MATH:113, Recitations 304 and 305

Marth 27th Lesson Plan

Our goals for this class period are:

- (i) digging deeper into the concepts underlying implicit differentiation;
- (ii) thinking critically about *why* it's necessary to use implicit differentiation in the first place;
- (iii) understanding where the name "related rates" comes from, and the setup involved in such problems;
- (iv) *if students have completed the rest of the problems*, a solving a bonus linear approximation problem.

We'll be doing an interactive lecture-y style recitation: groups should work through the problems together, and once we've

5-10 minutes	Homework fly-by (depending on whether students have submitted prob- lems through the survey).
5-10 minutes	Students work through the Concepts questions for Problem 1 of the work- sheet; we'll review these together as a class to make sure we're all up to speed.
5-10 minutes	Students work through the Setup questions for Problem 1 of the worksheet; again, we'll check in as a class to discuss.
10 minutes	Students complete the Computation portion of Problem 1; again, we'll check in as a class.
20 minutes	Students work through the Setup and Computation portions of Problem 2 in their groups; instructors circulate and discuss as we go. If there's time remaining and the students have completed the second problem, let them work on the linear approximation bonus problem.