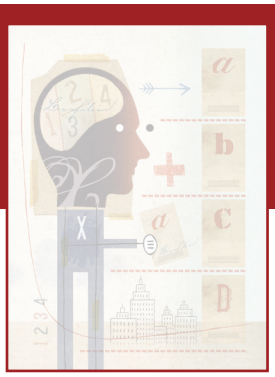
Moody's Mega Math Challenge™

M3Challenge.siam.org



Advice for students from past participants:

1. Basic knowledge of statistics is a great help. Using proper English and doing some practice problems from previous challenges are also helpful.
2. Be creative and don't hesitate to throw in seemingly outrageous ideas.
3. It's easy to get distracted. Take your time and make a plan.
4. Make sure to take a break during the process. My group totally forgot about that. Understand the question and brainstorm what you know about the topic of the question. Besides making calulations by hand, keep working on a computer to avoid wasting time.
5. Be thorough, concise in your report , and creative.
6. Have a great time but keep your eye on the clock!
7. Put your best effort towards it whether you win or not, since it'll look good on your college applications and it'll help you solve problems in the future.
8. Be sure to know how to model mathematically.
9. Just enjoy yourselves. Don't be nervous about participating in the M^3 Challenge, but look upon it as an adventure. You will receive the most benefit if you try to take in as much as you can.
10. Bring an open mind along with knowledge in many different fields of mathematics, as you never know how many different approaches you can take to a problem.
11. Use the Challenge as a learning experience and a chance for growth. The Challenge is also an opportunity to strengthen your mathematical skills and broaden your knowledge of math and its importance in other subjects.
12. Form teams with students who work well together, prepare well, pace yourself, and proofread.
13. Think outside the box.
14. Have reference books at hand, as you will be collecting a lot of data.
15. Don't freak out. Keep working and don't be afraid to go back and change work that you have already done.
16. Participate for the love of mathematics, if you have such love, of course. The participation is a lot of fun because the difficulty of questions is quite high and if you like to solve challenging questions like I do, you will enjoy it.
17. The best papers every year are those that show the validity of their solutions through rigorous mathematical tests.
18. Make sure your team is committed, motivated and ready.
19. Before you begin, select a team captain, and maybe even a co-captain. Make sure everyone has faith in these people and agrees to go along with their leadership. The leaders should have an even greater responsibility to review all rules and guidelines and make sure they are competent to take the team to a good paper.
20. Try to have at least an idea of how you will divide the labor throughout the day. What are each person's strengths and how can they best be used from start to finish?
21. It is likely you will get a topic that you know little to nothing about. Make sure you are ready to dig for data before starting your modeling work.
22. Have a plan and a back-up plan for where you will do your work. Make sure any transportation, computer, and internet issues are resolved in advance.
23. Have fun with it, relax, and work hard.

See reverse for advice for teacher-coaches.

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