

**Math 126: Calculus II**  
**Quiz 5** *October 5, 1999*

Name: \_\_\_\_\_  
Section: \_\_\_\_\_

In both problems, be sure to *show all your work and include all important steps*.

1. Use the method of partial fractions to calculate  $\int \frac{x^4 + 1}{x^3 + x} dx$ .

2. Use a trigonometric substitution to calculate  $\int \frac{1}{x^2 \sqrt{x^2 - 1}} dx$ .