

# CNCM Regional Math Tournament Rules

CNCM Administration

## Competition Structure

- Power Round - collaborating proofs.
- Team Round - collaborating problems.
- Individual Round - independent solving.
- Relay Round - problems reliant on teammates answers.
- Blitz Round - for fun.
- Tiebreaker Round - to break individual ties.

## General

- This competition is intended to be similar in format to the Duke Math Meet and the ARML.
- Cheating of any kind will result in potential disqualification and/or cancelation of scores and/or awards.
- Teams should be made up of a maximum of 4 people. Any teams/individuals with less than 4 are subject to be combined with other teams/individuals.
- None of the rounds allow the use of a calculator or any electronic devices.
- All answers should be reduced to simplest form, unless otherwise noted.
- The maximum Overall Team score is 200 points (50+50+80+20).

## Power Round

- The Power Round is a multi-proof problem on a single topic.
- Team members should collaborate to submit 1 packet of proofs.
- Partial credit may be given to incomplete proofs.
- Teams should indicate in the upper left corner their team number and problem number of the solution.
- Teams will be given 60 minutes.
- The maximum Power Round score is 50 points.

## Team Round

- Team members should collaborate to submit 1 packet of answers.
- There are 10 questions.
- Teams will be given 20 minutes.
- The maximum Team Round score (not to be confused with Overall Team score) is 50 points (5 points per problem).

## Individual Round

- Team members are NOT allowed to collaborate during problems.
- There will be 10 questions, given 2 at a time (5 pairs).
- Individuals will be given 10 minutes per pair.
- Before individuals start working on the problems, the proctor will read out the problem and individuals must ensure that the sheet that they have received is the correct paper.
  - The timer will not start until the proctor is done reading the questions and indicates the beginning of the 10 minutes.
  - Students may not touch their writing utensils until time begins.
- For individual ranking purposes, there will be a Tiebreaker Round to break ties amongst individuals that have the same Individual Round score.
- The maximum Individual Round score is 80 points (2 points per problem, 10 problems, 4 team members.)

## Relay Round

- Team members are NOT allowed to collaborate during problems.
- Teams must designate its 4 members into #1, 2, 3, and 4.
  - Teams without 4 members may participate for fun, but points will not be scored.
- The relay round will have 2 relays. Below describes the procedure of 1 relay.
- When #1 solves his/her problem, s/he will use a slip of paper distributed by the proctor to write down his/her answer and hand it to the group's #2.
  - The slips may NOT contain any information other than the number.
  - Multiple slips may be passed.
  - Similarly, #2 will write down his/her answer and hand it to #3, and #3 will pass his/her answer to #4
- #2, #3, and #4 will have a problem that needs the number that will be handed to them in order to solve it. This number will be described in the problem as **TNYWR** (The Number You Will Receive).
- #4 will submit his/her final answer on another slip of paper distributed.
  - If s/he correctly submits an answer within 3 minutes, the team will receive 10 points.
  - If s/he correctly submits an answer within 6 minutes, the team will receive 5 points.
  - #3 may submit multiple responses, but only the final response will be scored.
- The maximum Relay Round score is 20 points (10 points, 2 relays).

## Blitz Round

- The Blitz Round is for fun and should be taken lightly and humorously.
- Team members will be allowed to collaborate during problems.
- Each team will be given 5 problems, all with integer answers.
- Teams must submit a single answer, which should be the sum of the 5 answers.
- The round ends when a team gets the answer correct.
- There is not a restricted amount of time, but if there is no winner after 20 minutes, the Blitz Round will end without a winner.
- This round does not count towards the Overall Team score.

## Tiebreaker Round

- Any individuals involved in a tie that potentially alters the top 5 individual rankings will participate in the Tiebreaker Round.
- Participants will answer the question posted on the front simultaneously.
- They will have up to 60 seconds to answer the question.
- A participant that would like to answer must raise their hand and write down their answers on a slip of paper.
- The ties will be broken in this order:
  - Correctness of answer. All wrong answers are worth the same, and obviously correct answers are better than wrong ones.
  - Speed of submission. Timers will record when a student's hand raises their hand for precision.
  - Next question! If ties still need to be broken, they will be broken with the next tiebreaker question.
  - In the rare case that all 10 of the tiebreaker questions are expired, we will discuss with the involved participants.
- This round does not affect Overall Team score.

## Ties

- Individual ties will be broken through the Tiebreaker Round.
- Overall Team Score ties will be broken in the following order:
  - Highest Power Round Score
  - Highest Team Round Score
  - Highest Relay Round Score
  - Team without the highest performing individual (amongst the tied teams)