MATH 142 (Section 502) University of South Carolina
D. Meade Spring 1996

# Homework Problems for Chapter 12
# Polar Coordinates

| Section | Page | Problems | |
|---|---|---|---|
| 12.6 | 577 | # 5, 7, 9, 11–15, 17–21, 23–28 | (CR # 1–3) |
| 12.7 | 581 | # 1, 2, 3, 4, 5, 9, 10, 12, 13, 14, 21, 23, 33, 34 | (CR # 1–3) |
| 12.8 | 588 | # 1, 2, 3, 4, 5, 11, 14, 15 | (CR # 1–3) |

Notes

- This is the last set of homework problems!
- The material on polar coordinates serves several purposes. First, this material is important for those of you who will take MATH 241. Of more immediate concern, this should help you to refresh your trigonometry skills that we developed earlier in the semester. Remember some of the trig identities that we found useful; they'll come up again here. In other words, this will be useful in starting to study for the final exam.
- One of the main objectives of this material is to be able able to identify some common graphs of polar functions. This is the main objective in Sections 12.6 and 12.7. We will apply this to area problems in Section 12.8.
- These problems will reinforce the main points presented in the text, and in the lectures. You should be sure you know how to work all of them. Note that references to examples in the text are provided for many problems. Don't be afraid to use these hints.
- Some problems will require you to use knowledge learned in Math 141. If you don't remember the appropriate technique, look it up!
- If you need more practice, there are many other problems in the text that are similar to the ones I have assigned.
- If you don't know how to do a problem, ask about it in recitation!
- OFFICE HOURS: The usual office hours (MWTh 10:00–11:00) will be held. In addition, I will be available during our regular class times (MW 11:15–12:05, TTh 11:00–12:15). Other times can be arranged; give me a call at 7-6183.
- FINAL EXAM: Monday, April 29, 9:00A.M., LeConte 303B.