Main Exercises Week 3

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, September 10, 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. Use geometry to evaluate the following definite integral: $\int_{-8}^{2} \sqrt{25 - (x+3)^2}\,dx$. 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 $\int_{1}^{7} (6x^2 + 9)\,dx$.