AWESOMEMATH'S Goals

- Provide a fun, intellectually stimulating environment for students to learn math.
- Inspire a love of mathematics and learning that lasts into college and beyond.
- Help students significantly improve their performance in mathematics competitions.
- Make mathematics itself and the entire camp experience highly enjoyable.

WHY AwesomeMath Summer Program?

AwesomeMath is designed for bright students with a special interest in mathematics competitions.

Both camps offer mathematically gifted students the opportunity to engage in **meaningful problem solving** activities and explore in detail areas in **advanced mathematics.** The **high quality instruction** is provided by **renowned lecturers** and **Olympiad coaches** from around the world.

AwesomeMath's philosophy is that students learn better by diving into problems than just sitting through lectures. For this reason **our teaching sessions encourage student involvement** and are centered on using what is learned to solve concrete problems.

ACADEMIC Program

The structure of the academic program will be the same for both locations. The lectures will focus on the following subjects: Foundations of Number Theory, Euclidean Geometry, Algebraic Inequalities and Techniques, Modular Arithmetic, and Computational Geometry.

Every course will be taught by instructors and the mentors will follow each teaching session by a 90-minute problem seminar that focuses on the materials presented in the lecture.

"My son Tolga has returned home safely after three weeks at AwesomeMath Summer Program. I personally would like to thank you and all other AMSP staff for a very well organized and planned program which challenged and improved Tolga's personal skills and knowledge not only in Maths but in social relationships as well."

Murat Özdoğan, Instanbul, Turkey

GENERAL Information

The program is designed for students going into 7th-12th grades. Younger students may apply, but significant evidence of mathematical and personal maturity must be evident for admission.

We encourage female students to apply for our program. The China Girls Math Olympiad team trained at the AwesomeMath Summer Program 2007. We strive to create a culture of learning that treats everyone as a full member so that nobody feels out of place.

A Typical Day

Tuesdays through Saturdays follow a schedule close to the one below. Academic team contests will be held on Sunday evenings.

8:00 am – 9:00 am	Morning routine and breakfast
9:00 am – 10:30 am	Teaching sessions
10:45 am – 12:15 pm	Problem sessions
12:15 pm – 2:00 pm	Lunch break
2:00 pm – 3:30 pm	Teaching sessions
3:45 pm – 5:15 pm	Problem sessions
5:30 pm – 7:00 pm	Dinner
7:00 pm – 8:30 pm	Mathematics forum (optional)
7:00 pm – 10:00 pm	Recreational activities (optional)

"Thank you for making my stay at AMSP very pleasurable and enjoyable. I will always remember this camp as an eye opener to pursuing my mathematical talent. I am already missing the daily camp life. This camp exercised my mind thoroughly making it easier for me to solve problems. This was the first time I was exposed to this kind of math. I have realized that I have a lot of work to do in improving my problem solving skills. This was one of the most inspiring moments of my life."

Aneesh Sampath, Setauket, NY

LIFE at the Camp

Cornell Location

Cornell sits on a hilltop overlooking 40-mile-long, 400-foot-deep Cayuga Lake, the longest of the Finger Lakes of central New York State. Two sides of the campus are bound by gorges, cut during the last 12,000 years. Creeks and waterfalls fill the gorges, and no matter where you are on campus you are never far from the sight and sound of falling water.

Perhaps the most remarkable feature of the Cornell campus is the seamless interconnection of nature and the built environment. Cornell Plantations, curator of the university's natural areas, maintains trails, arboretums, and gardens that intertwine and blend with the university's graceful quads and inspiring architecture. Not only is Cornell a higher education and research powerhouse, it is also one of the most spectacular university campuses anywhere in the world.

Santa Cruz Location

UC Santa Cruz offers the academic excellence of a world-class research university within a unique small-college setting. It is nestled on 2,000 acres of redwood forest and meadows, overlooking Monterey Bay. Its students and faculty affiliate with ten residential colleges, each with unique architecture and environment.

The residence hall floors, typically shared by 12 to 20 students, have common bathrooms and lounge areas. UC Santa Cruz has an award-winning dining program that offers virtually any type of food you can imagine while delivering the utmost in quality.

For both locations, in addition to providing access to the university's facilities, the staff will organize special events on weekends. All activities at the camp are supervised. We make students' safety our top priority.

