Welcome to MOAA 2018 The First Math Open At Andover

A MIDDLE SCHOOL MATH COMPETITION AT PHILLIPS ACADEMY ANDOVER

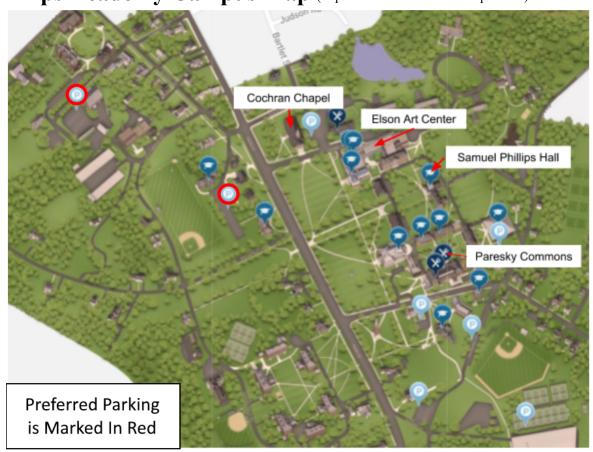
OCTOBER 6TH, 2018

Schedule of Events

Time	Event	Location
8:00 - 8:45	Breakfast / Check-in	Paresky Commons*
9:00 - 9:30	Opening Ceremony	Cochran Chapel
9:45 - 11:00	Individual Round	Samuel Phillips Hall
11:10 - 12:10	Team Round	Samuel Phillips Hall
12:20 - 13:20	Lunch	Paresky Commons
13:30 - 14:30	Invitation Talks	Cochran Chapel
14:45 - 16:15	Gunga Bowl	Cochran Chapel
16:30 - 17:00	Award Ceremony	Cochran Chapel

^{*}Address for Paresky Commons: 16 Salem Street, Andover, MA

$Phillips\ Academy\ Campus\ Map\ ({\it http://enews.andover.edu/campusbird/})$



Teams and Room Assignments

1 ACM Sebastian Zhu 2 Westford Gold Sebastian Zhu 3 Team Hax Hannah Zhang 4 Starfish Hannah Zhang 5 Panthers Stephanie Yang 6 CCC Math Stephanie Yang 7 Andover Math Kids Jeffrey Shi 8 ACM Team Two Jeffrey Shi	B9 B9 B10 B10 B15 B15
3 Team Hax Hannah Zhang 4 Starfish Hannah Zhang 5 Panthers Stephanie Yang 6 CCC Math Stephanie Yang 7 Andover Math Kids Jeffrey Shi	B10 B10 B15
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6 CCC Math Stephanie Yang 7 Andover Math Kids Jeffrey Shi	
7 Andover Math Kids Jeffrey Shi	B15
8 ACM Team Two Jeffrey Shi	B16
	B16
9 Pike/Hill Shen Duan	113
10 FSESA Shen Duan	113
11 Wise Owls Jonathan Mei	115
12 MathπRates William Yue	114
13 TI-84 William Yue	114
14 Dunan League Vincent Fan	209
15 Virginia International Vincent Fan Academy	209
16 The Awesome Asians Max Tao	210
17 The Fay School 1 Max Tao	210
18 The Fay School 2 Sam Sheehan	213
19 Blue Dogs Sam Sheehan	213
20 Clarke Irrationals Wendy Wu	214
21 MOAA 1 Wendy Wu	214
22 MOAA 2 Jessica He	215
23 MOAA 3 Jessica He	215
24 MOAA4 Jeremy Zhou	216
25 MOAA5 Jeremy Zhou	216

Competition Format

The competition will consist of three rounds. The problems on each round can be solved using only middle school mathematical techniques and every problem is computationally feasible without calculators. Unless explicitly stated otherwise, the use of any external source or aid, including calculators, dictionaries, notes, coaches, or proctors, is prohibited.

Individual Round

Each participant will take this test individually. Participants will have 75 minutes to complete the 20 question test. All answers are non-negative integers and no answer will have a value greater than 1,000,000.

Team Round

This test will be given to teams of up to 6 participants. Team members may freely collaborate with the members of their team, but not the members of any other team, to solve the 10 questions of the test in the allotted time limit of 60 minutes. All answers are non-negative integers and no answer will have a value greater than 1,000,000.

Gunga Bowl

The precise format of this round has not yet been released. It is intended for teams and permits free collaboration among team members. All answers are non-negative integers.

Competition Rules

No electronic devices or calculation aids (including calculators, phones, or calculator watches) are permitted on any portion of the MOAA unless explicitly authorized by the MOAA team. Medical devices are exempt from this rule if the MOAA team is informed of the situation.

No mathematical texts or notes of any kind are permitted. Rely on your brain! Compasses, protractors, rulers, straightedges, graph paper, blank scratch paper, and writing implements are generally permitted, so long as they are not designed to give an unfair advantage.

On the Individual Round, giving or receiving help from any other individual - such as a teammate, a parent, or a coach - will result in disqualification. On all other rounds, individuals may only help or receive help from members of their team - consulting any other individual is grounds for disqualification.

Integrity is of the utmost importance in any competitive event. Any individual or team discovered to be providing or receiving unauthorized aid by any means on any portion of the competition will be penalized at the discretion of the MOAA team and Phillips Academy Public Safety.

Any individual that interferes with or jeopardizes the fairness of the competition - including the grading and awarding process - may be disqualified. Any other participants affiliated with the individuals, such as their teammates, may also be disqualified.

Any individual that jeopardizes the physical or mental wellness of anyone else at the competition may be removed from the competition at the discretion of the MOAA team and Phillips Academy Public Safety.

QUESTIONS AND CLARIFICATIONS CAN BE ANSWERED AT KEMPER AUDITORIUM.

MOAA Contributors

Tournament Directors: Justin Chang, Andy Xu

Program Coordinators: Victoria Zhang (Marketing), Alice Ren (Director of Sponsorship)

Rachel Chang (Communications)

Faculty Advisor: Mr. Khiem Doba

Invited Speakers: Vivien Mallick (Director of Admission Operations at Phillips Academy), Michael Ren (PA Alumni, IMO, MIT Student), Valerie Zhang (PA Alumni, USAMO, Harvard Student)

Proctors: Christina Li, CC Song, Hannah Zhang, Jonathan Mei, Jeffrey Shi, Jessica He, Jeremy Zhou, Max Tao, Sam Sheehan, Sebastian Zhu, Shen Duan, Vincent Fan, Wendy Wu, William Yue

Problem Contributors: Justin Chang, Andy Xu, Sebastian Zhu, Vincent Fan, William Yue, Michael Ren, Max Tao, Sam Sheehan, Wendy Wu, Jeffrey Shi, Shen Duan

Website Programming & Design: Justin Chang, Victoria Zhang, Kevin Sun

Brochure: Max Tao, Justin Chang

Acknowledgements

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