Econ 101 Introduction to Economics I ECON/MAN Sections Bilkent University Fall 2011-2012 Homework II

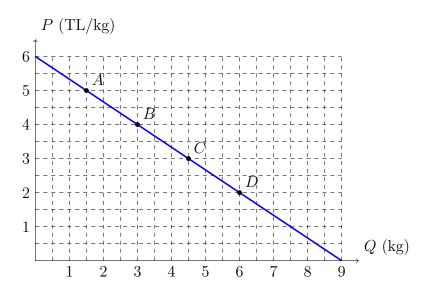
Due: October 30, 2011

You should submit your homework to Turnitin before 17:30

- 1) The government would like to reduce smoking. In order to achieve this the government is considering the following three policies:
 - a. Impose a price floor on the cigarette price.
 - b. Impose a sales tax on cigarette sales.
 - c. Impose a excise tax on cigarette producers.
 - d. Restrict smoking in certain places.

Predict the effects of these policies on the equilibrium price and quantity of cigarette sales.

2) For the demand displayed below, find the elasticity of demand at P = 5 (point A), P = 4 (point B), P = 3 (point C), P = 2 (point D).



- 3) The price elasticity of demand for cigarette is estimated as −0.5 at the current price of 7 TL/package. Due to the increase in taxes on cigarette the current price has become 9 TL/package. Due to this, approximately, what would be the percentage decrease in cigarette consumption?
- 4) Consider a market for rice consisting of a single consumer and a single supplier (producer). In this marker rice is sold (and produce) in quantities which are a multiple of 5 kg. The demand and supply of rice is a follows:

Demand (kg)	Price (TL/kg)	Supply (kg)	Price (TL/kg)
5	4.5	5	0.5
10	3.0	10	1.0
15	2.0	15	2.0
20	1.5	20	3.5
25	1.0	25	5.0
30	0.0	30	7.0

- a. How much is the consumer willing to pay to get his first 5 kg of rice?
- b. What is his *marginal benefit* (i.e., at what *rate* does the consumer benefit) when he receives his first 5 kg of rice.
- c. If the price of rice is 2 TL/kg how much would he have to pay for the first 5 kg that the consumer buys?
- d. How much is the consumer *willing* to pay to get his second 5 kg of rice (i.e., assume that he already owns 5 kg of rice and would like to get 5 kg more)?
- e. What is his marginal benefit (i.e., at what rate does the consumer benefit) when he receives his second 5 kg of rice.
- f. If the price of rice is 2 TL/kg how much would the consumer have to pay for 10 kg of rice?
- g. What is the consumers' "net gain" (i.e., consumers' surplus) if he bought 10 kg's of rice at a price of 2 TL/kg?
- h. What is the *minimum* about that the supplier would like to receive in order to supply the first 5 kg of rice?
- i. What is the *marginal cost* (i.e., at what *rate* should the supplier be compensated to cover for his opportunity cost of supplying the good) of supplying the first 5 kg?
- j. If the price of rice was 2 TL/kg what would the suppliers' revenue be?
- k. What is the *minimum* about that the supplier *would like to receive* in order to supply the second 5 kg of rice (i.e., the supplier has already produced/supplied the first 5 kg and will supply 5 kg more)?
- l. What is the *marginal cost* (i.e., at what *rate* should the supplier be compensated to cover for his opportunity cost of supplying the good) of supplying the second 5 kg?
- m. If the price of rice was 2 TL/kg what would the suppliers revenue be?
- n. If the price of rice was 2 TL/kg how much revenue would the supplier make by supplying 10 kg of rice?
- o. What is the suppliers "net gain" (i.e., *producers surplus*) if it supplied 10 kg of rice at a price of 2 TL/kg?
- p. What is the elasticity of demand corresponding to a price change between 2 TL and 3 TL?
- q. What is the equilibrium price and quantity?