

## MATH MATCH RULES

### We need:

1. Two “fairly balanced” teams - **team A** and **team B**. “Fairly balanced” means - similar number of members; a similar level of knowledge, skills, experience in each team.
2. A **captain** of each team. Some of the captain’s responsibilities are: speaking for the team; coordinating team’s work; keeping order in the group; having the final voice in choosing the appropriate strategy for the team.
3. Even number of **Math Problems**. Problems should be challenging but should not require excessive theoretical knowledge.
4. At least two **judges**, usually instructors. Some of judges’ responsibilities are: implementing the Math Match rules; having a final decision in whether or not accepting the solution and how to distribute the points; keeping the order; keeping the records.
5. **Preparation time and place** to solve the problems before the start of the match. The length of the preparation time as well as the place of the preparation should be negotiated between judges and captains.

### Description of rules:

1. To **determine the starting team** the “flip the coin” method can be used. Suppose the starting team is the team A.
2. Each presentation of the solution of a problem from the Math Problem list may earn from **0 to 10 points**.
3. The **captain of team A** calls **team B** to present one of the problems from the Math Problem list, for example problem #2.
4. The captain of team B either **accepts** the challenge and sends one of the team’s members to present the solution of the problem, or **refuses** to solve the problem (for example, if nobody from the team has solved it).
5. After the member of team B has completed his or her presentation, **team A** is allowed to **question the presented solution**. The more of weak points will be pointed out in the presented solution the lower the mark will be granted to team B.
6. Team A or the judge is allowed to present a different solution to the problem if this solution is to be considered interesting or more “elegant”; however, team A would not score any extra points by doing so.
7. If the captain of the team B (as in point 3) refuses to present a solution, **team A is obligated to present a solution** to problem called for. Team A may score up to **10 points** as long as the presented solution is correct. In case team A doesn’t have a solution, or the solution is incorrect, team A scores **negative 10** points.
8. In the next turn, the captain of **team B calls team A** to solve another problem from the given list, for example problem # 5. This process lasts until all the problems from the given list are solved.
9. **The winning team** is the one with **the higher score**.

**Final Remarks:**

- Look for the most “elegant” solutions. “Elegant” means short, easy to understand and to present, possibly nonstandard, interesting, and clearly written solutions.
- Show different ways of solving if there are more than one ways to solve the problem.
- Listen carefully to the presented solution and look for any inconsistencies or weak points in it. Pointing these out may lower the opponent team’s score and increase chances of winning.
- **Be fair and respect others if you want to be respected.** Talk when is your turn - never when somebody else is talking.
- Make sure that you do not cover the solution by your body while writing.
- Have fun.