MATH 142 (Sections 1&2) University of South Carolina
D. Meade Fall 1995

Homework Problems for Chapter 8
Techniques of Integration

Section	Page	Problems	
8.1	388	# 1–15, 17, 23–27, 41, 45, 52	(CR # 2, 3, 4)
8.2	395	# 1, 3, 4, 5	(CR # 1, 2)
8.3	400	# 1–6, 11, 16, 19, 21, 23, 33, 34	(CR # 1, 3)
8.4	407	# 1–7, 11, 13, 19, 21, 22	(CR # 1, 2)
8.5	415	# 1–5, 9, 13, 16, 17, 21, 23, 24	(CR # 1, 2, 4)
8.6	416	# 1, 3–9, 14, 28, 35, 37, 38	(CR # 1–5, 10, 17–20, 21)

Notes

- You will notice that there are more problems assigned for most sections of Chapter 8 than for Chapter 7. There are two reasons for this: i) several students have requested additional problems and ii) integration takes practice! I strongly encourage each of you to successfully solve each of these problems.
- While we will discuss the topics in each section of this chapter, we will *not* be discussing every part of each section. For example, we will not talk about Tables of Integration (in §8.1) and will only look at integrals of Type I and Type II in §8.2. I will make more announcements about this in the lectures.
- Formulating a plan of attack is often necessary when evaluating integrals. You need to identify this plan in advance, then determine if your plan is going to be successful. With the above practice, you should become quite proficient at the evaluation of integrals!
- 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.
- Do not be surprised if some of the answers in the book look different than yours. If both answers are correct, it should be possible to convert one into the other using the properties of the exponential, logarithmic, and trigonometric functions.
- If you don't know how to do a problem, ask about it in class, recitation, or office hours!