

The Art of Problem Solving Online Classes

Order Form

www.artofproblemsolving.com

Available Courses

The following are our current course offerings and an enrollment form. Students may also enroll online at www.artofproblemsolving.com. All students must be members of the Art of Problem Solving Community. Membership in the Community is free; visit our website for details.

If you have any questions about the Art of Problem Solving online classes, please write us at classes@artofproblemsolving.com.

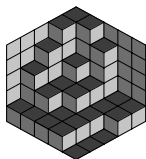
Fall/Winter, 2009

Algebra 1
Description: Fundamental concepts of algebra, including exponents and radicals, linear equations and inequalities, ratio and proportion, systems of linear equations, factoring quadratics, complex numbers, completing the square, and the quadratic formula.
Class ID: 404 Instructor: Paul Ryu (see website for bio)
Start Date: Oct 6, 2009 (Tue) End Date: Feb 2, 2010 (Tue)
Schedule: Tuesdays 7:30–9:00PM ET (4:30–6:00PM PT)
Enrollment Fee: \$225 without text, \$275 with text

MATHCOUNTS/AMC 8 Basics (Early Fall Session)
Description: For students just beginning with MATHCOUNTS and AMC 8. Covers much of the material needed for success at Chapter MATHCOUNTS.
Class ID: 420 Instructor: Richard Rusczyk, Naoki Sato (see website for bio)
Start Date: Sept 14, 2009 (Mon) End Date: Dec 7, 2009 (Mon)
Schedule: Mondays 7:30–9:00PM ET (4:30–6:00PM PT)
Enrollment Fee: \$150

MATHCOUNTS/AMC 8 Basics (Late Fall Session)
Description: For students just beginning with MATHCOUNTS and AMC 8. Covers much of the material needed for success at Chapter MATHCOUNTS.
Class ID: 411 Instructor: Joshua Zucker (see website for bio)
Start Date: Oct 23, 2009 (Fri) End Date: Jan 29, 2010 (Fri)
Schedule: Fridays 7:30–9:00PM ET (4:30–6:00PM PT)
Enrollment Fee: \$150

Introduction to Counting & Probability
Description: Basic and intermediate counting concepts, including casework, multiplication, permutations, combinations, Pascal's triangle, probability, combinatorial identities, and the Binomial Theorem. Appropriate for both MATHCOUNTS and AMC students.
Class ID: 406 Instructor: Dave Patrick (see website for bio)
Start Date: Oct 8, 2009 (Thurs) End Date: Jan 14, 2010 (Thurs)
Schedule: Thursdays 7:30–9:00PM ET (4:30–6:00PM PT)
Enrollment Fee: \$195 without text, \$225 with text



The Art of Problem Solving Online Classes

Order Form

www.artofproblemsolving.com

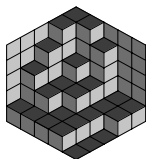
Introduction to Geometry	
Description:	An introduction to the concepts of geometry, including triangle similarity and congruence, complicated area problems, special quadrilaterals, the art of angle chasing, power of a point, 3-dimensional geometry, and geometric proofs.
Class ID: 405	Instructor: Naoki Sato (see website for bio)
Start Date: Oct 9, 2009 (Fri)	End Date: Apr 9, 2010 (Fri)
Schedule: Fridays 7:30–9:00PM ET (4:30–6:00PM PT)	
Enrollment Fee: \$345 without text, \$390 with text	

Algebra 2	
Description:	Fundamental concepts of algebra, including linear equations, systems of equations, quadratics, clever factorizations, complex numbers, graphing, functions, sequences and series, special functions, exponents and logarithms, and more.
Class ID: 419	Instructor: Richard Rusczyk (see website for bio)
Start Date: Sept 30, 2009 (Wed)	End Date: Jan 27, 2010 (Wed)
Schedule: Wednesdays 7:30–9:00PM ET (4:30–6:00PM PT)	
Enrollment Fee: \$225 without text, \$275 with text	

Advanced MATHCOUNTS/AMC 8 (Early Fall Session)	
Description:	Designed for students preparing for MATHCOUNTS, the premier middle school mathematics contest in the US, and for the AMC 8. The class will cover much of the material needed for success at State and National MATHCOUNTS.
Class ID: 424	Instructor: Dave Patrick, Mike Greenberg (see website for bio)
Start Date: Sept 4, 2009 (Fri)	End Date: Nov 20, 2009 (Fri)
Schedule: Fridays 7:30–9:00PM ET (4:30–6:00PM PT)	
Enrollment Fee: \$150	

