



MATH OLYMPICS VOLUNTEER PACKET

2023-24

Table of Contents

Important Information **3**

Instructions for Administering Tests (In-Person) **4-5**

Monitor's Directions to Students (In-Person) **6**

Scoring Procedures (In-Person) **7**

Tabulation Procedures (In-Person) **8**

Student Leadership & Learning Contacts **9**

Important Information

THANK YOU for volunteering to serve at the **ACSI Math Olympics!**

Your labor of love in Christ's name is truly appreciated. The ACSI Student Leadership & Learning (SL&L) team is here to help you in every way possible. Please don't hesitate to ask for assistance.

ACSI Student Leadership & Learning partners with K-12 schools and universities globally to advance the educational mission for students by providing enrichment and experiential events beyond the classroom, which equip students with valuable skills such as creative thinking, problem-solving, leadership, and service. Through participation, students discover their talents, reinforce their biblical worldview, and increase their cultural influence for Jesus.

NEW for 2023-24: There will be three levels of **Math Olympics** competitions – Local (In-Person and Digital), Divisional (Digital), and National (Digital). The top five (5) winners per grade level and category from each Local Math Olympics competition will be invited to advance to a Divisional Math Olympics. From there, the top fifteen (15) winners per grade level and category from each Divisional Math Olympics will be invited to advance to the National Math Olympics.

Pay close attention to the instructions throughout this book specific to **In-Person** or **Digital** Math Olympics. If not labeled, the instructions apply to all Math Olympics Chairpersons.

Submission of Fees

School registration fees are paid in the fall when submitting a registration form. Student participation fees are due 30 days before the event. The *Participation Fees Form* can be accessed online at acsi.org/studentleadership on the "Pay Fees" page.

To avoid a **Cancellation/No-Show Fee** of **\$200**, which covers your school's share of various event expenses, notify your chairperson and/or ACSI Student Leadership & Learning team member at least **60 days** before the event if you are unable to attend. Withdrawing within 60 days of the event takes away the opportunity for schools on the waitlist to participate and makes it increasingly difficult for the Chairperson to plan for the event.

Volunteers

Each participating school must provide five (5) adult volunteers to serve as Monitors, Timers, and Scorers at the ACSI Math Olympics. Failure to meet this volunteer requirement will result in removal from the event. In such a case, school registration and student participation fees will still be assessed.

To protect students participating in an ACSI-sponsored Student Leadership & Learning event, the school administration must affirm that **"All staff and volunteers the school provides meet its internal policies and standards and state requirements for working with children in a K–12 private school setting."**

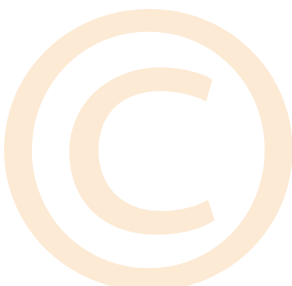
Insurance

All schools participating in an ACSI-sponsored event must have adequate insurance coverage for students and sponsors/teachers. ACSI does not assume responsibility for these coverages.

The school's student accident insurance should cover the most reasonable and customary medical expenses. Workers' compensation should cover sponsors/teachers.

Events include but are not limited to art, math, music, speech, and spelling events.

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No portion of this handbook may be reproduced, stored in a retrieval system, or transmitted in any form or by any means – mechanical, photocopying, recording, or otherwise – without the permission of ACSI.

To prepare students for their event, ACSI grants permission to ACSI member schools registered for this ACSI Student Leadership & Learning event to reproduce the materials contained in this document, as necessary, to prepare for the event. Please limit the distribution of materials to only one copy per student or volunteer.

THESE FILES MAY NOT BE POSTED TO ANY SCHOOL WEBSITE. Member schools should contact an ACSI Student Leadership & Learning team member for instructions on providing study materials to parents or students.

Instructions For Administering Tests (In-Person)

Print one copy of each test for every student participating in the Math Olympics.

An alternate may participate if a student is absent on the school's testing date. Please inform your chairperson of any changes if the entries on the *School Tabulation Sheets* differ from those previously submitted on the *Student Participation Form*.

Treat all tests/keys as **confidential** information before and after testing, as ACSI may use them again in future years. It is essential to emphasize confidentiality to everyone who works with the tests/keys.

Testing Times:

Grade 3:	4 rounds of testing	11 minutes per round
Grade 4:	4 rounds of testing	11 minutes per round
Grade 5:	4 rounds of testing	11 minutes per round
Grade 6:	4 rounds of testing	11 minutes per round
Grade 7:	4 rounds of testing	11 minutes per round
Grade 8:	4 rounds of testing	11 minutes per round

The Monitor's and Timer's Instructions (see below) must be followed precisely when giving the tests.

