MATH 107 Quiz 1

Name:_____ PIN in any 4 digits:_____ Score:_____

Instructions: You must show supporting work to receive full and partial credits. No text book, notes, formula sheets allowed.

1(6pts) (a, 4pts) Use $n = 2$ to find the Left Point Sum L_2, Right Point Sum R_2, Midpoint Sum M_2, Trapezoid Rule $T_2 = (L_2 + R_2)/2$, and the Simpson Rule $S_2 = (T_2 + 2M_2)/3$ for the integral $\int_0^1 \sin(x^2)dx$. (**No Credits if calculator programs are used.**)

(b, 2pts) Use a calculator program to find the Simpson Rule approximation with $n = 10$.

2(4pts) Find the **exact** value of the definite integral

$$\int_1^2 x^2 - x^{-1}dx,$$

using the Fundamental Theorem of Calculus.

(*... The End*)