343, 3350, 3378, 3381, 3388
Haohao Wang 3377
Jerzy Woźdyl 3377
Peter Y. Woo 3302, 3303, 3304, 3305, 3308, 3309, 3310, 3312, 3313, 3316, 3318, 3319, 3320, 3323, 3329, 3331, 3332, 3333, 3335, 3338, 3339, 3341, 3344, 3346, 3347, 3350, 3351, 3352, 3356(a), 3358, 3361, 3362, 3365, 3369, 3370, 3371, 3373, 3376, 3377, 3382, 3383, 3385, 3388, 3391, 3399
Todor Yalamov 3355
Roger Zarnowski 3389, 3390
Konstantine Zelator 3318, 3321
Bin Zhao 3346
Li Zhou 3367
Titu Zvonaru 3302, 3303, 3304, 3308, 3309, 3312, 3317, 3318, 3321, 3323, 3331, 3332, 3336, 3340, 3341, 3351, 3352, 3353(a), 3356(a), 3358, 3360, 3363, 3364, 3365, 3371, 3373, 3377, 3378, 3380, 3382, 3390, 3391, 3394, 3395

Other Solvers — Groups

Missouri State University Problem Solving Group 3351, 3352, 3359, 3360, 3384

Skidmore College Problem Solving Group 3363, 3390
Southeast Missouri State University Math Club 3358, 3377