

**Math 125 Worksheet #10**  
**August 9, 2007**

1. Evaluate the following improper integrals.

(a)  $\int_1^{\infty} \frac{dx}{x \ln x}$

(b)  $\int_0^1 \frac{\ln x}{x} dx$

(c)  $\int_{-\infty}^{\infty} x e^{-x^2} dx$

(d)  $\int_e^{\infty} \frac{\ln x}{x^2} dx$