Advanced MATHCOUNTS/AMC 8 (Late Fall Session)	
Description:	Designed for students preparing for MATHCOUNTS, the premier middle school mathematics contest in the US, and for the AMC 8. The class will cover much of the material needed for success at State and National MATHCOUNTS.
Class ID: 412	Instructor: Joshua Zucker (see website for bio)
Start Date: Nov 11, 2009 (Wed)	End Date: Feb 17, 2010 (Wed)
Schedule: Wednesdays 7:30–9:00PM ET (4:30–6:00PM PT)	
Enrollment Fee: \$150	

Algebra 3	
Description:	Algebraic subjects covered include polynomials, functions, logarithmic equations, clever substitutions of variables, systems of equations, symmetric sums, advanced factoring methods, finite differences, and binomial expansion. Appropriate for AMC and AIME participants.
Class ID: 407	Instructor: Dan Zaharopol (see website for bio)
Start Date: Oct 7, 2009 (Wed)	End Date: Apr 7, 2010 (Wed)
Schedule: Wednesdays 7:30–9:00PM ET (4:30–6:00PM PT)	
Enrollment Fee: \$345 without text, \$395 with text	



The Art of Problem Solving Online Classes

Order Form

www.artofproblemsolving.com

AMC 10 Problem Series (Early Fall Session)

Description: Designed for students preparing for the AMC 10. The class will consist of discussion of problems from past exams, as well as strategies for taking the test. The AMC 10 is an exam for students in 10th grade and below that serves as a first test in the series of contests used to determine the US IMO team.

Class ID: 423 **Instructor:** Paul Ryu (see website for bio)

Start Date: Sept 10, 2009 (Thurs) **End Date:** Dec 3, 2009 (Thurs)

Schedule: Thursdays 7:30–9:00PM ET (4:30–6:00PM PT)

Enrollment Fee: \$150

AMC 10 Problem Series (Late Fall Session)

Description: Designed for students preparing for the AMC 10. The class will consist of discussion of problems from past exams, as well as strategies for taking the test. The AMC 10 is an exam for students in 10th grade and below that serves as a first test in the series of contests used to determine the US IMO team.

Class ID: 413 **Instructor:** Valentin Vornicu (see website for bio)

Start Date: Oct 20, 2009 (Tue) **End Date:** Jan 26, 2010 (Tue)

Schedule: Tuesdays 7:30–9:00PM ET (4:30–6:00PM PT)

Enrollment Fee: \$150

AMC 12 Problem Series (Early Fall Session)

Description: Designed for students preparing for the AMC 12. The class will consist of discussion of problems from past exams, as well as strategies for taking the test. The AMC 12 is the first exam in the series of contests used to determine the US IMO team.)

Class ID: 422 **Instructor:** Valentin Vornicu (see website for bio)

Start Date: Sept 9, 2009 (Wed) **End Date:** Dec 2, 2009 (Wed)

Schedule: Wednesdays 9:00–10:30PM ET (6:00–7:30PM PT)

Enrollment Fee: \$150

AMC 12 Problem Series (Late Fall Session)

Description: Designed for students preparing for the AMC 12. The class will consist of discussion of problems from past exams, as well as strategies for taking the test. The AMC 12 is the first exam in the series of contests used to determine the US IMO team.)

Class ID: 414 **Instructor:** Sean Markan (see website for bio)

Start Date: Oct 19, 2009 (Mon) **End Date:** Jan 25, 2009 (Mon)

Schedule: Mondays 7:30–9:00PM ET (4:30–6:00PM PT)

Enrollment Fee: \$150

Intermediate Counting & Probability

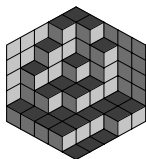
Description: Counting subjects covered include clever one-to-one correspondences, principle of inclusion-exclusion, generating functions, combinatorics, recursion, conditional probability.

Class ID: 421 **Instructor:** Sean Markan (see website for bio)

Start Date: Oct 13, 2009 (Tue) **End Date:** Mar 2, 2010 (Tue)

Schedule: Tuesdays 7:30–9:00PM ET (4:30–6:00PM PT)

Enrollment Fee: \$275 without text, \$315 with text



The Art of Problem Solving Online Classes

Order Form

www.artofproblemsolving.com

AIME Problem Series A

Description: Preparation for the AIME, the second in the series of tests used to determine the United States team at the International Math Olympiad. Many top colleges also request AIME scores as part of the college application process.

