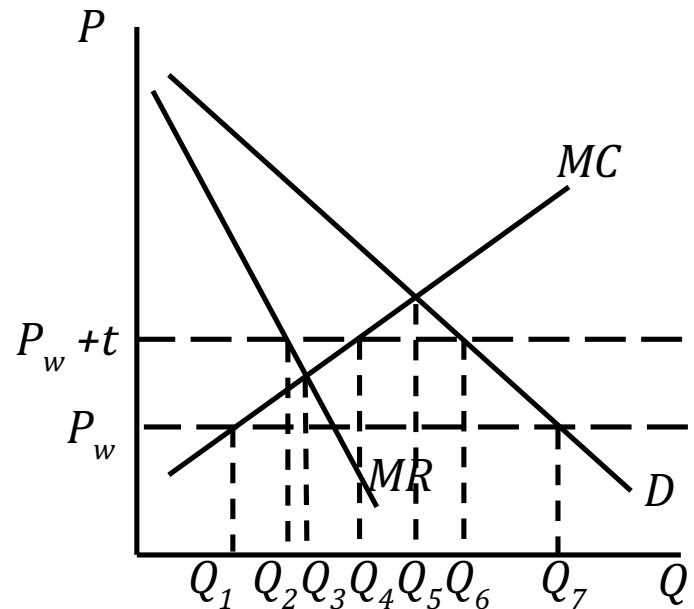


Problem Set #3

Analysis of Trade Barriers

1. Suppose that a small domestic economy has only a single firm producing a good that can be imported, under free trade, for the fixed price P_w shown. The firm's marginal cost is the upward sloping line shown here. Domestic demand is the downward sloping line, D , the firm could earn the marginal revenue MR shown if there were no trade at all.
 - a. Suppose first that there is free trade. What will be the quantities of the good produced by the firm, demanded by the domestic market, and imported?
 - b. Now suppose the country levies the tariff, t , shown. What now will be the quantities produced, demanded, and imported?
 - c. Suppose next that the government replaced the tariff with an import quota set equal to the quantity of imports that would have come in under the tariff. What now will be the quantities produced, demanded, and imported, and at what price? (For this part, unlike parts a and b, you will need to add lines and labels to the figure.)
 - d. Finally, suppose we go back to a tariff, but double its size to $2t$. What happens then? And what happens if we triple the size of the tariff to $3t$?
2. Suppose that we are a large country importing a good subject to a tariff or NTB, and that foreign producers of imports then become more efficient, so that their costs fall. How will the effects of this change – on the price and quantity of imports – differ depending on whether we are restricting imports with
 - a. a tariff,
 - b. a quota,
 - c. a voluntary export restraint,
 - d. a variable levy, or
 - e. a government procurement regulation?



3. Analyze the effects of a tariff on a good imported into a small country under the assumption that the good is not produced inside the country at all, but that another good for which the import is a complement, is produced inside the country and is not traded. A slightly contrived example might be a tariff on imports of movies into a country that has no movie industry, together with the market for popcorn to be eaten at the movie theater. A rise in the price of movies will reduce the demand for popcorn.