

Daily Assignment Lecture 2

Suppose the following model describes the relationship between world daily demand for oil (in thousand of barrels = K) and the price of oil :

$$\ln(\textit{price}) = 4.75 - 0.005\textit{quantity}$$

- (i) What is the world oil *price* when *demand* = 0 K (i.e., zero thousand) barrels? When *demand* = 25 K barrels?
- (ii) Approximate the percentage increase in *price* when *demand* increases by twenty five K barrels.
- (iii) Use the results of part (i) to compute the exact percentage difference in *price* when *demand* = 25 K and *demand* = 0 K. Comment on how this compares with the approximation in part (ii).