

MATH WEEKLY PROBLEM COMPETITION

Organized by the **Department of Applied Mathematics** and **IIT SIAM Student Chapter**

Purpose: Undergraduate Students at IIT are able to practice and compete in an intra-campus mathematics competition, and win the competition, by being the first undergraduate student to correctly solve the **Weekly Problem**.

Qualifications:

- undergraduate student at IIT
- a desire to solve mathematical problems

Difficulty of Problems:

The problems are expected to be quite challenging; however, all problems will only require knowledge up to Calculus. If you have not taken any classes above Calculus, you are not at a disadvantage in this contest.

Rules:

1. One problem will be placed on the website www.math.iit.edu/~weeklyproblem every Friday at 3:00PM;
2. Once it is published, undergraduate students at IIT can then independently begin to work on the problem(s). For this competition, no collaboration is allowed between students, and you are not allowed to discuss the problem with anyone else;
3. Each student will only be able to submit **one solution a week**. Submissions must be made by next Wednesday, 5:00PM;
4. Students **must submit** their solution **electronically** by email to weeklyproblem@math.iit.edu. Any other methods of submitting are NOT accepted. You may use your preferred software to type formulas; however, if this is not MSWord or LaTeX, please convert the solution into PDF (also consider using the TeX for Gmail extension). Scanned-in handwritten solutions are acceptable provided they are legible. Problems that do not contain formulas, or just a few, may be typed directly into the body of the email.
5. Solutions must include rigorous mathematical arguments to justify any claims made (eg. if a problem asks for all solutions to an equation, you need to show your method for obtaining solutions and show that no other solutions are possible).
6. The winner will be **the first** undergraduate student at IIT **to submit a COMPLETE and correct** answer. No partial credit will be given. The winner will qualify for a **\$15 prize and a certificate of recognition**. All students who submit a correct solution, regardless of the time at which they submitted the correct solution, will be acknowledged at a later time.
7. The name of the students who submitted the correct solution will be announced in the alphabetical order the following Friday after publishing the problem. The winner will NOT be announced by name, and only the time when the first right answer was submitted will be published.
8. If during the week there is no student who is able to submit a correct solution, then the next week we place a new problem and the prize for that problem will be \$15.
9. The contest will last until April 2015. The Department of Applied Mathematics will announce all winners during the "Remembering Karl Menger 2015" event (unless somebody graduates in December 2015).
10. At least one additional monetary prize will be given to the student who provided most correct solutions (not necessarily first) during the entire period of the contest.

Have fun, and enjoy Mathematics!