Class ID: 415 **Instructor:** Valentin Vornicu (see website for bio)

Start Date: Dec 3, 2009 (Thurs) **End Date:** Mar 4, 2010 (Thurs)

Schedule: Thursdays 9:00–10:30PM ET (6:00–7:30PM PT)

Enrollment Fee: \$150

AIME Problem Series B

Description: Preparation for the AIME, the second in the series of tests used to determine the United States team at the International Math Olympiad. Many top colleges also request AIME scores as part of the college application process.

Class ID: 416 **Instructor:** Naoki Sato (see website for bio)

Start Date: Dec 2, 2009 (Wed) **End Date:** Mar 3, 2010 (Wed)

Schedule: Wednesdays 7:30–9:00PM ET (4:30–6:00PM PT)

Enrollment Fee: \$150

Precalculus

Description: Introduction and evaluation of trigonometric functions, trigonometric identities, complex numbers, exponential form of complex numbers, De Moivre's Theorem, geometric representation of complex numbers, roots of unity, applications of complex numbers to geometry, two-dimensional and three-dimensional vectors and matrices, determinants, dot and cross product, applications of vectors and matrices to geometry.

Class ID: 409 **Instructor:** Richard Rusczyk (see website for bio)

Start Date: Dec 4, 2009 (Fri) **End Date:** Apr 16, 2010 (Fri)

Schedule: Fridays 7:30–9:00PM ET (4:30–6:00PM PT)

Enrollment Fee: \$275 without text, \$315 with text

Precalculus

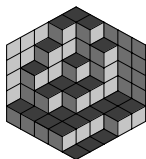
Description: A course in single-variable calculus. This course covers limits, continuity, derivatives and their applications, definite and indefinite integrals, infinite sequences and series, plane curves, polar coordinates, and basic differential equations. At the conclusion of the course, students should have sufficient preparation to take the AP Calculus BC exam; however, "AP exam preparation" is not the main focus of the course.

Class ID: 410 **Instructor:** Dave Patrick (see website for bio)

Start Date: Oct 12, 2009 (Mon) **End Date:** Apr 19, 2010 (Mon)

Schedule: Mondays 7:30–9:30PM ET (4:30–6:30PM PT)

Enrollment Fee: \$545 (includes text)



The Art of Problem Solving Online Classes

Order Form

www.artofproblemsolving.com

WOOT	
Description:	Art of Problem Solving Worldwide Online Olympiad Training is a 7-month Olympiad training program consisting of lectures and Olympiad testing. Due to sponsorship from D. E. Shaw group, Jane Street Capital, and Two Sigma Investments, all 2009 Math Olympiad Program participants are invited to join WOOT for free. Therefore, WOOT participants will be training with the top students in the United States.
Class ID: 403	Instructor: Various (see website for bio)
Start Date: Sep 8, 2009	End Date: Apr 21, 2010
Schedule: Every other Monday or Thursday	
Enrollment Fee: \$695 before Aug 15, \$845 after August 15	

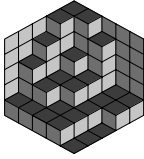
PLEASE NOTE: Problem Series courses such as our MATHCOUNTS Problem Series course are designed for preparation for specific prominent national programs. There are no problem sets in a Problem Series course; extra problems are provided to students via the course message board. See our website for more details.

Suitability guides for each of the subject courses are available online on the Enroll page of the Classes section of our site. Join our mailing list online to be informed immediately when new classes are offered.

Provided there is space remaining in the class, enrollments for a course will be accepted until two weeks after the course begins. Please check that there is space available in your desired course before submitting the enrollment form by visiting www.artofproblemsolving.com and viewing the Enroll page of the classes section. (If the class is full, there will be a note saying so at the end of the class description; otherwise, there will be enrollment buttons, meaning that space is still available.)

Enrollment is on a first come, first served basis.

Please mail enrollment form to: AoPS Incorporated, P.O. Box 2185, Alpine, CA 91903-2185, or if paying by credit card you may fax to (619) 659-8146.



The Art of Problem Solving Online Classes

Order Form

www.artofproblemsolving.com

Terms and Conditions of AoPS Online Classes

The following are the terms and conditions of this Agreement between the Student, the Student's parent or guardian (Parent) if the Student is under 18 years old, and AoPS Incorporated.

1. **Student** - The Student is hereby agreeing to attend a particular Online class provided by AoPS. AoPS conducts these Online classes through the use of a chat room. The Student has selected the particular class (Class) and been informed of the title and description of the Class, the schedule of meetings, the length of each session, and the cost of the Class. The Student and Parent agree to pay the cost in exchange for being allowed to attend each session Online.

