

Homework 5

July 30, 2008

This homework will not be graded, however you should do all these problems for your own practice and in order to prepare for the final exam. I shall post the solutions to this on Monday morning and discuss them in class as part of the review session. Please feel free to contact me over email at any time if you face difficulties, or to schedule an appointment at any time (including on Saturday or Sunday). Remember: Though this homework will not be graded, you **MUST** solve it for your own benefit. Note again that the final is on **TUESDAY**, 5th **AUGUST** in class.

1 Compulsory Problems

1. Go through the chapter 3 review and the true-false quiz on page 261.
2. Go through the class notes and obtain the derivatives for some inverse trigonometric functions.
3. Section 3.5: Problems 1, 3, 10, 20, 22, 26, 40, 43 (be careful on 43: please don't say that it's obvious).
4. Section 3.5: Problems 50, 54, 65, 67.
5. Section 3.9: Problems 10, 23, 24, 29, 35. Look at the sine rule and the cosine rule, which you might find useful for some of these problems.
6. Study all definitions and theorems in section 4.1 **THOROUGHLY**. Try to construct examples for yourself to check that you've really understood them.
7. Section 4.1: Problems 7, 14, 32, 36, 61, 63.