## I. Contents Of The Package

Your contest package contains:

1. This Teachers' Manual,
2. The AMC 8 Report Envelope (marked with your school ID),
3. A School Identification Form,
4. The Contest bundles,
5. A set of 10 Answer Forms for each bundle of 10 exams ordered
(Please check that the number of bundles corresponds to the number ordered. If not, call the AMC office as soon as possible.)
6. Solution Pamphlet Sets (if ordered) in sets of 10 .
7. Contest Manager's Envelope (contains a complimentary copy of the AMC 8 contest and solutions),

## II. Braille or Large Print Exams

1. Braille or Large Print exams (if ordered) will be sent under separate cover.
a. The time limit set by the Committee on the American Mathematics Competitions for visually impaired students is 70 MINUTES.
b. Please note that it is permissible for a certified teacher or a school administrator to read the questions to the student and mark the answers as directed by the student.

## III. Eligibility and Participation Schedule

1. Any student in grade 8 or below may participate.
2. The contest may be given either to the entire group of students at one time or during a regular mathematics class period of the students.

## Comment:

a. A discussion of academic integrity should take place with your students if they are to take the examination during their mathematics class period, and all copies of the contest should be retained by the teacher until after all administrations have taken place.
b. See Section VI on Page 3 for instructions relating to administering the contest on other dates.

## 1v. What Must Be Done Prior To

 November 19, 2002
## 1. Complete the following Pre-Exami-

 nation 1 rocesses associated with the AMC 8 Answer Forms:a. Stamp or print the Name and Address of your School (including ZIP code, if applicable) in the box in the upper right-hand corner on each form. DO NOT put any type of paste-on or adhesive address label on the form. If no stamp is available, the block could be filled in by using a computer program to print the information. COPIES OF ANSWER FORMS AND PREVIOUS YEAR'S ANSWER FORMS CANNOT BE ACCEPTED.
Please note that it is very important that each form is identified with your school name. We have no way to identify the answer form if the school name is omitted.
b. Have the students complete the following parts of the form. (The most common errors in the past have been blackening more than one circle in a column or not completely blackening the circles).
(1) Last Name
(2) First Name
(3) Middle Initial of their name
(4) Section Letter For each math class participating in the AMC 8, assign a different section letter of the alphabet (A-Z). These letters are assigned at the Contest Manager's discretion. At least 10 students should be assigned to each Section Letter. If you return results with Sections which have less than ten people, we will combine these Sections into a single Section. Certificates are given to the top 3 students in each section (see Page 8).
(5) Age, grade, and gender
c. Collect the Answer Forms for redistribution on the contest date.
d. Please make a final check to see if the forms have been marked correctly.
2. Review the Rules found on the package(s) of the AMC 8.
3. Discuss with your students the questions and solutions from previous AMC 8's so that they may see the type of questions to expect.
4. Review with your students the INSTRUCTIONS on the cover of the 2002 AMC 8 located inside the back cover of this manual.

5. The day before the contest remind students of the time and place of the AMC 8.
6. Make arrangements to mail the AMC 8 REPORT ENVELOPE(s) by FIRST CLASS MAIL.
7. Obtain a supply of: (a) \#2 lead pencils with good erasers, (b) unmarked scratch paper for use by the students, and (c) calculators for your class if you wish to use them. Students may not share a calculator.
Please inform participating students that no aids are permitted other than scratch paper, graph paper, ruler, erasers and calculators. Although no problems on the test will require the use of a calculator, any non-typewriter keyboard may be used.

## v. Instructions For Completing The School Identification Form

Several days before the contest date, please complete Items 1 through 4 (listed below) on the School Identification Form. Items 5 and 6 should be completed following the administration of the contest.

1. Stamp or write your school name and complete school mailing address in the box in the upper-right hand corner.
2. School ID -- Your School ID is found on your AMC 8 Report Envelope. Please CAREFULLY copy your School ID in the empty boxes under the words "School ID". All School ID's have six characters.
NOTE: Leave the School ID Section of this form blank if there is a question about marking the School ID correctly.

