

MCTM Middle School Mathematics Contest Rules

Grades 6-8

The Missouri Council of Teachers of Mathematics (MCTM) complies with the Americans with Disabilities Act. Requests for special accommodations for persons with disabilities must be submitted in writing with documentation to the Qualifying site coordinator at least 30 days in advance of the contest so special arrangements can be made.

Submission of this registration form grants permission to the Missouri Council of Teachers of Mathematics to release the names and photographs of participants in this contest to the news media, the MCTM web site, and the mathleague website.

Qualifying contests are open to students enrolled in grades 6, 7 or 8 in Missouri public or private schools. The maximum number of students a school (elementary or middle) may enter at each grade level is eight. Home-schooled students are also invited to participate either as a representative of the local public school team or as a representative of a homeschool team. A group of home schooled students from within the same state may affiliate under the name of an organization that mathleague.org will recognize as a school for the purposes of competition. The name of the school must include the words "home school" or some variation that will make it clear that the school is a home school organization. mathleague.org reserves the right to require a home school organization to define the geographical boundaries of its service area at any time and for any reason, and to determine whether the boundaries are reasonable. A home-schooled student's declared grade level must be equal to the grade level that student would be assigned to if the student enrolled in a public or private school in the student's state of residence.

MCTM/mathleague.org is solely responsible for the choice of questions, correctness of answers, and the administration of the Mathematics Contest. Test answer sheets will be collected, checked and scored by personnel selected by the Site Coordinator. All decisions will be rendered on questions as they arise. These decisions are and will remain final.

The sponsoring school and/or parents must provide **supervision at all times** except when a student is taking a test. **At least one teacher/principal (two if more than 9 participants)** must accompany the students to the qualifying contest and be available to assist the Site Coordinator as requested.

All participants should be familiar with our Conduct Standards available at <http://mathleague.org/conduct.pdf>. This document outlines some of the rights and responsibilities each participant has at our contests, as well as the consequences for committing infractions.

A special request must be made if a religious belief prohibits participation in a Saturday contest. The request must be made in writing to the Qualifying site coordinator or the state finals coordinator at least 30 days in advance of the contest so that special arrangements can be made. The arrangements may require that the contest participant go to another location to participate in the contest.

If you have any questions, please contact Kelley Garbero, Middle School Contest Director, at garberokelley@rsdmo.org or 314-602-2277.

Middle School Contest Checklist for Sponsors

BEFORE THE CONTEST DATE

Share specific details about the contest events with your students. There will be three events: Target (calculator allowed), Sprint (no calculator), and Team (calculator allowed). On Target, Sprint, and Team, students should never leave a question blank—they should always guess since there is no penalty for guessing. ALL students will take ALL events. For more details about each of these events and how they will be scored, please go to <http://mathleague.org/mstests.php> and use practice tests to prepare for the contest (<http://mathleague.org/freetests.php>). All participants should be familiar with our Conduct Standards available at <http://mathleague.org/conduct.pdf>. This document outlines some of the rights and responsibilities each participant has at our contests, as well as the consequences for committing infractions.

Fractional numbers must be expressed in simplest (lowest) terms or as an equivalent decimal fraction, unless a specific form is requested. For example, 0.33 is not equivalent to $\frac{1}{3}$ and would be counted incorrect if the answer were $\frac{1}{3}$. Units should not be included with answers since the question usually includes the units in the prompt. If dealing with a problem including time, AM or PM should be indicated.

Team Formation: Teams can be made up of 1-4 students of mixed or same grade levels; we encourage mixed grade level teams since a sixth grader may be stronger in a particular topic than an eighth grader just because he or she recently studied that topic in school. Every student attending will take the team test. The team event will be a part of the Sweepstakes score. A team's Sweepstakes score is obtained by adding the individual scores of the team members, dividing by 4, and adding double the team's score on the team test. A maximum team total would be 66 points (46 points if the team had four members with perfect individual scores, 20 for the team test). Ties are broken by comparing team test scores (weighted by item analysis). If a team is not comprised of 4 members, there will be a 0 added into the sum for each missing team member before dividing by 4.

All schools must sign up for mathleague membership online at <http://mathleague.org/membership.php> BEFORE submitting the entry form for registration. If your school has a common name like “Trinity Lutheran”, please enter the city that your school is located within the name (e.g., “Trinity Lutheran Jefferson City”) to distinguish it from others in the state. With this paid \$40 membership for this year, your school may choose to administer the in-school qualifying round if you are unable to attend a site in your area due to conflicts or are simply too far from a qualifying contest site. Or, you may have students attend a contest site AND take the in-school qualifying round as another chance to qualify for the state tournament. Middle school entries to the in-school contest must be submitted to mathleague by January 15 each year.

All entries must be submitted on the **Official Entry Form**, or copy thereof, signed by the school principal and postmarked no later than **3 weeks prior to the contest date**. A non-refundable fee of \$8.00 is required for each participating student, and site coordinators do not accept purchase orders. The entry form and check made out to MCTM should be mailed to the **Site Coordinator** (see addresses on the adjacent pages) at the qualifying site where the school plans to participate, which is normally the site closest to your school's location.

DAY OF THE CONTEST

Students should bring at least 2 sharpened pencils and a calculator. Scratch paper will be given on all events; any space on the test may be used for calculations. An answer sheet will be provided for recording and marking answers for each event. Care must be taken to write or mark each answer in the appropriate space. Calculators are allowed ONLY on the Target and Team Events. A student must furnish his or her own calculator. Calculators are NOT allowed on the Sprint Event. Any calculator allowed on the SAT may be used <http://sat.collegeboard.org/register/calculator-policy>.

