

MAA American Mathematics Competitions

2020 AMC 10/12

Participation Guide in Hong Kong & Macau

What are the American Mathematics Competitions?

The American Mathematics Competitions (AMC) are a series of examinations sponsored by the Mathematical Association of America (MAA), which consists of AMC 8, AMC 10, AMC 12 and AIME for every academic year. AMC aims to build mathematical knowledge and problem-solving skills in middle and high school students, and consequently enhance their capacities in analytic thinking. The first AMC took place in New York area back in 1950. Today, AMC has grown to over 300,000 students participating annually, in over 6,000 schools around the world. The official website for AMC is

<http://www.maa.org/amc>

What are the AMC 10 and AMC 12?

Geared towards high school students, the AMC 10 and AMC 12 are **25-question, 75-minute, multiple choice examinations** in high school mathematics designed to promote the development and enhancement of problem solving skills. For each question, 6 points are given for correct answer, 1.5 points for blank answer, and 0 points for incorrect answer. The full score is 150 points.

Who are eligible to participate in the AMC 10 and AMC 12?

Students with a passion for problem-solving, who are in **grade 10 or below** and **under 17.5 years of age** on the day of the competition are eligible to participate in the AMC 10, and who are in **grade 12 or below** and **under 19.5 years of age** on the day of the competition are eligible to participate in the AMC 12.

When are the AMC 10 and AMC 12 in Hong Kong and Macau?

In Hong Kong and Macau, the competition date for the **AMC 10A** and **AMC 12A** is **Friday, January 31, 2020** (Note that January 25~28 are public holidays in Hong Kong for Lunar New Year), and for the **AMC 10B** and **AMC 12B** is **Thursday, February 6, 2020**. For each version A or version B, the competition must be administered on the scheduled date and finished before **1pm** Hong Kong time. There are overlapping questions on the same version of AMC 10 and AMC 12, so if a school is offering both competitions on a given day, they must be given at the same time. For this same reason, a student may only take one examination per exam date.



MAA AMC
American Mathematics Competitions

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Pre-Exam Preparation

How to register for the AMC 10 and AMC 12 in Hong Kong and Macau?

Each school located in Hong Kong and Macau can register for the AMC 10 and AMC 12 **with Jiangan Yao**, the AMC international group leader for Hong Kong and Macau. The registration fee is **HKD 100** per student.

Registration procedure

- By **January 7**, send the estimated participation number for each version of the AMC 10 and AMC 12, together with basic school information (School name, School address, Approximate total enrolment, Contact person's name, phone number and email address, Lowest grade and highest grade in the school).
- By **January 21**, send the complete participating student information (Last Name, First Name, Date of Birth, Grade, Gender) in Excel or Number format.

Prepare students for the AMC 10 and AMC 12

- Discuss questions and solutions from previous AMC competitions so that students will know what type of questions to expect when they take the AMC 10 and AMC 12 this year.
- All the past AMC 10 and AMC12 questions can be found on the website of The Art of Problem Solving:
https://www.artofproblemsolving.com/wiki/index.php/AMC_10_Problems_and_Solutions
https://www.artofproblemsolving.com/wiki/index.php/AMC_12_Problems_and_Solutions

Pre-exam checklist for the AMC 10 and AMC 12

- Expect to receive the answer forms and the competition booklets around **January 30**

for the AMC 10A and AMC 12A, and around **February 4** for the AMC 10B and AMC12B from the local carrier.

- The day before the competition, have students fill in their Last Name, First Name as well as the assigned Competition ID on the answer forms, collect them for redistribution on the competition date. Please review all answer forms to ensure that they have been marked correctly!
- Reserve a quiet room for at least 1 hour and 45 minutes on competition date, to allow time for pre- and post-examination activities. All the students in your school must take the competition at the same time.
- Encourage participation by students who have not taken these competitions before. Help them prepare and make sure they know what to expect. For new students, getting even a few questions correct is an accomplishment. Make sure they set appropriate goals for themselves, so that the competition is a positive experience for every student.
- The day before the competition, remind students of the time and place of the AMC 10 and AMC 12.
- Obtain a supply of pencils with good erasers, and blank scratch paper. Inform students that no aids are permitted other than blank scratch paper, blank graph paper, rulers, compasses, protractors, and erasers.

Important Dates

Jan 7	Pre-registration deadline
Jan 21	Registration deadline
Jan 31	AMC 10A & AMC 12A
Feb 6	AMC 10B & AMC 12B
Mar 11/19	AIME I / AIME II

Competition Day

Before the exam

Do not open the test packets until just before the start of the competition.

