

SI Session: July 22<sup>nd</sup>, 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.

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

$$(b) \int t^2 \sqrt[3]{t^3 - 1} dt$$

$$(c) \int \frac{x+1}{\sqrt{x^2 + 2x - 4}} dx$$

$$(d) \int \frac{2x}{x-4} dx$$

$$(e) \int \left( \frac{1}{3x-1} - \frac{1}{3x+1} \right) dx$$

$$(f) \int x \left( 1 + \frac{1}{x} \right)^3 dx$$

$$(g) \int \sec(4x) dx$$

$$(h) \int \frac{\sin x}{\sqrt{\cos x}} dx$$

$$(i) \int \csc^2 x e^{\cot x} dx$$

$$(j) \int (\tan x) [\ln(\cos x)] dx$$

$$(k) \int \frac{1 + \cos \alpha}{\sin \alpha} d\alpha$$

$$(l) \int \frac{2}{3(\sec x - 1)} dx$$

$$(m) \int \frac{e^{\frac{1}{t}}}{t^2} dt$$

$$(n) \int \frac{5}{3e^x - 2} dx$$

$$(o) \int \cot^2\left(\frac{x}{2}\right) dx$$

$$(p) \int \sec(2x) \tan(2x) 2^{\sec(2x)} dx$$

$$(q) \int e^{x+e^x} dx$$

$$(r) \int \frac{e^{2x}}{1+e^x} dx$$

$$(s) \int \frac{\sqrt{x}}{1+x^3} dx$$

$$(t) \int \frac{e^{\tan^{-1} x}}{1+x^2} dx$$