CNCM MATH BOWL COMPETITION RULES



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COMPETITION STRUCTURE

There will be 3 main parts to the Math Bowl: **the Individual Round, the Team Round, and the Math Bowl round.** No calculators will be allowed in any part of the competition. Pencils, pens, rulers, compasses, protractors, blank printer paper, and blank graph paper are allowed at the competition. Please bring your own supplies, as our supplies will be limited.

TEAM CREATION

All members of a team should be from the same school, but if this is not possible, members of a team may attend different schools.

RULES

Violation of any of these rules may result in disqualification from the competition.

- 1. No electronic devices are allowed for use.
- 2. No one in the audience may communicate with the participants during the match
- 3. No external aids (notes) may be brought to the Math Bowl.
- 4. No communication of any sort with the opposing team during a match.
- 5. No match fixing or purposefully throwing a match.
- 6. No slandering or "trash talking" the opposing team.
- 7. Treat event staff with proper respect.
- 8. No collaboration allowed between team members or other competitors during the individual round.

INDIVIDUAL ROUND

This will consist of a **10 question test** that will be given to every participant. **50 minutes** will be provided to work on this section of the competition. The difficulty of this round will be comparable to HMMT November General Round which can be found at https://www.hmmt.co/archive/november/problems/2018/.

TEAM ROUND

This will be a **10 question** test that your **team of 4 members** will be given only **20 minutes** on, so make sure to use your time wisely and split the problems amongst team members! The difficulty of this round will be comparable to a Duke Math Meet Team Round which can be found at https://sites.duke.edu/mathmeet/past-problems/.

MATH BOWL PRELIMINARIES ROUND

This will be a **5 round Swiss-style tournament** in which teams will compete against each other. In each round, each team will face another team according to their current record. For example, if two teams have 3 wins at the end of the 3rd round, then they may face each other during the 4th round. The preliminary matches will occur simultaneously in different classrooms.

STRUCTURE

A 20-minute timer will be set and 90 seconds will be given per question. There will be 18 regular questions and 3 tiebreaker questions per round.

Teams will be given questions until the round ends. The round ends when either of the following scenarios take place:

- 1. The 20-minute time period has ended.
 - a. If the 20-minute timer ends during the 90-second period for the current question, then the match will end after the 90-second period for the current question ends, or if a team answers the current question correctly.
- 2. All of the 18 regular questions for the round are used.

TIEBREAKERS

As mentioned previously, each round contains 3 tiebreaker questions. These questions are only used if the score is tied at the end of the round which has been defined in the Structure section.

Instead of the 90 second time period allotted for regular questions, only 60 seconds are allotted for tiebreaker questions. The tiebreaker questions will be given one at a time and the first team to correctly answer a tiebreaker question will be declared as the winner.

If no team correctly answers any tiebreaker question, the result of the round will be a tie, and each team will get half the points allotted for the round.

BUZZING

At the beginning of the match, each team will designate a team captain who is tasked with buzzing. **Only the team captain may buzz in.**

When the captain buzzes in, the team will have 5 seconds to answer, separate from the 90-second time period provided for the question.

The captain must make sure to be recognized after buzzing to say his/her answer; otherwise, the answer will not be recognized, and the math bowl official will not state if the answer provided is correct or incorrect. If the answer is correct, the question period is over, but if it is incorrect, the opposing team is given the rest of the 90 seconds to answer.

SCORING

Individual Round: Each individual round question is worth 1 point. Your team's individual round score will be the sum of the individual round scores of the people on the team. There are 4 team members and 10 individual round questions which makes the maximum possible team individual round score 40 points.

Team Round: Your team's team round score will be 4 times the number of team round questions your team got right. There are 10 team round questions which make the maximum possible score for the team round 40 points.

Math Bowl Round: Each win will be worth 20 points and each tie will be worth 10 points. There are 5 Math Bowl rounds, so the maximum possible score here is 100 points.

Total Score: Your team's total score is defined as the sum of the individual round score, team round score, and Math Bowl score, so the maximum overall possible score is 180.

MATH BOWL FINALS

The top 4 teams as determined by your team's total score will qualify for the semifinal round. This round will follow a similar format as the Math Bowl Preliminaries but will instead take and will follow a single-elimination structure into the finals with a 3rd place match. The finals and semifinals will take place in the auditorium. For more information about locations, check the schedule.