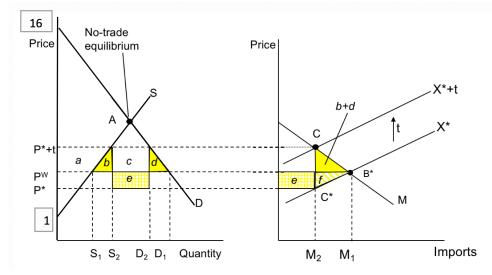
Sample Problems: Import Tariffs and Quotas

1. Suppose Home is a **large country** whose supply and demand curves are given by the following figure.



At no trade equilibrium, p = 8, q=7

$$P_w = 5$$
, $S_1 = 4$, $D_1 = 12$

$$P^* = 3$$

$$P^* + t = 7, S_2 = 6, D_2 = 8$$

$$M_1 = 8$$
, $M_2 = 2$

- a. Assume the world price is P_W = \$5. Determine the consumer and producer surplus under free trade.
- b. Suppose the government at Home government imposes a tariff in the amount of \$4 (i. e., t = \$4). What is the new Home price? What is the price received by the foreign exporters?
- c. Determine the terms of trade for Home with the tariff.
- d. Does Home welfare increase or decrease due to the tariff? Explain.
- **2.** Aoslia is a **small country** that takes the world price of corn as given. Its domestic supply and demand for corn is given by the following:

$$D = 45 - 3P$$

$$S = 3P - 9$$

Suppose the Aoslian government applies an import quota that limits imports to 12 bushels.

- a. Determine the quantity demanded, quantity supplied, and new domestic price with the quota.
- b. Calculate the quota rent.
- c. Assuming that the quota licenses are allocated to domestic producers, what is the net effect of the quota on Aoslia's welfare?
- d. Assuming that the quota rents are earned by foreign exporters, what is the net effect of the quota on Aoslia's welfare?

3. Consider the following hypothetical information pertaining to a country's imports, consumption, and production of T-shirts following the removal of the MFA (Multi Fibre Arrangement) quota:

	With MFA Quota	Without MFA (Free Trade)
World Price (\$/shirt)	2	2
Domestic Price (\$/shirt)	2.5	2
Domestic Consumption	100	125
(million shirts/year)		
Domestic Production	75	50
(million shirts/year)		
Imports (million shirts/year)	25	75

- a. Graph the effects of the quota removal on domestic consumption and production.
- b. Determine the gain in consumer surplus from the removal of the quota.
- c. Determine the loss in producer surplus from the removal of the quota.
- d. Calculate the quota rents that were earned under the quota
- e. Determine how much the country has gained from the removal of the quota.