

The majority of the credit you receive will be based on the completeness and the clarity of your responses. **Show all of your work and justify your solutions as much as possible.**
This is a 20 minute quiz and has 2 questions, for a total of 10 points

- (5 points) 1. Evaluate the integral (note: $\int \sec(x) dx = \ln |\sec(x) + \tan(x)| + C$).

$$\int \sec^3(\theta) d\theta$$

- (5 points) 2. Evaluate the following integral: (Note. If problem 1 applies, you can use it to help evaluate this integral.)

$$\int \frac{x^2}{\sqrt{x^2 - 9}} dx$$