25th Bay Area Mathematical Olympiad

Scores and awards

March 6, 2024

Contents

BAMO would not be possible without the support of the Simons Laufer Mathematical Sciences Institute, the generosity of Tom Davis and Ellyn Bush and Tom and Peggy Rike, and the support of numerous other individuals. To donate to BAMO, please contact `bamo@msri.org`.

1 Overview

Over 650 students took part in the 25th BAMO on March 6, 2024, with 418 taking BAMO-8 and 235 taking BAMO-12. Over 100 schools were represented in nearly 40 different proctoring locations, including over 100 participants from Seattle, Santa Cruz, Santa Barbara, Los Angeles, and San Diego.

Every BAMO since the first exam in 1999 (with the exception of 2020, due to the pandemic) has an awards ceremony take place a week or two after the exam, featuring a math talk by an exceptional speaker, followed by a brief presentation of awards. Prizes consist of T-shirts, electronic gift certificates for Powell's Bookstore, and Jamba Juice certificates for winning schools. New for this year will be generous gift certificates from The Art of Problem Solving, awarded to all students scoring at least 7 points (more than 500 people). This year's awards ceremony took place on Sunday, March 17, at Santa Clara University, and the speaker was Alex Kontorovich (Rutgers University), who spoke about "The Apollonius problem."

For more information about BAMO, please visit `https://www.bamo.org`.

1.1 Score distributions

Each problem was worth 7 points, so the maximum total score for each exam was 35 points. The median scores were 12 and 9 points, respectively, for BAMO-8 and BAMO-12 (for both exams, 3 points lower than 2023). The first two tables show the score distribution for each problem, and the third table shows the rank corresponding to a given score. For example, in BAMO-8, 122 people scored above 15 points.

BAMO-8	A	B	C1	D2	E3
blank	17	47	60	57	135
0	7	53	138	168	169
1	13	31	58	121	49
2	1	27	45	13	47
3	0	24	58	20	8
4	12	46	20	18	1
5	14	94	12	2	0
6	32	64	9	7	2
7	322	32	18	12	7
median	7	5	1	1	0

BAMO-12	C1	D2	E3	4	5
blank	7	24	64	107	98
0	32	52	52	46	38
1	9	51	26	7	54
2	26	10	30	4	24
3	46	13	8	7	8
4	14	18	2	7	5
5	24	15	1	8	3
6	11	10	2	16	3
7	66	42	50	33	2
median	4	2	2	3.5	1

Score	5	10	15	20	25	30
BAMO-8 rank	380	270	123	40	13	*
BAMO-12 rank	162	104	65	42	21	7

* One person received the top score of 32 points, and one person scored 29 points.

2 Individual awards

2.1 BAMO-8, Scoring 27 or more points

Name	School	Score
Oscar Varodayan	Greene Middle School	32
Ayan Sharma	Harvest Park MS	29
Alan Verbitsky	BASIS Independent Bellevue	28
Jeffery Wang	The Harker School	28
Ethan Yin	Miraleste	28
Patrick Liang	Portola Highly Gifted Magnet	28
Kieran Callahan	Synapse School	27
Elena Beckman	The Knox School of Santa Barbara	27
Xei Sackett	Hall Middle School	27
Minghao Guo	Portola Highly Gifted Magnet	27
Jayson Quah	Harvest Park MS	27

2.2 BAMO-8, Honorable Mention (22–26 points)

Name	School
Nathan Song	Berkeley Math Circle
Atticus Lin	The Nueva School
David Fox	Proof School
Joey Guo	The Nueva School
Alice Wang	Bayside Academy
Eric Zhang	The Harker School
Sohum Tavisala	Harvest Park MS
Aiden Shan	Bowditch Middle School
Chris Xu	Bayside Academy
Daniel Luo	Ellen Fletcher Middle School
Ava Berenji	Davidson Academy Online
Tiffany Meng	Bayside Academy
Junu (Kevin) Pae	Pacific Trails Middle School
Jayden Gong	Pinewood
Cris Chai	Proof School
Yanlin Huang	Basis Independent Silicon Valley
Vedanth Chakravarthi	San Jose Math Circle
Temujin Battulga	Ellen Fletcher Middle School
Phuong Le	Egan Junior High School

2.3 BAMO-12, Scoring 29 or more points

Name	School	Score
Elliott Liu	Torrey Pines High School	35
Ritwin Narra	Silver Creek High	35
David Zhang	Dougherty Valley High School	34
Rohan Das	Basis Independent Silicon Valley	33
Michelle Liang	Canyon Crest Academy	33
Dylan Frank	Cupertino High School	32
William Zhao	Dougherty Valley High School	31
Rohan Garg	Amador Valley HS	30
Jonathan Du	Los Altos High School	29
Thomas Della Vigna	Proof School	29
Kailua Cheng	Amador Valley HS	29

2.4 BAMO-12, Honorable Mention (23–28 points)

Name	School
Aiden Jeong	Branham High
Eddy Li	The Nueva School
Myungbeen Choi	The Quarry Lane School
Hengrui Liang	The Harker School
Brandon Muliadi	Cupertino High School
Amelia Chen	Proof School
Hannah Fox	Proof School
Spencer Hill	Proof School
Hugh Cheng	Harvard-Westlake
Lily Shi	The Harker School
Marius Rutkowski	La Canada HS
Alex Zhan	Basis Independent Silicon Valley
Jacopo Rizzo	Torrey Pines High School
Taiga Nishida	The Nueva School

3 School Awards

BAMO recognizes two types of school awards: *participation* awards, going to the schools with the largest number of students scoring at least 7 points (one problem) on the exam, and *team* awards, measured by the sum of scores of the top three students from each school.

3.1 BAMO-8 Participation Awards

School	# Students
The Nueva School	35
Ellen Fletcher Middle School	32
Bayside Academy	23

3.2 BAMO-12 Participation Awards

School	# Students
Proof School	22
Henry M. Gunn High School	17
BASIS Independent Silicon Valley	10
Palo Alto High School	10

3.3 BAMO-8 Team Awards

School	Sum of three highest scores
Harvest Park Middle School	80
The Harker School	72
Bayside Academy	70
The Nueva School	70

3.4 BAMO-12 Team Awards

School	Sum of three highest scores
Proof School	83
BASIS Independent Silicon Valley	79
Torrey Pines High School	79

4 Special Awards

BAMO special awards single out students for unusually creative solutions, unusually good art, excellent writing, and also, exceptional youth. This year we gave several Young Student Awards, for the top BAMO-8 students among the 47 participants in grades 5 or younger.

Name	School	Grade	Score
Conrad Braun	Ocean Grove Charter School	3	12
Alvin Zhu	Homeschool	4	17
Lucas Zhang	Walnut Grove ES	4	13
Paixiao Seelvangsawat	Stevenson Elementary School	4	13
Bryan Shan	Bowditch Middle School	5	18
Shiven Bhargava	The Harker School	5	17
Liana Lee	Ocean Grove Charter School	5	15
Derek Wang	Medina Elementary School	5	15

And last but not least, we awarded the Best Art Award to Elsa Ren, an 8th grader at The Nueva School, for a beautiful drawing of chocolate-chip cookies, in lieu of a solution to problem D2 (the “cookie problem”).