## Mark as follows:

Schools using U.S.A. ZIP Codes: Blacken the circles for 0-9 in each column for the five digits and blacken one circle of the letters A-J for the letter that has been assigned uniquely to your school.
Canadian Schools: All schools have a

School ID that follows this pattern: letter, digit, letter, blank, blank, letter. Blacken the correct circles under these 6 characters. Be sure to darken the blank circles (not the circles containing zeroes) for the two blanks in your School ID.
Foreign Schools: All schools have a School ID in which the six characters are letters (A-Z), unless the 4th and/or 5th characters are blanks. Blacken the correct circles under these six characters. If there are blanks in your School ID, be sure to blacken the blank circles (not the circles containing zeroes).
3. Using the "OTHER USE ONLY" grid, mark the total number of students attending your school.
4. Leave the section marked OFFICE USE blank.
5. Mark the number of completed Answer Forms Returned. Please do not count or return answer forms of students who were absent, blank forms or teacher "practice " forms.
6. Mark the proper circles for the date the contest was actually administered.

## VI. Policy Statements

## Statement 1

Official Et Clnofficial Administration of the AMC 8

## Early Administration

Administration on an earlier date is NEVER permitted and will lead to a disqualification of the results. Such an administration would jeopardize the validity of all scores from nearby or even distant schools.
Official Administration Window
Statement:
"The AMC 8 will be given officially on the first day that the school is open between Tuesday, November 19 and Tuesday, November 26. If the contest is not given on Tuesday, November 19, the principal must include an explanation indicating why the school was closed or describe briefly the academic conflict." (See the Certification Form $A$ on Page 9 or Form B on Page 11). Block scheduling is not a valid reason for giving the contest on two different days.
Please note: Because the contest may be given
officially during the "window" days as indicated above you must collect the students' contest booklets and instruct them not to discuss the contest questions and solutions outside of the school until after November 26.
If you are unable to give the contest on November 19 because:
a. your school is closed,
b. your school has an academic conflict,
c. the class periods have been shortened due to an assembly or other reason,
d. the majority of your best students will be on a field trip on contest day,
then a window date may be used.

## Unofficial Administration

Unofficial administration after the "window" period is permitted if it is impossible to take the contest during the " window." You do not have to call the American Mathematics Competitions office, but must write the reason on the certification form as indicated. The last date to take the contest unofficially is Friday December 13, 2002.

## Statement 2

## Irregularities

If it is clear to the Contest Manager or another proctor that a student has cheated, then the Manager must disqualify the student's score and not submit that student's AMC 8 ANSWER FORM for grading.
If there is inconclusive evidence of cheating, or an accusation without clear evidence, the Contest Manager must report this irregularity in writing when submitting the ANSWER FORMS for the school. This written report and the questionable ANSWER FORM(s) should be clearly identified, banded together and submitted along with the other ANSWER FORMS.

## Statement 3

## Follow-up Inquiries

The results of this AMC 8 are used to identify students with various levels of mathematical ability. To assure that this purpose is served, the Committee on the American Mathematics Competitions reserves the right to make inquiries about scores, to re-examine students and to disqualify scores if necessary. If the required security procedures are not followed, all scores from a school may be disqualified.

## Statement 4

## Refund/Credit Policy

If your school is unable to take the AMC 8, please use the materials as practice sets for the next year. WE DO NOT GIVE REFUNDS OR CREDITS.

## Statement 5

## Learning Disabilities

If you have students with learning disabilities, please call the Lincoln Office for clarification on eligibility. In most cases, students are given a 70minute time allowance to take the AMC 8. All such administrations must be documented on the reverse side of the Certification Form, by listing the student's name and circumstance.

