MATH 151 HW #1: CHAPTER 9
SPRING 2004

Write your name (encoded, if you like) and clearly separate sections!
Show work where appropriate, and use "good form and procedure," as in class!
This is due when you take Quiz 1 on Chapter 9.
Graded out of 10 points.
"*" denotes "See Hint below."
Some of these problems can be done using Math 150 methods!
Read some of the Examples in this chapter for additional assistance.

9.1:   1, 3, 7-13 odd, 17, 21*, 25, 29, 31, 37, 39, 41*, 43

   Hint on 21: See Example 6 on pp.460-1.
   Hint on 41: See Example 7 on p.461.
   Look at (i.e., you don't have to do, but they're interesting) 51, 53.

9.2:   1, 3, 5, 9-15 odd, 19, 21*, 25, 27

   Hint on 21: Use the "product-to-sum" identity for $\sin u \sin v$ listed on the back endpaper of the textbook. If you need any of these product-to-sum identities for a test, I will give it to you on the test.

9.3:   1-9 odd, 10*, 11, 13

   Answer to 10: $\dfrac{1}{2}\ln\left|\dfrac{2x}{5}+\dfrac{\sqrt{4x^2-25}}{5}\right|+C$, or $\dfrac{1}{2}\ln\left|2x+\sqrt{4x^2-25}\right|+C$

   by using properties of logs.

9.4:   1, 5, 7, 9, 11, 16*, 17, 19, 21

   Answer to 16: $2x-5\ln\left|x+3\right|+\dfrac{3}{x+3}+K$

9.5:   3, 5, 7, 11, 15 (Hint: Factor the denominator.)

9.6:   1, 3, 7, 11, 13, 15, 21, 29

   Warning: Some of the solutions in the Student Solutions Manual are incomplete in that they do not go back from u to x.

9.8 (Review): No homework, but think about how to approach these problems. These review problems are often harder than the ones you've seen, though!