

Homework 1

Econ 5243

January 29, 2009

1. Find the MLE of β from the exponential distribution, $f(x|\beta) \sim \beta e^{-\beta x}$ for $x > 0$.
2. Find the least squares estimator of variance, $\sigma^2 = E[(Y - E(Y))^2]$ using the result

$$S = \sum_{i=1}^T (y_i^2 - \mu_2')^2 \quad (1)$$

where $\mu_2' = E(Y^2)$