Team Project #1 - Fabricating a Parabolic Mirror (cont.)
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Your team has been hired as a consulting group by NASA to study the spin-casting process. NASA is considering making a significant investment of time and money into further development of this process. On February 25th your team will make an 8 minute presentation to a group of NASA scientists and engineers who will make the decision of whether or not to continue research in this area. In this presentation you have been asked to address the following questions:

1. In the spin-casting system, what shape does the free-surface take?
2. How does this shape vary as a function of rotation speed? fluid properties? cylinder geometry?
3. NASA is particularly concerned with the strength of the final casting. What is the thickness of the casting at the center of the free surface? How does this vary with the rotation speed?
4. Should NASA invest in this process? Will there be significant "spin-off" (no pun intended) applications from such an investment?

Presentation Guidelines: Your team should use Powerpoint and/or Maple for its presentation. Presentations should be brought to class on a CD on February 25th. Note, your audience is a team of *scientists* and *engineers*. This team wants to see technical details of your analysis. In particular, a presentation showing only final formulas without a derivation will not be sufficient. You have Maple at your disposal. Maple allows you to visualize surfaces and even to animate them. You should take advantage of this tool.