

- 1. AMC12 Top 5%, Score 130.5 (G11); AMC10 Top 1%, Score 138, Distinguished Honor Roll, AIME 8/15 (G10)
Grade 10, 11, International**

Award won by participating in AMC exams held by Mathematical Association of America (MAA) and score higher than international cut-off of Top 1% or Top 5%. Qualified for AIME (American Invitational Math Examination) twice in G10 and G11.

Participated in Olympiad Math training programs provided by AoPS, Gauss Math, and Awesome Math since 8th Grade. Actively involved in Princeton high school team lecture and review sessions. Attended Woot (Worldwide Online Olympiad training) and proof-based contest USAMTS to improve competition level beyond AMC and AIME. Dedicated 8 hrs/wk, 10 wks/yr

- 2. Princeton Univ. Math Competitions Indv. Finalist #28, Number Theory Indv. #8, Team Power Round #7
Grade 11, National**

Award won by participating PUMAC (Princeton University Mathematics Competition) and scoring as Top 10 in Number Theory, and Top 30 in individual total. Selected from more than 2000 global participants in 2024.

Participated Princeton High School Math team training. Passed two rounds of pre-screening to join PHS Apricot team. Dedicated 10 hours per week of self-study preparing for problem sets.

- 3. Stanford Math Tournament Indv. Top 10%, Team Guts Round Top 10%, Distinguished Honorable Mention
Grade 11, National**

Award won by participating SMT (Stanford Math Tournament), and scoring as Top 10% in individual total. SMT is one of the most challenging national contest event with more than 2000 global participants in 2025.

Participated in online Olympiad Math training by AoPS. Dedicated 10 hours per week of focused math practice on past competitions. Self-study

advanced topics in algebra, number theory, geometry, combinatorics. Attend math camps and joined math circle to learn proof-based problem-solving skills.

4. American Regional Math League Team National #6, Team High Medal

Grade 10, National

Team placed national #6 and I received the Team High Medal by being the highest scoring individual in the team. Selected by two rounds of pre-screening tryout to represent West Windsor & Princeton regional league (WWPA) in 2023, 2024, and 2025.

ARML (American Regional Math League) is one of the most competitive high-school mathematics team competitions in US. Regional teams in NJ are exceptionally selective. Participated in joint Math training by Princeton High School and West Windsor High School math teams. Dedicated 10 hours per week of focused practice. Organized group discussions.

5. PUMAC Team National Top 1 Award

Team placed national Top 1. Received the Team National #1 medal. Pre-selected to join PHS Apricot team by two rounds of pre-screening tryout. Award won by competing against 70+ teams nationally and scored highest in team round and power round total.

PUMAC is one of the most prestigious high-school mathematics team competitions in the United States. Pre-selection is required. Participated in Math training held by Princeton High School Math team. One week committed to group discussion and research on team power round. Dedicated 10 hours per week of self-study preparing for mock problem sets.

6. National Merit Scholarship Program Commended Student (50,000/300,000)

Grade 11, National

Honor award recognized by the National Merit Scholarship Corporation (NMSC) for scoring significantly higher than the national norm in PSAT/NMSQT standardized test in G11.

Participated on-line training program for SAT and PSAT. Dedicated 6 hours per week of self-study on reading and writing mock problem sets.

6. 2025 National Recognition Program for Outstanding Academic Achievement, School Recognition Award (College Board)

7. 2025 Feb. HMMT (Harvard MIT Math Tournament), team round #25, Guts round #52. 11th grade, selected to represent West Windsor and Princeton High Schools to participate in the largest and most prestigious Math Tournament.

8. CCIR (Cambridge Center for International Research) Research Mentorship Program. Grade 11

Participate 1-on-1 Research Mentorship Program. Leverage Deep Learning (DL) and Machine Learning (ML) methods to predict wildfire occurrence. Apply classification algorithms to model wildfire data. Presented 20-pg paper on CCIR Research Symposium, to be published in 2025 IEEE Conf.

9. STS Regeneron, IEEE Research Conference.

Grade 12

Participate STS Regeneron Research Competition. Researched long-term fine-grained Tree Change Detection (TCD) with deep learning Hyperbolic Siamese Network (HSN) trained on UAV-camera-based dataset. Research Topic: A Hyperbolic Siamese Model for Tree Growth Monitoring Researched Hyperbolic Neural Network on image recognition; paper submitted to 2025 STS Regeneron; to be published in 2025 IEEE Conference (ICMLCA)

10. North Carolina Math Camp (NCMC) advanced session II

Grade 12

Researched advanced topics on vector calculus, topology, linear algebra and graph theory. Write thesis on derivation & application of Stoke theorem, Divergence theorem.