Monitor's Instructions

1. Make sure there is sufficient scratch paper for each student and extra sharpened pencils. Students should borrow a pencil from the Monitor during the testing periods rather than sharpen their own.
2. Computation Category: Post specific instructions that apply to your grade level regarding the expression of remainders:
 - Grade 3: No instructions are needed. There are no problems with remainders.
 - Grade 4: Express remainders as fractions (lowest simplest terms) or r.
 - Grade 5: Express remainders as fractions (lowest simplest terms, mixed numbers, no improper fractions), decimal, or r.
 - Grades 6-8: Express remainders as fractions (lowest simplest terms, mixed numbers, no improper fractions), decimal, but not with r.

If the problem requires the answer to be in a specific format or component, any deviation from that format will be considered incorrect.

Use of Parentheses: When parentheses are used, that work must be done first.

3. Ask if anyone has a calculator, cell phone, smartwatch, or any electronic device with them. If so, they must be put on the teacher's desk until the testing is finished. Any student in possession of a calculator during testing must be disqualified.
4. Remind students that this is a testing situation and that any unnecessary disruptions from them will result in disqualification. Begin the session with prayer.
5. Pass out test papers FACE DOWN, instructing students to leave them face down and to print their FULL NAME on the back of the test.
6. Before every test, repeat the exact directions to the students as given in "Monitor's Directions to the Students" on page 12. Be sure to follow the instructions for rest periods between rounds.
7. At the end of each round, collect the tests and ask the Timer to deliver the tests to the Scorers for grading.
8. While the Timer is delivering the previous round of tests to the Scorers, distribute the next round of tests to the students and read the bold-printed instructions on page 12 aloud. Wait for the Timer to return before starting the next round of testing.
9. At the end of round 4, dismiss the students according to the Chairperson's instructions.

Timer's Instructions

1. With each test, when the monitor instructs the students to BEGIN, you must write the STARTING TIME on the board and then add 11 minutes to show the ENDING TIME.
Example: Starting Time – 9:20 Ending Time – 9:31
2. During the testing period, assist the monitor by answering questions, providing additional supplies such as scratch paper and pencils as needed, and ensuring that students do not share their answers with one another.
3. When two (2) minutes remain in the round, say: *“There are two minutes left in this round.”*
4. When time is up, say: *“Time is up.”*
5. After each round, collect the used scratch paper while the Monitor collects the test papers.
6. Take the test papers to the Scorers for grading after each round of testing.

Monitor's Directions to Students (In-Person)

The Monitor should read aloud all **bold-printed** instructions to students.

Once test papers have been passed out FACE DOWN, and you have instructed students to leave them face down, SAY:

"This is round #__ of the testing. Please print your full name on the back of your test. During the testing period, do not write, draw, doodle, or figure problems on the back of your test papers."

When the students are ready, SAY:

"Remember as you work to:

- 1. Write all answers on the answer blanks on the right side of the paper.**
- 2. Give exact answers unless the problem says otherwise.**
- 3. Unless a specific "place" is asked for, answers worked to the hundredth or thousandth place are acceptable.**
- 4. Make sure commas and decimals are in the correct place."**

Next, SAY:

"If you need more scratch paper or a sharpened pencil during the test, please raise your hand. Do not talk out loud or get out of your seat. When there are just two minutes left, we will announce it to you. Are there any questions?"

Allow time for questions, then SAY:

"You may turn your paper over and begin the test."

After each test, when the timer announces that time is up, SAY:

"All pencils must be put down immediately. Turn your test over."

AFTER EACH TEST: Collect and count the test papers to verify they are all there. While collecting the tests, ensure each has the students' first and last names on the back. While you are collecting the test papers, the Timer will collect the scratch paper.

AT THE END OF THE FIRST TEST: Give the students a 3-minute break to stand, stretch, and sharpen pencils. Students should stay in the room during this break. Ask the Timer to distribute the scratch paper. After 3 minutes, distribute the next test *face down* and repeat all instructions above.

AT THE END OF THE SECOND TEST: Give students a 5-minute break to use the restroom and sharpen pencils. Ask the Timer to distribute the scratch paper. After 5 minutes, distribute the next test *face down* and repeat all instructions above.

AT THE END OF THE THIRD TEST: Give the students a 3-minute break to stand, stretch, and sharpen pencils. Students should stay in the room during this break. Ask the Timer to distribute the scratch paper. After 3 minutes, distribute the final test *face down* and repeat all instructions above.

AT THE END OF THE FOURTH TEST: The math competition is completed.

Scoring Procedures (In-Person)

Scorers should work in teams of two, sitting across the table from each other (see diagram below). For optimal efficiency, use two scorers for each grade level.

