

Math 205

Assignment #6

Due: March 6, 2015

- Complete the following integrals from the 6th edition of your text – Hughes-Hallett– pg 410
 - a. #138 (4 marks)
 - b. #135 (4 marks)
 - c. # 140 (4 marks)
 - d. #146 (4 marks)
- Sketch the graph for question # 160 – pg 410 from the 6th edition of HH and find the area. (5 marks)
- Question #182, pg 411 from the 6th edition of your text – Hughes-Hallett or HH (4 marks)
- Question #188, pg 411 from the 6th edition of HH (5 marks)
- The SineIntegral function $\text{Si}(x)$ is defined by the expression: $\text{Si}(x) = \int_0^x \frac{\sin t}{t} dt$:
 - a. Use the Trapezoidal Method to estimate the value of $\text{Si}(1)$ by using a regular partition with $n = 10$
 - b. Use Simpson's Rule to estimate the value of $\text{Si}(1)$ by using a regular partition with $n = 10$
 - c. To 6 decimal places, $\text{Si}(1) = 0.946083$ – compare the result from parts a and b and comment on the accuracy of each method.
(10 marks)