

# EDWIN O'SHEA'S TIPS FOR WRITING MATHEMATICS

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EDITED FOR MATH 170 BY DAN FINKEL

## My Personal Guidelines

**I am your fellow student:** When writing your solutions imagine me as a fellow student who has kept up with the course but who hasn't done this current homework. I should be able to read your solution and understand it.

**I do not have psychic powers:** I must never have to fill in holes or guess what you're thinking. Don't assume that I will understand where you're coming from.

**Good Mathematics is always written in good English:** Write complete sentences. Tell me what you think the solution is, how you're going to prove it, then prove it and conclude. Telling me something too about the main idea will help your case, perhaps with an illustrative example. All this should be expressed in a succinct and elegant manner.

**My job should be easy:** If I have to read your solution five times or spend more than 10 minutes trying to understand what you are saying then you haven't made a strong case. Your solutions should read like poetry, like honey dripping from the page.

**I expect a high standard:** You could very well make big decisions based on ideas you learn in this class. This entails me holding you to a very high standard. Please keep this in mind.

## Some Friendly Tips

**Work in groups:** Focus hard on hearing out your classmates and constructively criticizing each others solutions. The fruit of good oral communication and dialog will often be a good written presentation.

**Ask me, ask me, ask me:** Don't be afraid to ask me questions during office hours. If you can't make an office hour don't be shy to request an appointment.

**Leave space on the page:** Leave a little space after each question and leave some margin so that there is sufficient room next to a solution where I can respond with comments.