MTY Academy Syllabus

Course Name: AMC 10 Problem Solving

This course is designed to prepare students for the AMC 10, the first exam in the series of competitions leading to selection for the United States team at the International Mathematical Olympiad. Additionally, many top-tier colleges consider AMC scores as part of their admissions process. The course emphasizes the development of problem-solving skills through in-depth analysis and discussion of problems from past AMC 10 examinations.

Curriculum

The AMC 10 tests mathematical problem solving with arithmetic, algebra, counting, geometry, number theory, probability, and other secondary school mathematical topics. Problems are designed to be solved by students without any background in calculus or trigonometry.

Duration: **20** Lectures (1.5 hours each)

Objective: This course is designed to provide comprehensive preparation for the AMC 10 competition scheduled for November 2025. The curriculum includes an in-depth review and analysis of problems from the past **20** years of AMC 10 exams, with a focus on developing effective problem-solving strategies and mathematical thinking skills.

Course Outline:

Session 1 (10 lectures from June 3 to July 5)

1. 2024 AMC 10 Exam
2. 2023 AMC 10 Exam
3. 2022 AMC 10 Exam
4. 2021 AMC 10 Exam
5. 2020 AMC 10 Exam
6. 2019 AMC 10 Exam
7. 2018 AMC 10 Exam
8. 2017 AMC 10 Exam
9. 2016 AMC 10 Exam
10. 2015 AMC 10 Exam

Session 2 (10 lectures from July 14 to August 14)

1. 2014 AMC 10 Exam
2. 2013 AMC 10 Exam
3. 2012 AMC 10 Exam
4. 2011 AMC 10 Exam
5. 2010 AMC 10 Exam
6. 2009 AMC 10 Exam
7. 2008 AMC 10 Exam
8. 2007AMC 10 Exam
9. 2006 AMC 10 Exam
10. 2005 AMC 10 Exam

Students, particularly those aspiring to qualify for AMIE, are strongly encouraged to take part in both AMC 10 Session 1 and Session 2.

Attendance Policy: Students are expected to attend each scheduled class meeting. Regular attendance is essential to your success in this course. If you miss a class, you are responsible for the material covered.

Class Recordings will be posted online following each class session. Students are expected to complete a full AMC 10 exam prior to each lecture. During class, the instructor will provide a detailed discussion of the *last ten problems from the assigned exam*. Additional questions will be addressed based on student inquiries and areas of difficulty.