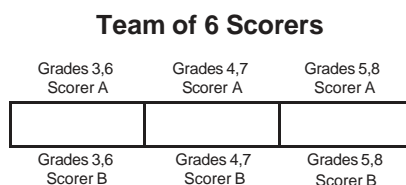
Before grading tests, check to ensure there is a student's FULL NAME (first and last) on the back of every paper. Do not grade any test missing this information.

Use the KEYS provided by ACSI to grade each test. Follow the KEYS and the testing procedural rules precisely to determine if an answer is correct. Refer to Scoring Reminders below.

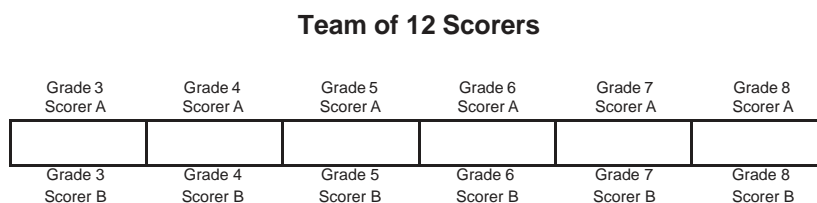
- The first scorer (A) will check one round of tests, mark the incorrect answers with a red "X" (without marking through the answer), and record the number of CORRECT answers on the top of each test.
- The scoring partner (B) across the table rechecks all tests and initials the number of correct Scorer A answers on the top of each test. In case of error, the Scorers confer and resolve the problem together; then, the partner initials the correct number.
- Tests that have been checked, rechecked, and initialed are sent to the tabulation room. (The tabulation room should return any tests that are not initialed.)

Scoring Table

If tests are given in two separate time sessions, for example, grades three, four, and five in one sitting and then six, seven, and eight in a later session, six (6) scorers per session will be required.



Twelve (12) scorers are preferred if all students are tested simultaneously.



Scoring Reminders

Points: Score one point for each correct answer.

Decimals: A decimal not placed or improperly placed constitutes a wrong answer.

Commas: The lack of a comma does not change the number; therefore, a missing comma does not make the number incorrect.

Fractions: Answers in fractions should be reduced to the lowest simplest terms.

Places: It is impossible to make a general statement that all problems should be worked to the hundredth place, or the thousandth place, etc. An answer should not be considered wrong if it is carried additional places unless a specific answer is called for.

Scorers should observe the students' answers compared to the answer keys. Please note:

- The answer to a problem should match the format requested in the problem statement, such as percentage, fraction, or decimal. For example, if a percentage is asked for, an answer in fraction or decimal form is incorrect. For combined component problems, the answer can be provided in any of the components unless a specific component is requested.
- The answer to a problem must meet the minimum requirements. Answers may provide more information than requested, but not less.

Tabulation Procedures (In-Person)

One week before your event, download a copy of the *Master Chair Tabulation Sheets* from the “Math Olympics Resources” page at [acsi.org/studentleadership](https://www.acsi.org/studentleadership) and follow the instructions below for preparing grade/category tabulation sheets.

- Save the *Master Chair Tabulation Sheets* Excel worksheet to your computer (File, Save a Copy).
- Type your name, email address, etc., in the spaces provided on the “Instructions” tab.
- Gather the *School Participation Forms* that School Coordinators from participating schools sent you.
- Select the "Gr 3 Computation" tab at the bottom of the window to open the Grade 3 Computation tabulation sheet.
- Select the first blank cell under **Student** (column A, row 5) on the Grade 3 Computation tabulation sheet and type in the first third-grade participant's name (first and last). Then, enter the names of the other participating Grade 3 Computation students in the appropriate cells.
- In the **School** column (column B), type the full name of the school the student attends; in the **City, State** column (column C), enter the school's city and state next to each student's name.
- Follow the directions above for each grade/category tabulation sheet until all students are listed on the appropriate sheets.
- Because the Monitors will use the grade/category tabulation sheets to take attendance, it would be helpful if the list of students was sorted alphabetically by first name. Go to the Grade 3 Computation tabulation sheet. Click in the first cell under **Student** (column A, row 5), hold, and drag to select all data cells in the **Student** column through the **Award** column (columns A-M). Select **Data > Sort > Sort A to Z**.
- Print three (3) copies of each grade/category tabulation sheet. You will need one copy of each sheet for the Check-in Workers, one for the Monitors, and one for the Tabulators.

On the event day, the tests will be scored by teams of Scorers and then delivered to the Tabulation Room. Upon receiving the graded tests, Tabulators should verify that each test has been scored twice by checking the top of each test paper. If any test does not have the number of correct answers written at the top (by Scorer A) or has yet to be initialed (by Scorer B), it should be returned to the Scoring Room to be double-checked.

