Calculus Presentations

Calculus 11, Veritas Prep.

In this class we are not just learning math—we are also learning how to teach math. These are two very different things. Math may be an object of contemplation, but math teaching requires practical, not theoretical, wisdom. So we need to practice. These presentations are an opportunity for you to take charge and teach the class. Each night when I assign homework, I'll assign two of you problems to present in class (see schedule on reverse); the next day, you'll come in and spend ten minutes or so at the board going over the problem, just as if I were going over it (except better).

Teach us how to solve the problem! You should set up, explain, and work through the problem as clearly as possible, as if we had just seen that type of problem for the first time. Write on the board, use algebra, calculus, graphs, words, color-code, come up with clever metaphors, call on people to help with steps, bring in visual aids—do everything that you think is necessary to fully explain how to solve the problem.

You won't know what problem you'll be presenting until the day before, due to some strategic decisions about long-term planning on my part, but I don't mean that to be a hinderance. Most of the problems I'll be assigning for you to present will be on topics that we've already spent some time covering, or that are review from last quarter, so that you can focus your efforts on explaining the math rather than understanding it. (This is not to say that explaining and understanding are disjoint, but that's a much longer conversation...) Come talk to me if you are uncertain about how to work out the math for your problem, or even if you just want to practice explaining your solution—I'm happy to help. I really do want you to do well. The point isn't to show off how good at math you are, or how you can antidifferentiate a factored fifth-degree polynomial in your head—the point is to show off how good you are at teaching *us* how *we* can do the math.