B.E. International Program

Faculty of Economics, Thammasat University

EE 211 Principle of Microeconomics

Semester 1/2017

Exercise 4

(Consumers, Producers, and Market Efficiency)

1. Explain the concepts of consumer's surplus, producer's surplus, and total surplus (or social welfare).

2. Show that total surplus is equal to the difference between consumers' willingness to pay and producers' cost. Discuss why total surplus is maximized at the market equilibrium.

3. (This question is from Question 4 in Exercise 2).

Suppose that the demand and supply schedules for oysters in a local market (in 1,000 kilograms/months) are given as follows:

Price (Baht/Kg)	Quantity Demanded	Quantity Supplied
120	40	130
110	50	110
100	60	90
90	70	70
80	80	50
70	80	30
60	100	10

a. Determine the equilibrium price and quantity.
b. Determine consumers' surplus and producers' surplus at the equilibrium.

c. Suppose now consumers' average income increases. This results in an increase in quantity demanded by 30 units at any given price. Show how the equilibrium changes. Also, calculate the changes in consumers' surplus and producers' surplus.

4. (This question is from Question 7 in Exercise 2).
   Suppose that the demand and supply of pencils are given by $Q^D = 30 - P$ and $Q^S = P$.
   a. Determine the equilibrium price and quantity.
   b. From the answer in a., calculate consumer's surplus and producer's surplus.
   c. Suppose the price is now fixed at \$20, how do consumer's surplus and producer's surplus change? What if the fixed price is changed to \$10? Show your work.