

Main Exercises Week 10

MATH 130: Calculus I, Sections 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** and which **section** of calculus you are in at the top. Neatness is appreciated and makes a good first impression!!!

Due: at the beginning of class on Friday, November 1st

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 TA discussions.

1. Find the derivatives of the following functions. Simplify your answers by eliminating negative exponents and fractions within fractions, and cancelling where clearly possible.

(a) $f(x) = \log_8(\arcsin(7x)) + \arctan(e^{x^6})$

(b) $y = (\ln x)^{\sec x}$