AMSP Leadership

DR. TITU ANDREESCU, **University of Texas at Dallas, AMSP Director**
US IMO Team Leader (1995 – 2002)
Director, MAA American Mathematics Competitions (1998 – 2003)
Director, Mathematical Olympiad Summer Program (1995 – 2002)
Coach of the US IMO Team (1993 – 2006)
Member of the IMO Advisory Board (2002 – 2006)
Chair of the USAMO Committee (1996 – 2004)
MAA Sliffe Award winner for Distinguished Teaching

DR. JOSHUA NICHOLS-BARRER, **AMSP Academic Director**
MOSP instructor (2005, 2006)
IMO Silver Medalist (1995, 1997)
USAMO Winner (1995 – 1997)

AMSP Faculty

DR. DORIN ANDRICA, **Babes-Bolyai University, Cluj-Napoca, Romania**
Chairman, Department of Geometry (1995 – present)
Member of the Council for the Romanian Mathematical Olympiad

DR. MIRCEA BECHEANU, **University of Bucharest, Romania**
Coach of the Romanian IMO team (1996-2002)
Leader of the Romanian IMO team (1988, 1995-2002)
Member of the IMO Advisory Board (1998-2002)
Member of the IMO Problem Selection Committee (2003, 2004, 2005)

BOGDAN ENESCU, **National College BP Hasdeu, Romania**
IMO Gold Medalist (1978), Bronze Medalist (1977, 1979)
Coach of the Romanian IMO team (1989 – present)
Deputy Leader of the Romanian IMO team(1995 – present)

DR. RAZVAN GELCA, **Texas Tech University**
IMO Gold Medalist (1985)
MOSP Instructor (1997, 1998, 2000, 2002, and 2006 – present)
US IMO Deputy Leader (2008)

DR. JONATHAN KANE, **University of Wisconsin-Whitewater**
Member of the AIME Committee (2004 – present)
Cofounder of the Purple Comet! Math Meet

DR. BRANISLAV KISAČANIN, **computer scientist at Texas Instruments**
Works in the field of computer vision
Author of the book: *Mathematical Problems and Proofs.*

DR. OLEG MUSHKAROV, **Bulgarian Academy of Science; Institute of Mathematics and Informatics**
Senior Research Fellow (1979 – present)
Head of Department of Complex Analysis (2002 – present)
Bulgarian IMO Team Leader (1994 – 1998)
Scientific Group talented students training (1994 - present)

DR. ZORAN SUNIC, **Texas A&M University**
Deputy Leader of the Macedonian IMO team
Coach of the US IMO Team (2002)

DR. WALTER STROMQUIST, **Swarthmore College**
MOSP instructor (2002)
Math Magazine Editor

DR. MIRROSLAV YOTOV, **Florida International University**
IMO Bronze medal (1981)
Instructor for COSMOS-UC Irvine (2000-2004)
Math Circles leader in Miami, Fl (2005-present)

JUNIOR Faculty

BRIAN BASHAM, **Massachusetts Institute of Technology**
MOSP qualifier (2007)
1st Place HMMT Combinatorics Subject Test 2008
AMC 10 Perfect Score (2005)

IVAN BORSENCO, **Massachusetts Institute of Technology**
IMO Gold Medalist (2006), Bronze Medalist (2003 – 2005)
Assistant Editor, Mathematical Reflections (2005 – present)

DR. IVAN MATIC, **Duke University**
IMO Silver Medalist (1999)
Assistant Director, Berkeley Math Circle

JUAN IGNACIO RESTREPO, **McGill University, Canada**
IMO Silver Medalist (2004), Bronze Medalist (2003)
International Mathematics Competition Second prize winner (2005, 2006)

VISITING Faculty

NAOKI SATO, **Art of Problem Solving (2005 – present)**
First Place on Canadian Mathematical Olympiad, 1993
IMO Silver Medalist, 1992, Bronze Medalist, 1993
Deputy Leader of the Canadian IMO team (1997, 2002, 2006)

DR. HAROLD REITER, **University of North Carolina, Charlotte**
Member of the College Board's College-Level Examination Program (CLEP) Pre Calculus Mathematics Committee
Chair of the MAA's Edith May Sliffe Award Committee.
Former chair of the MATHCOUNTS Question Writing Committee
Former member of AIME and USAMO committees

MENTORS & Assistants

Mentors and assistants are graduate or undergraduate students who will share with the students their knowledge, experience, and love of mathematics. Many are former Olympiad winners with an outstanding record in the IMO. They will also conduct the camp's problem sessions.

