



25th Bay Area Mathematical Olympiad

Scores and awards

March 6, 2024

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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 procuring 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 |
| 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 |
| 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 |
| David Zhang | Dougherty Valley 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”).