2. **Payment Rules** - Payment in full is required prior to the start of the first session. If payment in full is not received by AoPS by the start of the third session, AoPS retains the right at its sole discretion to prevent the student from having access to any further sessions. If a Student elects to terminate their attendance in this class, and AoPS receives notification from the Student (or Parent) no later than the start of the third session, AoPS will refund the entry cost within 30 days of its receipt of the notification. No refunds are permitted once the third session has begun.

3. **AoPS Privacy Policy** - The AoPS Privacy Policy is contained in a separate document and is hereby made an integral part of this Agreement.

4. **Student Conduct** - The Student and Parent understand that all information, data, text, software, music, sound, photographs, graphics, video, messages or other materials (Content), whether publicly posted or privately transmitted, are the sole responsibility of the person from which such Content originated. This means that the Student, and not AoPS, is entirely responsible for all Content that the Student uploads, posts, e-mails, transmits or otherwise makes available for the Class. While AoPS makes reasonable efforts not to allow offensive, indecent or objectionable material on this site, by attending the Class, the Student may be exposed to Content that is offensive, indecent or objectionable. Under no circumstances will AoPS be liable in any way for any Content, including, but not limited to, any errors or omissions in any Content, or for any loss or damage of any kind incurred as a result of the use of any Content posted, e-mailed, transmitted or otherwise made available for the Class.

The Student agrees as follows:

- a. not to harm minors or cause minors to be harmed in any way;
- b. not to forge headers of postings, e-mails, or otherwise manipulate identifiers in order to disguise the origin of any Content transmitted for the Class;
- c. not to impersonate any person or entity, including, but not limited to, an AoPS employee, forum moderator, guide or guest, or falsely state or otherwise misrepresent your affiliation with any person or entity;
- d. not to upload, post, e-mail, transmit or otherwise make available any Content that is unlawful, harmful, threatening, abusive, harassing, torturous, defamatory, vulgar, obscene, libelous, invasive of another's privacy, hateful, or racially, ethnically or otherwise objectionable;
- e. not to upload, post, e-mail, transmit or otherwise make available any Content that you do not have a right to make available under any law or under contractual or fiduciary relationships (such as inside information, proprietary and confidential information learned or disclosed as part of employment relationships or under nondisclosure or confidential disclosure agreements);
- f. not to upload, post, e-mail, transmit or otherwise make available any information that you consider confidential in nature, which posting may cause you or any third party to lose rights to the intellectual property associated with the information;
- g. not to upload, post, e-mail, transmit or otherwise make available any Content that infringes any patent, trademark, trade secret, copyright or other proprietary and lawful rights of any party;
- h. not to upload, post, e-mail, transmit or otherwise make available any unsolicited or unauthorized advertising, promotional materials, "junk mail," "spam," "chain letters," "pyramid schemes," or any other form of solicitation. You understand that such postings may violate laws of various jurisdictions, and that you may be subject to prosecution or to civil suit;
- i. not to intentionally or unintentionally violate any local, state, national or international law;
- j. not to "stalk" or otherwise harass another; or collect or store personal data about other Students;
- k. to upload, post, e-mail, transmit or otherwise make available only material which the Student has created and to which the Student owns the copyrights; and
- l. to report any violations of the above immediately to AoPS.

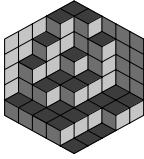
6. **Integration** - This Agreement, together with any other documents referenced herein constitutes the entire agreement between the parties and supersedes all previous agreements, promises, proposals, representations, understandings, and negotiations, whether written or oral, between the parties respecting the subject matter hereof.

7. **License to Copy and Distribute Student Material** - AoPS does not claim ownership of the Content you submit or make available for inclusion for the Class. However, with respect to Content you submit or make available for the Class, the Student and Parent hereby grant a non-exclusive, perpetual, irrevocable, fully sub-licensable, world-wide, fully-paid-up license which allows AoPS to use, distribute, reproduce, modify, adapt, publish, translate, publicly perform and publicly display such Content (in whole or in part) and to incorporate such Content into other works in any format or medium now known or later developed. The Student or Parent does not retain a right of attribution.

8. **Governing Law** - This Agreement shall be governed by the laws of the State of California without regard to any conflicts of law provisions.

9. **Jurisdiction and Venue** - The parties agree to submit exclusively to the personal jurisdiction of a proper court located only in the County of San Diego, State of California. Both parties agree that venue is proper in the County of San Diego, State of California. The parties agree to waive any defenses based on venue, inconvenience of forum, the lack of personal jurisdiction, and the adequacy of service of process (as long as the party was at least notified by the email address provided) in any suit or action brought in the State of California.

