

Main Exercises Week 8

MATH 131: Calculus II, Section 2

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. Neatness is appreciated, makes a good first impression, and can earn you a bonus point!!!

Due: at the beginning of class on Monday, October 15, 2018

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. **EXPLAIN** and **SHOW YOUR WORK!!!** Final answers will not receive full credit without supportive explanations. You may use your own paper on which to write these up.

1. Find the length of the curve $y = \frac{1}{2}(e^x + e^{-x})$ on the interval $[-\ln 2, \ln 2]$.
2. Find the surface area generated by rotating $y = \sqrt{6x + 8}$ on the interval $[0, 7]$ about the x -axis.