GIVE EXACT ANSWERS FOR ALL PROBLEMS SHOW ALL WORK FOR FULL CREDIT – PLEASE CIRCLE YOUR FINAL ANSWER DUE: MONDAY, MAY 4, BEFORE THE EXAM NO EXCEPTIONS!!

I understand that no aspect of these problems can be discussed. This includes methods used, resulting forms of the answer, hints, etc. I also understand that the only resources I may use to complete these problems is the required textbook and/or my notes. I hereby acknowledge that I completed these problems on my own, with no help from any other individual. I also acknowledge that I did not help any other person complete their assignment. Furthermore, I understand that violation of these rules will result in a zero being recorded as my exam score and the loss of such privileges in the future.

Signature:

1. (6 pts) Evaluate the following limit.

$$\lim_{x \to \infty} \left(1 + \frac{7}{x} \right)^{2x} =$$

2. (6 pts) Evaluate the following integral.

$$\int \frac{6x-7}{x^2+81} \, dx$$