- Seat students so they are separated by an empty space, if possible.
- Hand out the previously completed answer forms and provide pencils with good erasers and unmarked scratch paper for each student.
- Open the test packets, hand out the AMC 10 or AMC 12 booklets and inform the students that they are not to open past the cover page until instructed to do so.
- Instruct students to read the entire front page of the AMC 10 or AMC12 booklet. Allow 3 minutes for students to review the instructions in the front page. Remind students that 6 points are given for a correct answer, 1.5 points for a blank answer, and 0 points for an incorrect answer. Students should consider this scoring system as they decide whether or not to guess on a question.
- Tell your students to be as certain as possible of their answers before they mark the answer form. Tell your students to take special care to mark the answer in the row that corresponds to the correct problem number.
- Ask if there are any questions about examination procedures. Inform students that talking or asking questions during the competition is not allowed. They must do their own work.
- When it is time to begin, tell students to flip open the competition booklet to see all the problems. Remind students that there are 25 problems and that they have 75 minutes to complete the competition. Then tell them to BEGIN.

During the exam

- The competition should be proctored continuously as you would for any important test.
- Provide as quiet an environment as possible.
- Be sure that no student has access to calculator or any calculating device during the competition.
- Warn any students whose eyes wander, and disqualify any students that are clearly copying answers or collaborating.
- Announce when there are 15 minutes left and again when there are 5 minutes left.
- When time is up at 75 minutes, tell the students to STOP and collect the answer forms and the competition booklets as quickly as possible.
- As the answer forms are handed in, check that each student's name is correct on the form and that the Competition ID is bubbled in completely.
- Inform the students that the competition and solutions may not be discussed with anyone outside of the room either orally or digits/ally, i.e. email, internet, or social media of any type until one day after the competition date. The competition booklets must be collected from the students directly after the competition, but they may be returned on or after February 3, 2020 for the AMC10A and AMC 12A, on or after February 10, 2020 for the AMC 10B and AMC 12B.

Competition problems will be displayed in both English and Traditional Chinese.

Post-Exam Process

After the exam

- Please do not score the answer forms.
- Check student answer forms to make sure every student have filled in **complete and correct Name and Competition ID**.
- **Arrange the answer forms in ascending order by Competition ID** with each form facing the same direction with the same side up.
- Place the answer forms in a sealed envelope, and send to **Jiangang Yao, Room 4110, 41/F, Hong Kong Plaza, 188 Connaught Road West, Sai Wan** by a trackable mail service within 24 hours after the competition is finished.
- The AMC 10 and AMC 12 student answer forms submitted for scoring will not be returned to your school.
- You may discuss the competition and solutions with your students. Remember that there will be schools taking the competition in other locations at different times. Hence, it is important that no one discuss problems and solutions in any online or public forum on the competition date and one day after.

AMC Results and Awards

- By **March 31**, the report for the scores of every individual student will be sent to your school in electronic format. Please retain this digital report for future reference, either in your files or with the student counselor's office. Many students cite these scores on applications to college and beyond.
- By **April 30**, detailed analysis reports with global comparison, as well as school ranking and honors will be available.
- By **May 31**, student participation and award certificates will be distributed.

Special Notes

- **Early Administration is NEVER permitted** and will lead to a disqualification of the results. Such an administration would

jeopardize the validity of all scores from other schools.

- If your school is closed on the competition date due to severe typhoons, rainstorms or other special situations, the AMC 10 and AMC12 exam has to be cancelled and the registration fees will not be charged. You may choose to administer the competition unofficially after the school reopens.

AIME

What is the AIME?

The American Invitational Mathematics Examination (AIME) is an invitational exam for the top performers on the AMC 10 and AMC 12. The AIME is a **15-problem, 3-hour examination, and answers to all the problems are 3-digit integers**.

Who is eligible to participate in the AIME?

It is an honor for a student to be invited to take the exam. AIME qualification parameters vary with the results of the AMC 10 and AMC12 competitions. For AMC 10, at least the top 2.5% of all scorers on each version are invited, and for AMC 12, at least the top 5% of all scorers on each version are invited. The reason for this difference is to include the top younger students, while making sure that the AIME is an appropriate experience for all invited. A cutoff score will be announced for each exam based on the distribution of scores.

When is the AIME in Hong Kong and Macau?

In Hong Kong and Macau, the main competition date for AIME (the AIME I) is **March 11, 2020**, with an alternate date (AIME II) of **March 19, 2020**. Students to be invited for AIME will be notified in late February.