Spring, 2014 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

MAT 162 Gurganus

Directions: Show all work for partial credit purposes. You may use a graphing calculator and notes recorded on one side of a single 8.5 by 11 inch paper. Otherwise the test is closed book. When you turn in your test, staple your notes to this sheet.

For 1-4, calculate the following:

1. 

2. 

3. 

4. 

5. Estimate  using the Simpsons Rule with n = 8. Write the sum; you do not have to evaluate the sum.

6. Calculate the following; it the integral does not converge, state “does not converge.”

 a. 

 b. 

7. Tell why the following converge or diverge:

1.  b. 

8. Calculate 

9. Write the form of the partial fraction decomposition that you would use to calculate the following integral (you do not have to solve for the constants nor evaluate the integral): 