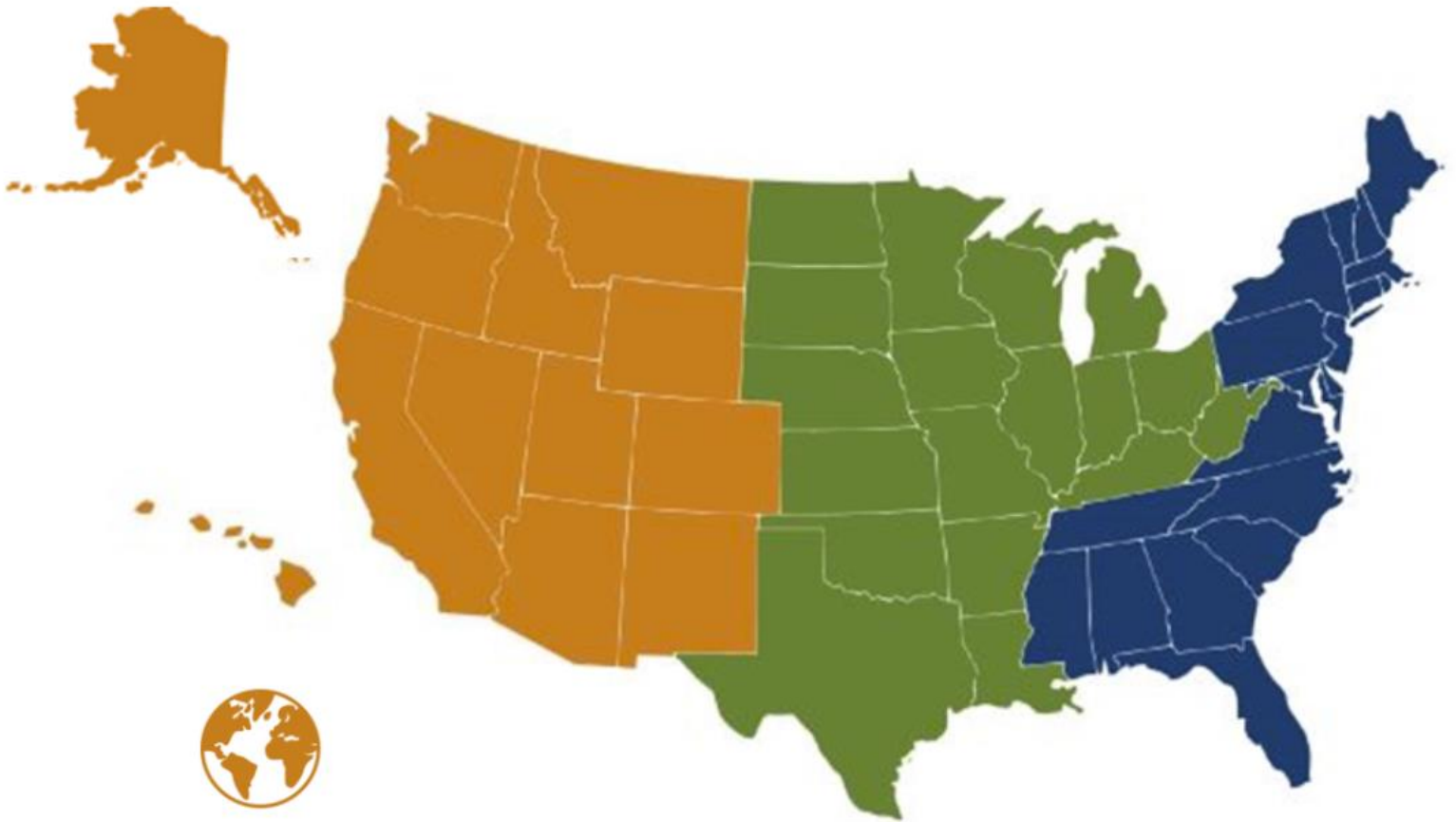
Once confirmed that each test has been scored twice, the tabulators should record the scores on a hard copy of the grade/category tabulation sheet. Ensure that tests from all four rounds are recorded before compiling student scores on the *Master Chair Tabulation Sheets*.

The Chairperson is responsible for overseeing the tabulation process. You may enter scores into the *Master Chair Tabulation Sheets*, sort the data, determine winners, or assign these tasks to someone else. In either case, the designated person will need access to the computer that has the *Master Chair Tabulation Sheets* saved to it, as well as a printer.

It is highly recommended that tabulators verbally communicate the scores to the designated person entering the data into the *Master Chair Tabulation Sheets*. This helps verify that the scores are recorded correctly and ensures the process is conducted accurately and efficiently.

Follow the instructions on page 15 for compiling student scores, sorting data, and determining winners.

STUDENT LEADERSHIP & LEARNING CONTACTS



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