ECONOMICS 243
INTERNATIONAL TRADE
Spring 2010

Problem Set #4 – Due Monday, March 29, 2010

The home country imports steel from the foreign country. Demand for steel in the home country is given by, D=10–P, where D is the quantity of steel demanded and P is its domestic price. Supply of steel in the home country is given by, Q=P, where Q is the quantity supplied.

1. Assume the Home country is small and therefore take the foreign price P*=2 as given.

(1) Find the equilibrium values of D, Q, consumer surplus and producer surplus in the home country in AUTARKY. (2 points)

(2) Find the equilibrium values of D, Q, consumer surplus and producer surplus in the home country in FREE TRADE. (2 points)

(3) Find the equilibrium values of D, Q, consumer surplus and producer surplus, and tariff revenue in the home country, when the home country imposes a specific TARIFF t=2 per unit of imports. (2.5 points)

(4) Rank the total home welfare, from highest to lowest, in the three cases: autarky, free trade and tariff. What is the EFFICIENCY LOSS from free trade to tariff? (1.5 points)

2. Now Assume the home country is large and faces a foreign export supply of XS=2+2P*, where XS is the quantity of foreign steel exports and P* is the foreign price.

(1) Draw the home IMPORT DEMAND curve. (2 points)

(2) Find the values of P, D, Q, consumer surplus and producer surplus in the home country in FREE TRADE. (2.5 points)

(3) Find the values of P, D, Q, P*, consumer surplus, producer surplus, and tariff revenue in the home country, when the home country imposes a specific TARIFF t=1 per unit of imports. (3.5 points)

(4) Rank the total home welfare, from highest to lowest, in the three cases: autarky, free trade and tariff. What are the EFFICIENCY LOSS and TERMS OF TRADE GAIN from free trade to tariff? (2 points)

3. From the textbook, problem 7.2

4. From the textbook, problem 7.3.