Students may not use any dictionaries or other reference materials. If any student's proficiency in the language(s) the tests are offered in is so severely limited as to preclude participation in mathleague.org contests, that student's coach may make arrangements with mathleague.org to provide a written translation of the tests, so long as the translation can be accomplished in a timely and secure fashion, and at no cost to mathleague.org. Any such translation must be approved by mathleague.org before use at a contest.

No student or adult will be allowed to enter a testing session after a test has begun. Students are expected to remain in their assigned rooms and to refrain from talking throughout the individual testing sessions. Any student making disruptive noises may be asked to leave the room. During the team event, students should talk quietly with their teammates so that they do not inadvertently share answers with other teams. Students may be working in adult-sized arm chairs in university classrooms.

During the restroom break, students are expected to remain in the area near their testing rooms. Restrooms and a water fountain will be nearby. No food or drink may be taken into the testing rooms.

The students earning the five highest scores in Target and Sprint at each grade level will be recognized. The top five Sweepstakes scores will also be recognized. In each grade level, the top five combined scores (sprint score plus twice the target score) will be recognized.

AFTER THE CONTEST

Each participant will receive a Ribbon of Participation.

A Missouri student qualifies for the Middle School State contest if he or she participates in a middle school qualifying round (either a local contest or the in-school qualifying round) during the school year and does any one of the following:

- Earns at least 50% of the available points on any of the individual tests.
- Scores strictly higher than 80% of the participants in his or her grade on any of the individual tests.
- Participates on a team that scores either at least 50% of the available points or strictly higher than 80% of the other teams on the team test.

A list of qualifiers can be found within the "Qualifiers to Next Level" tab in each site's results found at <http://mathleague.org/results/middleschool/>

If you have any state qualifiers, please register and pay for them online using the link found within the State Information at <https://moctm.org/mctm-math-contest/mctm-middle-school-math-contest.html>.

For the Qualifying and State Math Competitions, there are two different ways that ties are broken for awards. If two students tied with the same score in an event (e.g. Target with a score of 3), their Borda scores were compared to see which student answered the more difficult questions. The student with the lower Borda score would place higher than the other. To break absolute ties in Sprint or Target at the Middle level, we looked at the students' opposing event scores. Say that Students A, B and C are all tied with a score of 3 on Target, all with the same Borda scores indicating they answered the same 3 questions correct. We then look at their Sprint scores. Say Student A has a Sprint score of 10, Student B has a sprint score of 9, and Student C has a sprint score of 8. Then to break the tie on Target, Student A would be first, Student B would be second, and Student C would be third.

In the past, MCTM has not released any portion of the students' tests due to using some similar questions from year to year. However, mathleague.org would like to encourage all site coordinators to keep all of the students' tests by school, and return them to the appropriate schools after all of the contest sites have been completed for that month. This allows students to see what they have missed, learn from their mistakes, and even have time to learn some new concepts before the state competition on Saturday, March 28, 2020. Site coordinators may choose to mail the contest papers (if sponsors pay a \$3-5 mailing fee at the contest) or make them available for pick up at their school after the last Saturday of the month the contest was held.

In addition to releasing the test materials, results of ALL sites will be available online at mathleague.org to the public after the results have been finalized by the site coordinator. Students' names will not be listed; the school's name will be listed and the student's first and last initials. Students will now be able to see how they rank with regard to everyone else at a particular site and across the state.



Missouri Council of Teachers of Mathematics
35th Annual Missouri Middle School Mathematics Contest
Qualifying Contest Sites and Dates



Montgomery City – January 25, 2020

Angel Davis
Jonesburg Elementary
106 Smith Rd
Jonesburg, MO 63351
addavis@mc-wildcats.org

Test Site:

Montgomery City Elementary
817 N. Harper St.
Montgomery City, MO 63361

Columbia – January 25, 2020

Bob Borst
Rock Bridge High School
4303 South Providence Road
Columbia, MO 65203
bborst@cpsk12.org

Lamar – January 25, 2020

Bradley Robertson
Lamar Middle School
202 W 7th ST
Lamar, MO 64759
brobertson@lamar.k12.mo.us

Rolla – February 1, 2020

(Snow Date of February 15, 2020)

Steven Blakley
Rolla Junior High
1360 Soest Road
Rolla, MO 65401
sblakley@rolla.k12.mo.us

West Plains – February 8, 2020

Jerry Trick
Missouri State University-West Plains
128 Garfield Ave.
West Plains, MO 65775
jerrytrick@missouristate.edu

Hannibal – February 15, 2020

Amanda Huber
Hannibal Middle School
4700 McMasters Ave.
Hannibal, MO 63401
ahuber@hannibal60.com

Maryville – February 15, 2020

Jaelyn Smail
Maryville Middle School
525 W. South Hills Drive
Maryville, Mo 64468
smail@maryviller2.com

Ballwin – February 22, 2020

Kelley Garbero and Erin Brooks
Crestview Middle School
16025 Clayton Road
Ellisville, MO 63011
garberokelley@rsdmo.org

Brookfield – March 7, 2020

Jaelyn Burns
Brookfield Middle School
126 N Pershing Dr.
Brookfield, MO 64628
jburns@brookfieldr3.org

The State Math Competition will be held on Saturday, March 28, 2020, at Selvidge Middle School in Ballwin, Missouri.

