

Name: \_\_\_\_\_  
MAT 296

Quiz 5: Trig Sub  
Fall 2017

**Problem 1:** Integrate the following:

$$\int \frac{x^3}{\sqrt{x^2-9}} dx$$

**Problem 2:** Integrate the following:

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

**Problem 3:** Integrate the following:

$$\int_0^1 \frac{dx}{(x^2 + 1)^{5/2}}$$

**Problem 4:** Integrate the following:

$$\int \frac{dx}{x^2 - 6x + 14}$$