

Math 242
29 January 2008

Integration Practice

Directions: Here are some integrals you may wish to evaluate for practice. I will not collect and grade this; rather, these are for your benedit. These integrals come from an old Math 142 exam I gave and I will be more than happy to discuss them with you if you feel the need.

$$\begin{array}{lll} \int x^3 \cos(2x) dx & \int \frac{dx}{x^2 - 2x + 3} & \int_0^1 \ln x dx \\ \int_0^4 \frac{dx}{\sqrt{4-x}} & \int_0^1 \tan^{-1} x dx & \int_0^\infty e^{-2x} dx \\ \int \frac{x^4 + x^2 + 1}{x^3 + x} dx & \int_{-\infty}^3 \frac{dx}{x^2 + 9} & \int x^3 \sqrt{5-x^2} dx \end{array}$$