## Statement 6

## Foreign Students and Non-Citizens

To benefit recent immigrants, students learning "English as Second Language" (ESL) may use a book or electronic type dual-language nontechnical dictionary between their native language and English. A recent immigrant may use the dictionary only the first time that he/she takes the AMC 8. The dictionary must be given to the school contest manager to examine and retain for the 24hour period preceding the test. The proctor must announce to other students that the ESL student(s) has/have been given special permission to use the dictionary during the contest.


## VII. Instructions For The Day

## Of The Contest

Do not open the contest bundle(s) until just before you are to hand the exams out to the students.

1. When the students arrive, seat them so they are separated by an empty space, if possible.
2. Hand out the Answer Forms which have previously been partially completed by the students.
3. Provide a \#2 lead pencil with a good eraser for each student.
4. Read the following instructions to the students:
a. This 40 -minute contest has 25 questions. You

will note that after the question number there is a row of five possible answers labeled A, B, C, D, and E. Only one answer is correct. Mark your answers to these problems in the rows indicated.
b. BE AS CERTAIN AS POSSIBLE OF YOUR ANSWERS BEFORE YOU MARK YOUR FORM. Forms which contain imperfect erasures may not be read by the scanner that is used to grade the contest.
c. Remark to Teacher: Some students may wish to keep a personal record of their answers by circling their answers on the contest booklet before they are marked on the form. This procedure is acceptable provided it does not consume too much time. However, the official answers will be the ones blackened on the answer form.
5. Next, open the contest bundle(s), hand out the AMC 8 and inform the students that they are not to open the contest booklet until instructed to do so.
6. As you hand out the contest, tell the students to disregard the front flap which contains instructions for the contest manager. Instruct students to read the entire front cover of the AMC 8. Allow at most 3 minutes to do this. You may inform students that the contest is a folded booklet and to be cautious about following the correct numeric sequence.
7. Ask if there are any questions about procedures. Inform the participants that they may not talk or ask any questions during the contest, and they must do their own work
8. Remind students that they have 40 minutes to complete the contest. Then tell them to BEGIN.
9. The contest should be proctored continually as you would for any important contest. Students whose eyes wander should be warned; students caught copying answers or collaborating must be disqualified. Try to provide as quiet a testing environment as possible.
10. Announce when there are 15 minutes left and when there are 5 minutes left.
11. When time is up, tell the students to STOP and have them sign their name in the space provided on the Student Answer Form. Collect the Answer Forms and exams as quickly as possible.
Inform the students that the contest and solutions may not be discussed with anyone outside of your school either orally, via eMail, www, copier or media of any type until after November 26. Tell students that their contest will be returned to them after that date.
12. Please do not grade the answer forms. They are to be sent to Lincoln for grading. Tell the students that their scores will be available no later than late December.

## VIII. What To Do Following The Contest

1. Insert the Answer Forms along with the School ID Form (placed on top), inside the AMC 8 Report Envelope.

## Comments:

a. Please arrange the forms by section with each form facing the same direction with the same side up and place the School Identification Form on top.
REMOVE ALL PAPER CLIPS, RUBBER BANDS OR NOTE PAPER ATTACHED TO ANY ANSWER FORMS. PLEASE FAN THE FORMS SEPARATING ANY THAT MAY BE STUCK TOGETHER.
b. A maximum of 200 forms should be placed in one envelope.
c. Do not return blank forms or teacher "practice" forms.
2. Complete the Certification Form A (only one form is needed) found on Page 9 or 11 (Homeschool),

and the Teacher Nomination/Sliffe Award Form on Page 13.
3. Ask your Principal or person with comparable title to sign the Certification Form and place it in the AMC 8 Report Envelope, seal and send it by First Class (please affix the proper postage before mailing) within 24 hours or as soon as possible after all administrations have taken place.

## General Comments:

* Indicate the number of packages you are returning in the space provided on the Report Envelope.
(1) Please be certain that the postage affixed to the AMC 8 Report Envelope is adequate for FIRST CLASS MAILING.
氲 The AMC 8 Student ANSWER FORMS sent to Lincoln for grading will not be returned.
* A $\$ 5$ charge will be assessed for rescoring.

