

Main Exercises Week 3

MATH 131: Calculus II, Section 2 and 3

Your Name (Print): _____

Follow the general guidelines for the Main Exercises assignments (the salmon colored handout). Be sure to **staple** together your pages if you have more than one, and include your **name** at the top. Be **NEAT** and **SHOW YOUR WORK!!!**

Due: at the beginning of class on Friday, September 18th

Remember: Your write-up should be **your own**. You may discuss these problems with others, but **you should be alone when you write them up**, using only outlines of any group or Intern discussions.

1. Do problem 73 from Section 5.2 in the text (page 361). Read the directions carefully! This is before Section 5.3 so don't use tricks from there!

2. Find the **derivative** of $g(x) = \int_{\sec x}^{x^4} \frac{t^2}{\sin t - 16} dt$. (This uses similar ideas to the challenge problem we did in group work on Monday.)

3. Do problem 46 from Section 5.3 in the text (page 374). Read the directions! This IS from Section 5.3!