Reading Quiz 09 for Calculus A

Name： _____   Student ID #： _____   Score： _____

Read sections 7.1-7.3, 7.5

1. Under what circumstances can you be sure that the inverse of a fuction f is differentiable? How are the derivatives of f and f^{-1} related?

2. What is the natural logarithm function? What are its domain, range and derivative? What arithmetic properties does it have?

3. What is logarithmic differentiation? Give an example.

4. Descibe l'Hospital's Rule. How do you know when to use the rule and when to stop? Give example.