SI Session: July 23rd , 2008
Mondays – Thursdays
12:35 PM – 2:05 PM
Room 1229

Prof. Stockton : Calculus II
Summer II 2008
SI Leader : Neil Jody

[1] Evaluate each integral.

(a) $\int \tan^{-1} x \, dx$

(b) $\int \left(\sin x - \cos x\right)^2 \, dx$

(c) $\int 4^{-x} \cos x \, dx$

(d) $\int \cos^4 x \, dx$

(e) $\int \sqrt{x} \ln x \, dx$

(f) $\int \cos^3\left(\frac{x}{3}\right) dx$

(g) $\int \ln\left(x^2+4\right)dx$

(h) $\int_0^{\pi/2} \sin^2\left(\frac{x}{2}\right)\cos^2\left(\frac{x}{2}\right)dx$

(i) $\int \cos\left(\ln x\right) dx$

(j) $\int_0^{\pi/6} \sec^3 2\theta \tan 2\theta \, d\theta$

(k) $\int_1^2 x \sec^{-1} x \, dx$

(l) $\int \tan x \sec^{3/2} x \, dx$

(m) $\int_1^e x^2 \ln x \, dx$

(n) $\int \sin^2 x \cos^2 x \, dx$

(o) $\int \frac{xe^x}{(x+1)^2}\,dx$

(p) $\int \sec^5 x \tan^3 x\,dx$

(q) $\int (\ln x)^2 \, dx$

(r) $\int \sec^5 x \, dx$