

SI Session: July 24th, 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) $\int e^x \cos(2x) dx$

(b) $\int \sin(-4x) \cos(3x) dx$

$$(c) \int_0^2 e^{-x} \cos(x) dx$$

$$(d) \int \frac{\sin^2(x) - \cos^2(x)}{\cos(x)} dx$$

$$(e) \int_{-\pi}^{\pi} \sin(3\theta)\cos(\theta) d\theta$$

$$(f) \int \frac{1}{\sec(x)\tan(x)} dx$$

(g) $\int x \arcsin(x) dx$

(h) $\int \frac{3 \cos(x)}{\sin^2(x) + \sin(x) - 2} dx$

$$(i) \int \frac{\sqrt{4x^2 + 9}}{x^4} dx$$

$$(j) \int \frac{1}{(x^2 + 3)^{3/2}} dx$$

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

$$(l) \int \frac{x^3 - x + 3}{x^2 + x - 2} \, dx$$

$$(m) \int \frac{x+2}{x^2-4x} dx$$

$$(n) \int \frac{2x-3}{(x-1)^2} dx$$

$$(o) \int_0^{\sqrt{3}/2} \frac{1}{(1-t^2)^{5/2}} dt$$

$$(p) \int_1^5 \frac{x-1}{x^2(x+1)} dx$$

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

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