

Serial No.: \_\_\_\_\_ Student Name: \_\_\_\_\_ Student Number: \_\_\_\_\_  
Instructor: M. Z. Abu-Sbeih Math 102- Q3 Date: 7-11-2009

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**Show all your work. No credits for answers not supported by work**

Evaluate each of the following integrals.

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

(b)  $\int \tan^3 x \sec^{4/3} x \, dx$

(c)  $\int \sin^{-1} x \, dx$

(d)  $\int \tan^3 x \sec^{4/3} x \, dx$