10. **Time Limitations** - Regardless of any statute or law to the contrary the parties agree that any claim or cause of action arising out of this Agreement or related to the Class must be filed within one year after such claim or cause of action arises or forever be barred.



The Art of Problem Solving Online Classes

Order Form

www.artofproblemsolving.com

11. **Waiver** - The failure of either party to exercise or enforce any right or provision of this Agreement shall not constitute a waiver of such right or provision.

12. **Enforceability** - In the event any one or more of the provisions of this Agreement shall for any reason be held to be invalid, illegal or unenforceable, the remaining provisions of this Agreement shall be unimpaired, and the invalid, illegal or unenforceable provision shall be replaced by the provision which, being valid, legal and enforceable, comes closest to the intention of the parties underlying the invalid, illegal, or unenforceable provision.

13. **Warranties** - AoPS makes no warranty that: (a) the Class will meet your requirements, (b) the Class will be uninterrupted, timely, secure, or error-free, (c) the results that may be obtained from the Class will be accurate or reliable, (d) the quality of any products, services, information, or other material purchased or obtained by you relating to the Class or not will meet your expectations, and (e) any errors in the software will be corrected.

AOPS MAKES NO WARRANTIES OF ANY KIND, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. AOPS SHALL NOT HAVE ANY LIABILITY WHATSOEVER FOR ANY COVER OR SET OFF NOR FOR ANY INDIRECT, CONSEQUENTIAL, EXEMPLARY, INCIDENTAL, OR PUNITIVE DAMAGES, INCLUDING LOST PROFITS, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

14. **Assignments** - Neither party may assign or delegate any or all of its rights or its duties or obligations hereunder without the consent of the other party, which consent shall not be unreasonably withheld or delayed; provided, however, that either party may assign this Agreement, without the need to obtain consent of the other party, to an affiliate of such party or to a successor in interest to substantially all of the business of that party to which this Agreement relates. An assignee of either party authorized hereunder shall be bound by the terms of this Agreement and shall have all of the rights and obligations of the assigning party set forth in this Agreement. An assignment which is in violation of this Agreement is void.

15. **No Construction Against Drafter** - If an ambiguity or question of intent arises with respect to any provision of this Agreement, the Agreement will be construed as if drafted jointly by the parties and no presumption or burden of proof will arise favoring or disfavoring either party by virtue of authorship of any of the provisions of this Agreement.

16. **Force Majeur** - Either party shall be excused from performance and shall not be liable for any delay in whole or in part, caused by the occurrence of any contingency beyond the reasonable control either of the excused party or its subcontractors or suppliers including, but not limited to, war, sabotage, insurrection, riot or other act of civil disobedience, act of public enemy, failure or delay in transportation, act of any government or any agency or subdivision thereof affecting the terms hereof, accident, fire, explosion, flood, severe weather or other act of God, or shortage of labor or fuel or raw materials.

17. **Attorneys' Fees** - If any legal action is brought to construe or enforce any provision of this Agreement, the prevailing party shall be entitled to receive its reasonable attorneys' fees and court costs in addition to any other relief it may receive.

18. **Use of Content** - All materials and resources presented on or accessed for the Class is provided by AoPS as a service to its visitors and readers and may be used for information purposes only. AoPS assumes no responsibility for errors or omissions in these materials. AoPS makes no commitment to update the information contained herein.

19. **Limits for Data Storage and Use** - AoPS may establish general practices and limits concerning the Class, including without limitation the maximum number of days that any Content contributed by you will be retained by AoPS, the maximum disk space that will be allotted on AoPS server space on your behalf, and the maximum number of times (and the maximum duration for which) you may access in a given period of time. AoPS has no responsibility or liability for the deletion or failure to store any messages and other communications or other Content maintained or transmitted by AoPS. AoPS reserves the right to log off accounts that are inactive for an extended period of time.

20. **No Sale or Use** - The Student agrees not to reproduce, duplicate, copy, sell, resell or exploit for any commercial purposes, any portion of the material made available for the Class. This does not apply to the resale of any books purchased by the Student.

21. **Copyright Infringement Claims** - If the Student or Parent believes that any material on this web site is an infringement of the Students or Parent's copyrights, The Student or Parent must notify the AoPS Agent to Receive Notification of Claimed Infringement in a form and with the information specified under US copyright law. See the instructions on the US Copyright Office web site, www.copyright.gov. The name and contact information of the AoPS Agent are contained elsewhere on this site.