

Main Exercises Week 2

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. Neatness is appreciated and makes a good first impression!!!

Due: at the beginning of class on Friday, September 11th

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. Use geometry to evaluate the following definite integral: $\int_{-8}^2 \sqrt{25 - (x + 3)^2} dx$. Think about the example we did in class on Wednesday! Your solution should include a diagram and a complete sentence.

2. Use the **definition** of the definite integral (remember that when we say this we will always mean with **right Riemann sums** NOT left or midpoint, etc.) to evaluate $\int_1^7 (6x^2 + 9) dx$.