

Assorted tips applications for REUs and/or graduate school, by David Glickenstein

1. Be sure your letters are from people who can speak to your mathematical ability. Preferably highest levels of mathematics taken! Even if you don't know the professor, it is better to know that you did well in a difficult course than you are a nice guy. Ask your professors if you think they can write you a good letter.
2. Follow the instructions! It annoys the organizers to have to root through your application.
3. Try to write about concrete things rather than how good you are. Write about some mathematics which you think is beautiful or an experience that you found rewarding or that you would like to know more about (and why – but don't say you are ONLY interested in one area, especially if that is not an area for the REU or a strength of the department to which you are applying). Write about some of your interests and goals (but be reasonable about goals: not everyone can win a Fields medal). Keep in mind that your audience is mathematicians who are trying to evaluate your ability to succeed in graduate school.
4. Ask someone to read your essay. Even better, have a couple of people read your essay. It is best if you can have someone who would know your audience better, like one of your professors!
5. Give your recommenders sufficient time to write a good letter (if possible, at least two weeks). Provide them with information about you such as your resume, list of courses, statement of interest.
6. Put your name on everything you send, at the top!
7. Use standard file formats: pdf, text, maybe MS Word.
8. Stay away from politics and religion. Those reading your materials may disagree or even take offense.
9. For that matter, don't give opinions on any other subject that might offend someone (say, disparaging an area of mathematics or science).