"I had a wonderful time in the AwesomeMath Summer Program! Thank you so much for the great opportunity. I had a lot of fun being around people who have the same interest and at the same time I have gained a lot of knowledge of math!! AMSP was one of the best experiences in my life! It ended so quickly and I wish it was longer! I am really hoping to go back next year and looking forward to it! Thank you again for a wonderful summer!"

Meiyao Tysinger, Mocksville, NC

APPLYING TO AMSP 2011

Each student must submit:

- A personal information form
- Two letters of recommendation: one from a math teacher or mentor and one from someone who knows the student in a personal context
- A completed admission test
- The $25 application fee

The mailing address is:
AwesomeMath c/o Dr. Titu Andreescu
3425 Neiman Rd., Plano, TX 75025

Applications could be sent electronically to:
tandreescu@gmail.com

The test is the student's opportunity to demonstrate the willingness to explore advanced mathematics topics and the ability to tackle challenging, non-routine problems. Tests will be posted online in **January, April, and May** (see the schedule below). Solutions must be e-mailed or postmarked to AwesomeMath by the dates indicated in the table.

In making our admission decision, we consider the application as a whole. It is not only the raw test score that matters but the passion for mathematics that becomes evident in the student's complete application.

It is important to apply early, since **a discount of 10% of the tuition fee is given for early registration** (if paid by the due date) and airfare is cheaper when purchased in advance. The tuition fee for each of the two locations is $3,885. This covers room, board, transportation from/to airport, and all camp materials, activities, and trips. AMSP 2010 participants receive a $200 discount on the subsequent AwesomeMath Year-round program (AMY).

Please visit the AwesomeMath website at **awesomemath.org** for complete information about the summer program and to download application instructions and materials.

If you have any questions, do not hesitate to get in touch with the director, Dr. Titu Andreescu: tandreescu@gmail.com (214)549-6146 or (214)549-7880

	Early Registration	Normal Registration	Late Registration
Application Deadline	02/04/11	04/08/11	05/20/11
Required Admission Test	Test A 01/14–02/04	Test B 03/18–04/08	Test C 04/29–05/20
Tuition Receipt Deadline	02/18/11	04/22/11	06/03/11

OTHER AwesomeMath Programs

AMSP has a follow-up program: the AwesomeMath Year-round (AMY). It is given in six segments spread monthly throughout the school year and provides students with further opportunities to broaden their mathematical horizons and hone problem-solving skills, particularly in those fields from which Olympiad problems are drawn. Rather than concentrating solely on problem-solving techniques, the material covered familiarizes students with general mathematical concepts and widely applicable methods of proof. The AMY extends and solidifies the mathematics learned during the AwesomeMath Summer Program.

"I really appreciate this camp because it brought awesome and math together. I made so many friends and learned a lot. AwesomeMath is an experience I will never forget."

Allison Koenecke, Falls Church, VA

Additionally, AwesomeMath publishes Mathematical Reflections, a free online journal designed primarily for high school students and undergraduates interested in mathematics. We hope that some work done at the camp will be published therein. The journal's website is:

http://awesomemath.org/mathematical-reflections

Also check the website for new published books by XYZ Press.

"Thank you for your hard work for the camp, I had an incredible time this summer."

Aaron Roe, Oklahoma City, OK

Sample Admission Test Questions

Write 1,000,000 as a sum of a prime number and a perfect square.

Can you arrange the numbers 1 through 16 on a circle such that the sum of each two adjacent numbers is a perfect square? Same question for a line.

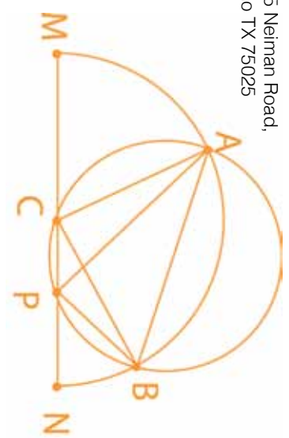
Points M and N lie on a semicircle of diameter AB such that AM − BM = 3 and AN − BN = 7. Let P be the point of intersection of AN and BM. Evaluate area AMP − area BNP.

"The three weeks I spent at the AwesomeMath were the most productive ones in my life. I learned so many different topics which I never even knew existed before, The teachers were some of the top-notch professors and former Olympiad winners from all around the globe. Their accents and names are as exotic as the problems and skills that they taught me! The mentors at the camp were the coolest on the planet. They were all high achievers and former USAMO/IMO participants…"

Anupa Murali, Concord, NH

AMSP Sponsors

Cornell University, University of California, Santa Cruz
Springer / Birkhauser



AwesomeMath
making x, y, z as easy as a, b, c

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