MATH FIELD DAY

PLACE: Southeast Missouri State University
DATE: Thursday, April 11, 2024
CONTENT: Math Field Day will consist of

(i)   22 Individual Events (12 Open Events, 7 Grade Level Events, & 3 Class-Specific Events), 15 minutes each.

(ii)   5 Team Events, all held from 9:25 A.M. to 9:45 A.M. A team will consist of exactly 4 members, each of whom will test <u>individually</u>, and the team score will be determined by the sum of the best 3 scores on the team.

(iii)   Problem Solving
A set of problems that require some ingenuity for their solution will be distributed to each school as part of the Math Field Day registration packet, and each school competing will turn in one set of answers by 11:30 a.m.

(iv)   The MATHLETICS event that begins at NOON is described later in this brochure.

RULES:

1.   A student may compete in any Open Individual Event. To compete in a Grade Level Event, students must be in the listed grade or a lower grade. The Algebra I, Algebra II, and Plane Geometry events, both individual and team, restrict participation to students enrolled in those courses.

2.   Each event will have two sets of winners, one from schools designated as large schools, and one from schools classified as small schools. The cutoff we are using this year for large schools is 500 or more students in Grades 9 – 12 in the district.

3.   A student may enter at most 4 events: including team events, individual events, and Mathletics.

4.   <u>Participants must provide their own pencils and calculators. Calculators may not be used in the Computational Mathematics and the Mental Arithmetic competitions. Students will not be permitted to share a calculator with another competitor. The ACT policy regarding use of calculators will be followed</u> (https://www.act.org/content/dam/act/unsecured/documents/ACT-calculator-policy.pdf). <u>Student use of prohibited calculators will result in a disqualification from the event.</u>

5.   Each team must be accompanied by an adult sponsor.

6.   Each school may enter no more than 2 students in each Individual Event. Each school may enter only one team for each Team Event. Each school may bring no more than 30 students to Math Field Day.

7.   Each student listed as a participant in Math Field Day must be entered in at least one Individual or Team Event, and each student must be entered for an event before the student may compete in that event.

8.   Participant substitutions may be submitted by the sponsor upon arrival on Math Field Day.

9.   The Southeast Missouri State University Department of Mathematics reserves the right to cancel any event.

10.   Completed entry forms must be received by the Southeast Missouri State University Department of Mathematics by **March 21, 2024**. Entry fees may be sent with the entry forms if desired.

11.   A school may <u>NOT</u> enter additional events after March 21, 2024.

12.   <u>After all entries have been received each school will be sent more information regarding Math Field Day.</u>

13.   <u>All tests will be graded by Southeast Missouri State University staff and their designates. All decisions regarding scores are final.</u>

14.   A list of winners will be sent to all sponsors.

DEPARTMENT PROBLEM SOLVING EVENT:

A set of problems that require some ingenuity for their solution will be given to each school upon registration at Math Field Day. Students from each school may work together to solve these challenging problems. Solutions should be submitted no later than 11:30AM in one packet to a representative of the mathematics department at the table at the head of the stairs in the University Center, next to the Ballroom entrance.

MATHLETICS EVENT

1. Each school's team will consist of four students currently enrolled in math classes. One student must be enrolled in Algebra I and one student must be enrolled in Geometry or Algebra II.

2. The ACT policy regarding use of calculators will be followed (https://www.act.org/content/dam/act/unsecured/documents/ACT-calculator-policy.pdf). Student use of prohibited calculators will result in a disqualification from the event.

3. Pencils will not be provided.

4. Scratch paper will be provided.

5. Each team will be seated at a separate table and will be allowed to work together on each problem.

6. Problems will be posed one at a time, allowing different time limitations and different point values depending upon the difficulty of the problem.

7. The time for each problem will vary from 15 seconds to 2 minutes.

8. A packet of the problems will be placed on each table. Each team is only allowed to work on the current problem.

9. Teams suspected of any form of cheating will be disqualified.

10. Decisions made by judges will be final.

11. When time is called, one person from each team will hold up the team's answer. The correct answer will be given. Judges will verify correct answers and points will be awarded.

12. No partial points will be awarded.

13. Answers will be considered correct only if given in required format. (Use units where given.)

14. Approximately halfway through the event, the top-ranking teams will be announced.

15. If a tie results, a pre-determined method for breaking ties will be used until there is exactly one 1st place, one 2nd place, and one 3rd place team.

16. Awards for first, second, and third place teams will be given.

17. Substitutions are allowed only at registration at Math Field Day.

SCHEDULE OF EVENTS
MATH FIELD DAY
April 11, 2024
Academic Auditorium/University Center

<u>Time</u>	<u>Event</u>
9:00	Opening
9:25	Algebra I (Team)
9:25	Algebra II (Team)
9:25	Geometry (Team)
9:25	Trigonometry (Team)
9:25	Medley (Team)
10:00	Word Problems (9th Grade)
10:00	Geometry (Class Required)
10:00	Algebra II (Class Required)
10:00	Non-Routine Problem Solving
	Level 1 (9th, 10th Grades)
	Level 2 (11th, 12th Grades)
10:30	Exponential & Log Functions (11th Grade)
10:30	Matrices & Determinants (12th Grade)
10:30	Computational Mathematics (Open)
10:30	Algebra (Open)
10:30	Geometry (Open)
10:30	Elementary Data Analysis (Open)
11:00	Algebra I (Class Required)
11:00	Word Problems (11th Grade)
11:00	Sets and Logic (Open)
11:00	Probability (Open)
11:00	Mental Arithmetic (Open)
11:00	Analytic Geometry (12th Grade)
11:30	Number Bases (9th Grade)
11:30	Number Theory (Open)
11:30	Trigonometry (Open)
11:30	Hand Calculators (Open)
11:30	Calculus (12th Grade)
NOON	<u>MATHLETICS</u>
1:00	Awards Ceremony