MATH 2
PROBLEM OF THE WEEK 1
Due Friday, January 31st, 2003 before the quiz.

Please show all your work!

Name:

Show the following:

(1) \[ \int \frac{\ln^nx}{x} \, dx = \frac{\ln x}{} + c \]

(2) \[ \int (\ln x)^n \, dx = x(\ln x)^n - n \int (\ln x)^{n-1} \, dx \]