

Team Math Quest

LEVEL:	Grade 12
TYPE OF CONTEST:	Team
COMPOSITION OF TEAM:	2-3 Students per team
NUMBER OF STUDENTS:	Preliminary – As determined by your local MESA Center Regional – 3 Delegate teams per MESA Center
SPONSOR:	Marvin J. Maldonado, Director, UC Irvine MSP

OVERVIEW: Students work as a team to solve a set of challenging, non-routine problems that require core mathematical knowledge, creative deductive abilities, and collaborative reasoning skills. The event is designed to introduce, develop, and foster the use of various strategies to solve exciting and complex mathematical problems. **Participation logistics, limits, and competition facilities may vary by host site. Advisors and students are responsible for verifying this information with their center director.**

CATEGORIES:

For Regional Events Only:

- Delegates: A team that places 1st, 2nd, or 3rd at Prelims and qualifies to represent their Center in Team Math Quest.
- At-Large: Teams comprised of students who are representing their Center in another event but did not qualify to advance as Delegates.

MATERIALS:

The Host Center provides the following:

- 1 Set of math problems per team
- 1 Scantron per team
- Pencils

The team provides the following:

- Calculators (Acceptable calculators are described in General Rule #4)

GENERAL RULES:

- 1) A team is composed of **2-3** students. All members must be in 12th grade participate in this competition.
- 2) Teams are given **50 minutes** to solve as many problems as possible from a **set of 30**. All problems will be multiple-choice format and do not need to be solved in numerical order.

- 3) The following math content will be covered: **Algebra I, Geometry, Algebra II, Trigonometry, Pre-Calculus, Math Analysis, Calculus.**
- 4) Only non-QWERTY calculators are permissible and must be supplied by the team. Calculators that have typewriter-like keyboards, require an electrical outlet, make noises, or use paper are not permitted. Additionally, devices with embedded calculator functions such as cell phones, iPod/iPad, laptops or tablet computers are strictly prohibited.
- 5) Books, mathematical tables, or other resource materials cannot be used during the test.
- 6) The *Team Scantron* must be legible and thoroughly completed as instructed by the proctor. Scantrons that are illegible or not filled out correctly will not be scored.
- 7) Scratch paper is not allowed. Each problem is printed on a separate sheet of paper. Team members may use both sides of this sheet to solve the problem. ***Any work done on this sheet will not be used for scoring purposes***
- 8) Only answers properly marked on the Team Scantron will be scored.

JUDGING:

- 1) Before beginning the timed event, a proctor will briefly review the event guidelines with all student participants, verify that only non-QWERTY calculators are present, and distribute pencils.
- 2) Each team will be given a Scantron. Per General Rule #6, each team is responsible for legibly and thoroughly completing the *Team Scantron* per proctor instructions.
- 3) Each team will be given the appropriate set of 30 problems in a manila file folder or large clasp envelope. Per General Rule #7, scratch paper will not be provided.
- 4) Once a problem is solved, the team must record the answer in the corresponding space on the Team Scantron and continue with problem solving until the end of time is called.
- 5) The proctor will announce when 5 minutes and 1 minute remain.
- 6) Scoring is strictly based on the number of correct responses. Questions left blank will be scored as incorrect.
- 7) In the event of a tie, a tie breaking procedure will be implemented to determine placing.

AWARDS:

- *Preliminary event:* 1st, 2nd, and 3rd place will be awarded.
- *Regional event:* Same as preliminary, but there are two different categories: **Delegates** and **At-Large**. See the "Categories" section for complete definition. At-Large students that don't have their original teammates from Prelims will be teamed up with students from their same school site, and then their same center if necessary. This will be at the discretion of each center director.