4. Please note: After all of the Answer Forms have been delivered to the school office to be mailed, you may discuss the contest and solutions with your students under the following conditions which take into consideration the fact that there will be schools taking the contest in other locations at different times, and some will be taking the contest on other "window" dates.
a. Inform the students that the contest and solutions may not be discussed with anyone outside of your school either orally, via eMail, www, copier or media of any type until after November 26.
b. The contest booklets must be collected from the students. They may be returned after November 26 .

## IX. - Report Of Results

The AMC 8 will be centrally scored at the University of Nebraska in Lincoln, Nebraska.
Each school will receive the following reports:

1. A list of the top 20 students in your school.
2. A report for each section with a minimum of 10 students. This report lists the score of each student.
3. One combined report for all sections of size less than 10.
4. Tables of Item Difficulty associated with the par-
ticipants in your school.
5. A 2003 AMC 8 Registration Form.

Comment: This registration form is included with your results at the request of many AMC 8 School Contest Managers who wish to register before the beginning of the next school year.
6. A 2003 AMC 10/AMC 12 (formerly the American High School Mathematics Examination (AHSME)) Invitation Brochure will be included with your results if you have students with a high score. The date of the AMC 10/AMC 12 is Tuesday, February 11, 2003 and Wednesday , February 26, 2003. It is recommended that prior year AMC 10/AMC 12 exams be studied by these students.
7. A National Summary of Results and Awards which will include the names of the top-scoring students and a listing of the national award winners. This Summary will be sent following the complete analysis of results (generally during the month of February).

## PLEASE NOTE:

IF YOU DID NOT RECEIVE YOUR 2002 AMC 8 REPORT OF RESULTS BY FEBRUARY 1, 2003, PLEASE CALL THE AMC OFFICE at 800-5273690. ALL student answer forms returned for grading will be RECYCLED 60 days after the AMC 8.


## X. SPONSORSHIP BD THE AKAMAI FOUNDATION

In February 2001, just as the AMC 10 and AMC 12 were being given and the AIME 2001 was going to press, the Akamai Foundation of Boston made a large charitable gift to the Mathematical Association of America (MAA) on behalf of the American Mathematics Competitions. This large charitable gift allowed MAA American Mathematics Competitions to fund several important new projects over the past one and a half years.
We intend to continue these projects as funds are available. There will be information available through the website for the 2002-2003 school year as the details are finalized.
The Akamai Foundation was established by Akamai Technologies, Inc. and was initially funded by Akamai executives and its employees. Akamai Technologies helps companies by optimizing Web site performance, delivering broadcastquality streaming media, and providing interactive application services. The Foundation chose to focus on mathematics because Akamai was conceived and founded on mathematical innovation.
The Akamai Foundation is dedicated to excellence in mathematics in the hopes that they can encourage America's next generation of technology innovators. Their mission is to reach out to students in grades $\mathrm{K}-12$ with the message that mathematics is important, demonstrating to them that it can be magical and fun and in the process, helping them to realize that math can lead to some very exciting career opportunities.


A Certificate of Distinction is given to all students who receive a perfect score.

An AMC 8 Winner Pin is given to the student(s) in each school with the highest score.

The top three students in each of your assigned sections will receive, respectively, a gold, silver, or bronze Certificate for Outstanding Achievement. In case of a tie, additional certificates will be included with your results.

An AMC 8 Honor Roll Certificate is given to all students who score in (approximately) the top 2\%.

An AMC 8 Merit Roll Certificate is given to all students in 6th grade and below who score in (approximately) the top $2 \%$.

A Certificate of Participation will be included in your school results and may be reproduced and given to the other students so that every student taking the AMC 8 will receive recognition. An Order Form will be included with your results in case you wish to purchase a set of these Certificates.

Achievement Award Pins, Certificates of Merit and AMC Caps and T-Shirts are available for purchase if your school wishes to recognize other outstanding students. Ordering information for these awards will be sent along with the results of your school.