Researched topics on vector calculus, topology, linear algebra and graph theory; Presented 15-pg thesis on derivation & application of Stoke theorem.

11. Stanford Math Circle, intensive advanced enrichment program for high school students

Grade 11, 12

Weekly discussions on Number Theory, Graph Theory, Topology & Algebraic Geometry led by mathematicians, with guest speaker sessions and group projects on competition math topics.

12. Program in Algorithm and Combinatorial Thinking (PACT)

Grade 10

The program lays foundation for theoretical computer science, covers discrete mathematics including number theory and combinatorics, proof techniques such as induction.

13. Summer research guided by Princeton University Professor

Grade 10

Study financial mathematics, discrete mathematics, numerical analysis. Thesis accepted by the 4th International Conference on Business and Policy Studies (CONF-BPS 2025).

14. Princeton High School Math Team & Club, competing in AMC,

AIME, HMMT, PUMAC, SMT, MMATH, ARML, Team Lead, Major

Contributor.

Grade 10, 11, 12

Led team to competitions ARML, HMMT, PUMAC, SMT; achieved ARML National 6th, PUMAC 5th rank; organized regional math tournament w/ 200+

participants. Organized multiple Mathematics Competition field trips to HMMT, ARML, SMT and PUMAC as team lead, helped team with registration and logistic arrangements.

15. Founded card games club, recruited two vice presidents, and attracted more than 40 club members

Card Games Club Founder and President, First club of its kind in school history, leading two vice presidents and 40+ members
Organized and led weekly Friday meetings for 30+ members, hosting game sessions and inter-club card game competitions (UNO, Texas Hold'em, CLUE, Golf).

16. Princeton High School Fall Play 2025 - 2026 "Clue: The Stage Cast

Member. Grade 12

Cast in the school's fall comedic play through a competitive two-round audition process. Performed a major role in a consecutive four-day run of theater stage play, participate audition, work closely with director and screen writer. Acted in a four-day performance run in school theatre with 1000+ hundred audiences, working closely with the director and crew throughout the rehearsal

17. Play in Princeton High School Varsity Fencing team

Earned 1 of 3 starting positions on 4-year varsity team; competed in interscholastic matches. Team won 2023-2024, 2024-2025 District championships 2nd place twice, recruited to Medeo Fencing Club, NJ, competed in Cetrulo in Drew University
Participated varsity team fencing since eighth grade. Team won 2023-2024, 2024-2025 District championships 2nd place twice. Recruited to Medeo Fencing Club, NJ. Participated Princeton University fencing camp 2024.

18. Piano performer, train & perform since age 7

Earned Trinity College London Piano Level 8 Certificate & performed in various recitals and events. Performed with high school orchestra, at local churches, and for public events, achieved success in multiple piano competitions. Received 2025 the 8th US Starlight Youth Talent Competition Piano Bronze Award.

19. Princeton High School Badminton Club Captain

Coordinated with school admin to host weekly meetings across six courts for over 30 participants. Organized the first Badminton Tournament in PHS (40 players/refs), led members to New Jersey High School Badminton Tournament & local competitions.

20. Participate Pre-collegiate Credit Course

UCLA eSCIP Pre-collegiate Summer Session. Studied undergraduate Multivariate Calculus, topic includes vector calculus, line integral and surface integral, completed group project and workshops with distinction.

21. Teaching Assistant, Rutgers University Math Corps

Mentored middle school campers in math, collaborating with Rutgers professor and college students. Prepared over 60 middle schoolers for their math curriculum and organized camp activities, while studying topics like linear algebra and group theory
Tutoring and grading for Middle School campers. Lead group discussions and review sessions. Responsible for the safety and organization for the camp events.

22. Team lead and tutor for Princeton Middle School Math Team

Princeton Middle School Math Team, the middle school division of Princeton math competitions. Instruct middle school math team (30 ppl) for math competition topics, organize the team to participate AMC8, AMC10, Mathcount competitions.

23. Participate community activities

Princeton High School community. IEEE Integrated STEM Education Conference volunteer; Ridgeview forest preservation volunteer; PHS annual asian festival interpreter and volunteer;