

MAC 2312
Quiz 3
September 17, 2008

Evaluate the following definite and indefinite integrals. Give me exact values for the definite integrals, NOT decimal approximations.

$$\int_0^{\pi/4} \sin(x) + \cos(x) + \tan(x) + \sec(x) \, dx$$

$$\int_0^3 \frac{x^2 + 3}{x^3 + 9x + 2} \, dx$$

$$\int \sin(2\theta) \sin(\cos(2\theta)) \, dx$$

$$\int \frac{x^4 + x^3 + x^2 + x + 1}{x + 3} \, dx$$

$$\int \frac{\ln(y) + 5}{y} \, dy$$

$$\int \frac{x^3}{\sqrt[4]{x^4 + 5}} \, dx$$