

## Problem Set 3

EC 391: International Economics I

Due on: Wednesday July 25, 2018

### True/False/Uncertain (12 points)

Instructions: For each of the following statements, indicate whether it is true, false, or if the assertion is indeterminate. In all cases, defend your answer with a concise explanation. **To earn full credit, you must include an explanation with your answer.**

1. Small importing countries impose tariffs because they are a source of government revenue and may be a net benefit if the terms-of-trade gain is larger than the resulting deadweight loss created by the import tax
2. A tariff and a quota that generate the same volume of imports will have identical effects on prices and welfare
3. If the Foreign export supply is fixed at a given quantity, so that exports do not vary with the international world price (i.e. perfectly inelastic export supply), then the optimal tariff Home should apply to increase welfare is zero.

### Longer Questions (20 Points)

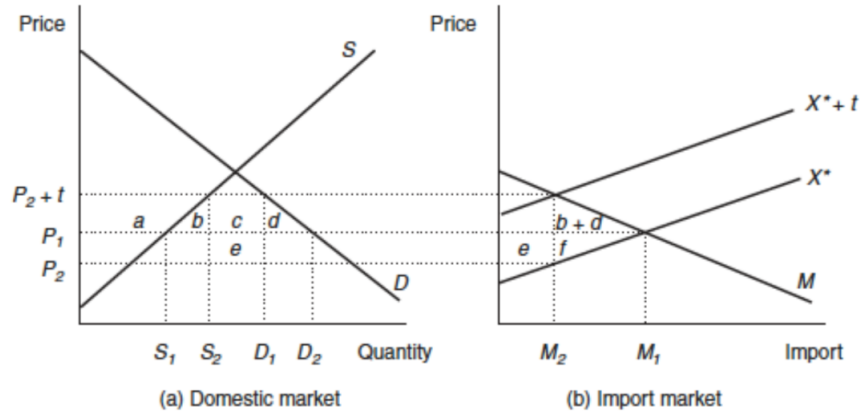
1. **(Welfare with Tariffs: Small Country)** Aoslia is a small country that takes the world price of corn as given. Its domestic supply and demand for corn are given by the following:

$$D = 45 - 3P$$

$$S = 3P - 9$$

- (a) Assume initially that Aoslia does not open up to trade. What is the autarky equilibrium price and quantity?
- (b) Suppose Aoslia decides to engage in trade. Determine the quantity demanded, quantity supplied, and import quantity given the world price of \$6 per bushel of corn.
- (c) If the government of Aoslia imposes a tariff in the amount of \$1 (i.e.  $t = \$1$ ), what is the new domestic price? What is the amount imported?
- (d) Determine the effect of the tariff on the Aoslian consumers, producers, and government.

2. **(Free Trade: Large Country)** Suppose the U.S. is a large importer of Mexican tortillas. Following the North American Free Trade Agreement (NAFTA), the U.S. tariff on tortillas decreased from 25% to 0.



- (a) Will the price of tortillas in the U.S. fall by the exact amount of the tariff? Explain.
- (b) What is the impact of NAFTA on US tortilla producers, Mexican tortilla producers, and US tortilla consumers?
- (c) State and justify whether the following is true or false: “Removal of the tortilla tariff under NAFTA has increased welfare in the US.”