

Name _____ Student number _____ Quiz section: _____

1 : (5 pts) Evaluate

$$\int \sin^2 x \cos^3 x \, dx.$$

2 : (5 pts) Evaluate

$$\int \sec^4 x \, dx.$$

3 : (5 pts) Use partial fractions to find

$$\int \frac{dx}{x+x^2}.$$

4 : (5 pts) Use a trigonometric substitution to write

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

as a trigonometric integral. DO NOT EVALUATE THIS TRIGONOMETRIC INTEGRAL!!!