

Competition Components

MATHCOUNTS competitions are designed to be completed in approximately three hours:

The **SPRINT ROUND** (40 minutes) consists of 30 problems. This round tests accuracy, with time being such that only the most capable students will complete all of the problems. **Calculators are not permitted.**

The **TARGET ROUND** (approximately 30 minutes) consists of eight problems presented to competitors in four pairs (6 minutes per pair). This round features multi-step problems that engage Mathletes in mathematical reasoning and problem-solving processes. **Problems assume the use of calculators.**

The **TEAM ROUND** (20 minutes) consists of 10 problems that team members work together to solve. Team member interaction is permitted and encouraged. **Problems assume the use of calculators.**

Note: Coordinators may opt to allow those competing as “individuals” to create a “squad” of four to take the Team Round for the experience, but the round *should not be scored and is not considered official.*

The **COUNTDOWN ROUND** is a fast-paced, oral competition for top-scoring individuals (based on scores in the Sprint and Target Rounds). In this round, pairs of Mathletes compete against each other and the clock to solve problems. **Calculators are not permitted.**

At Chapter and State competitions, a Countdown Round may be conducted officially, unofficially (for fun) or omitted. However, the use of an official Countdown Round will be consistent for all chapters within a state. In other words, *all* chapters within a state must use the round officially in order for *any* chapter within a state to use it officially. All students, whether registered as part of a school team or as an individual competitor, are eligible to qualify for the Countdown Round.

An official Countdown Round is defined as one that determines an individual’s final overall rank in the competition. If the Countdown Round is used officially, the official procedures as established by the MATHCOUNTS Foundation must be followed.

If a Countdown Round is conducted unofficially, the official procedures do not have to be followed. Chapters and states choosing not to conduct the round officially must determine individual winners on the sole basis of students’ scores in the Sprint and Target Rounds of the competition.

In an official Countdown Round, the top 25% of students, up to a maximum of 10, are selected to compete. These students are chosen based on their individual scores. The two lowest-ranked students are paired, a question is projected and students are given 45 seconds to solve the problem. A student may buzz in at any time, and if s/he answers correctly, a point is scored; if a student answers incorrectly, the other student has the remainder of the 45 seconds to answer. Three questions are read to each pair of students, one question at a time, and the student who scores the most points (not necessarily 2 out of 3) captures the place, progresses to the next round and challenges the next highest-ranked student. (If students are tied after three questions [at 1-1 or 0-0], questions continue to be read until one is successfully answered.) This procedure continues until the fourth-ranked Mathlete and her/his opponent compete. For the final four rounds, the first student to correctly answer three questions advances. The Countdown Round proceeds until a first-place individual is identified. (More detailed rules regarding the Countdown Round procedure are identified in the “Instructions” section of the School Competition booklet.)

Note: *Rules for the Countdown Round change for the National Competition.*

The Masters Round is a special round for top individual scorers at the state and national levels. In this round, top individual scorers prepare an oral presentation on a specific topic to be presented to a panel of judges. The Masters Round is optional at the state level; if held, the state coordinator determines the number of Mathletes that participate. At the national level, four Mathletes participate. (Participation in the Masters Round is optional. A student declining to compete will not be penalized.)

Each student is given 30 minutes to prepare his/her presentation. **Calculators may be used.** The presentation will be 15 minutes—up to 11 minutes may be used for the student’s oral response to the problem, and the remaining time may be used for questions by the judges. This competition values creativity and oral expression as well as mathematical accuracy. Judging of presentations is based on knowledge, presentation and the responses to judges’ questions.