



New Zealand Mathematical Olympiad Committee

The New Zealand Mathematical Olympiad

Regulations — January 2021

The **New Zealand Mathematical Olympiad** (NZMO) is an annual mathematical problem solving competition for New Zealand school students, run by the New Zealand Mathematical Olympiad Committee (NZMOC).

Aims

The aims of the NZMO are:

1. to discover, encourage and challenge mathematically gifted students in New Zealand;
2. to promote mathematics; and
3. to serve as the first stage in the selection process for the team to represent New Zealand at the following year's International Mathematical Olympiad (IMO).

Structure

The NZMO consists of two rounds:

Round One (the NZMO1): A take home exam. The problem set will normally be released in July, and solutions will be due approximately one month later. The due date will be at least three weeks after the problem set is released.

Round Two (the NZMO2): A three hour supervised exam, normally held in September.

The dates for the NZMO will be advertised on the NZMOC webpage early in the year.

Eligibility

NZMO1: Participation in the NZMO1 is open to any student enrolled in the New Zealand education system, at secondary school level or below.

NZMO2: Participation in the NZMO2 is by invitation only.

Invitations will be made based on the results of the NZMO1. Members of the NZ IMO team in the year of the NZMO will automatically be invited to sit the NZMO2.

Competition rules

1. The NZMO is an individual competition. Participants must work on the problems entirely on their own, without assistance from anyone else or any kind of software.
2. Electronic devices may not be used to assist in solving the problems. This includes but is not limited to calculators, computers, tablets, smart phones and smart watches.

3. The NZMO1 is an untimed unsupervised exam. The internet may not be used, except as a reference for looking up definitions.

Solutions are to be submitted online as a single PDF file, at the submission URL given in the problem set. The deadline is 23:59NZST on the given due date. Solutions may be typed, or handwritten and then scanned or photographed.

4. The NZMO2 is a timed closed book exam sat under normal supervised exam conditions. Geometrical instruments (ruler and compasses) may be used; protractors and electronic devices may not. All electronic devices must be handed in to the supervisor for the duration of the contest.
5. The NZMO problems may not be discussed online until the solutions to the corresponding round have been posted on the NZMOC webpage.

Awards

Awards for the NZMO (gold/silver/bronze/honourable mention) will be made based on the results of the NZMO2.

Approximately half the participants in the NZMO2 will be awarded a gold, silver or bronze award, with gold, silver and bronze awarded in the approximate ratio 1 : 2 : 3. NZMO2 participants who don't receive a gold, silver or bronze award will be awarded honourable mention if they achieve full marks on at least one problem on the NZMO2.

Scores will not be announced for either round. Participants in the NZMO1 will only receive an indication of whether they have been invited to participate in the NZMO2; participants in the NZMO2 will only be told the level of their award, if any.

Decisions on scores, awards and NZMOC January camp selection are final, and no correspondence will be entered into.

NZMOC January camp selection

The results of both rounds of the NZMO will be used to select approximately 25 students to participate in the NZMOC's residential camp the following January.

The January camp is the next stage of the selection process to choose the team of six to represent New Zealand at that year's IMO. Only students eligible for NZ IMO team selection will be considered for camp selection, and only students who attend the January camp will be considered for NZ IMO team selection.

Eligibility for NZ IMO team selection

To be eligible for NZ IMO team selection, students must

1. be New Zealand citizens or permanent residents; and
2. be enrolled as a full time student in the New Zealand education system in year 13 or below, in the year of the IMO (the year following the NZMO).

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www.mathsolympiad.org.nz