

From the desk of your enterprising and resourceful professor

As you've read, your groups will all be submitting proposals to Cindy, and she'll be selecting the one she likes best. For all we know, she's shopping around at other colleges and universities across the country, so you want to really work to create something impressive.

What I want you to do is to submit a rough proposal to me, showing me the shape you're proposing rotating, and telling me what curves you'll be using. I'd like you to submit it to me by not only giving me a paper copy, but also by e-mailing me your Maple file as an attachment (that way, the class can see everyone's proposals – I think that'll be interesting!) Since she wants the final proposals by November 5, how about if you give me your rough proposals no later than October 24.

By the way ... more than likely, one curve isn't going to be enough to accomplish what you'd like, especially since she said she wanted a complex design. If you're going to be using more than one curve, you want the place where two curves connect to look natural. There are several ways around this. One is to choose to have them connect where both of them have slope 0. Another is to have them meet at a point, and to have that point look like that's what you meant to do. The final way is to have a connecting curve between the two that matches the slope of each at either end. This is an excellent skill to know; I use it all the time!

I threw together a very simple example to demonstrate some of the ideas and some of the Maple commands; your proposal will of course be fancier.

This demo is (or will be) found on my web site at
http://acunix.wheatonma.edu/jsklensk/Calc2_Fall03/Projects/project2demo