## MATH 150 FINAL INFO + HW: CHAPTER 8 (10 POINTS EXTRA CREDIT)

## **SPRING 2009**

## START DESIGNING YOUR SHEET OF NOTES FOR THE FINAL!

Your sheet will be allowed on Part 2 (but not Part 1) of the Final. On Part 1, you will have to remember derivatives, integrals, and trig and hyperbolic identities; you may need the Chain Rule. Know all of the formulas on the front endpaper of your textbook, except for #1, #19, and #20 under "FORMULAS FOR INTEGRALS." In addition, know the derivative and integral formulas and the identities for the hyperbolic functions. Also know the definitions of sinh *x* and cosh *x*. Know the graphs, domains, and ranges of the inverse trig functions. Check the old Final (especially Part 1) on my web site.

## Turn this HW in separately from the Ch.7 HW.

Chapter 8 will be well represented on the Final! Read some of the Examples in this chapter for additional assistance.

Know the rules/formulas for derivatives and integrals, as well as basic identities.

- 8.1: Know the graphs, domains, and ranges of the inverse trig functions. 1, 5, 19, 21
- 8.2: 1, 3, 7, 9, 17, 29, 31a, 33, 37, 41 (Think first!) **Warning:** In the <u>Student's Solutions Manual</u>, the authors sometimes forget to write *u* out in terms of *x* in the final answer; in this sense, the manual does not complete some of the problems.
- 8.3: 1a, 3, 5, 7, 9, 27-35 odd

Look at the applications on p.441.

Look at 49.

**Look at** 55-70. For 57-70, notice the similarities with formulas you (hopefully) remember from trigonometry (listed on the back endpaper of your textbook). There is a sign flip from what you might expect on 60-69, except 61, 65, and 68.

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Why are they called "hyperbolic" functions? Check my web site – Notes for Chapter 8.

8.4: Skip