



42 Points | Math Battle

Rules of Math Battle

1. *Problem Solving.* Each of the two teams (let us say, *Team A* and *Team B*) receives a list of 10 problems prepared by the jury. They are given 3 hours to solve the problems. After 3 hours expire, the team members and the jury gather together in some auditorium, where the math battle begins.
2. *Captains Contest.* The jury determines which team goes first through a *captains contest*. A simple problem is given to the captains and the victorious captain decides which of the teams will issue the first challenge.
3. *Challenge.* Let us say, *Team A* “issues a challenge” to *Team B*. This means that *Team A* declares that they want to hear *Team B*’s solution to one of the problem from the list. *Team B* can accept the challenge or reject the challenge.
4. *Challenge Accepted.* If *Team B* accepts the challenge, then they send one of its members to the board to act as a “storyteller” (that is, to tell their solution of the problem). *Team A* sends one of its members to act as a “critic” to the storyteller, whose responsibility is to check the solution, reveal its weak points, or, perhaps, even prove it wrong.
5. *Challenge Rejected.* If *Team B* rejects the challenge, then *Team A* must prove that they challenged *Team B* in a *correct manner*. This means that they must delegate a “storyteller” who gives a correct solution to the problem. As before, *Team B* should send a “critic”, who will try to disprove the solution or at least find some minor errors or unproven points.
6. *Next Challenge.* In all these cases but one, the next challenge must be made by the other team. The exception occurs if after checking the *correctness* of the challenge (see the previous paragraph) the *Jury* decides that *Team A* did not provide a solution to the problem and therefore the challenge was not issued correctly. In this case, *Team A* is to be fined, and they must challenge *Team B* for another problem.
7. *Points Distribution.* Each problem is worth +12 points. After the discussion of the solution is finished, the jury shares the 12 points among the three parties: *Team A*, *Team B* and *Jury*. If the presented solution is correct and has no holes, the “storyteller” is granted 12 points. Points may be granted to the “critic” if he finds errors in the presented solution. The *Jury* is also permitted to award points to itself if a major error found by the “critic” (or by the jury) was not corrected by the “storyteller” within some standard amount of time (usually 1 minute). The fine for the incorrect challenge is –6 points.