

Economics 181
International Trade
Assignment #4
Due Date: Beginning of class December 3

1. The nation of Bermuda is “small” and assumed to be unable to affect world prices. It imports strawberries at the price of 10 dollars per box. The Domestic Supply and Domestic Demand curves for boxes are:

$$S = 60 + 20P$$
$$D = 1160 - 15P$$

(a) Assume Bermuda is completely open to trade. What is the equilibrium price and quantity consumed? How much is produced domestically, and how much is imported?

(b) Now consider the effect of an import quota of 400 boxes. What happens to the price of strawberries and quantity consumed? How much is produced domestically, and how much is imported?

(c) Who wins and who loses? Discuss consumers, domestic producers, and importers (Be sure to compute quantitatively with numbers the change in their welfare).

2. Assume California’s supply and demand for beef is:

$$D_c = 800 - 10P$$
$$S_c = 200 + 30P$$

(a) Derive and graph California’s import demand schedule. If California’s agricultural department outlawed purchasing out of state beef to prevent the slaughter of unhappy cows, what would the price of beef be (ie what is the price of beef in autarky) ?

(b) Now consider Nebraska, with the following demand and supply schedules for beef:

$$D_n = 100 - 5P$$
$$S_n = 40 + 15P$$

Derive Nebraska’s export supply schedule and graph it. If Nebraska’s agricultural department outlaws selling beef out of state, what would be the price of beef in the absence of trade?

(c) Suppose that interstate sale of beef is permitted between California and Nebraska. What is the world price? What is the volume of trade?

(d) What happens if California limits beef imports from Nebraska by adding a 15 percent tax? Calculate the effect of the tariff on (1) the price of beef in each state (2) the quantity of beef supplied and demanded in each state and (3) the volume of trade. Calculate the impact on the welfare of California consumers, producers, government revenue, and total welfare.

3. Redo the last 3 bullet points of problem 3 in the last assignment (assignment 3), assuming that both countries are large. This means you need to calculate the impact of the specific tariff of .4 on car imports on home consumption, production, volume of trade and welfare. Please give exact numerical amounts for the impact on home producer surplus, consumer surplus, and government revenue. Is this tariff on net good for home welfare?

4. Redo problem 4 from the last assignment, assuming both countries are large countries. Calculate the impact on home welfare and foreign welfare of adding a foreign export subsidy, equal to the specific amount of .4 per car exported from foreign. Give specific amounts for the change in home and foreign consumer and producer surplus, government revenues, and the net change in welfare for both countries.