Concentrate on the process as well as the final result, and show all your steps clearly so you will be eligible for the most partial credit. Good luck!

1.) (5 pts.) Describe the First Derivative Test for Maxima and Minima. (Ideas: when do you use it? What can it find for you? How do you perform it?)

2.) (5 pts.) Use L’Hopital’s Rule to find $\lim_{x \to 0} \frac{x^2}{\sin x}$. Remember: you need to show you can use L’Hopital’s Rule before you use it.