

**Problem Set 1**  
**Due Date to be Announced**

**I. Gains from Trade / Standard Trade Model**

- (1) Problem 1, page 59 from Markusen et al. Ch 4 (e-reserves).
- (2) Problem 1, page 74 from Markusen et al. Ch 5 (e-reserves).
- (3) Problem 3, page 74 from Markusen et al. Ch 5 (e-reserves).
- (4) Problem 6, page 74 from Markusen et al. Ch 5 (e-reserves).

**II. Ricardian Model**

Consider a model with two countries (Mexico and the United States), two goods (Hats and Shoes) and one input (Labor). The production technologies are specified by the following unit labor requirements:

	United States	Mexico(*)
Hats	2	4
Shoes	1	5

The total labor endowment in each country is 40 hours. Assume that each country has standard shaped community indifference curves.

- a) Graph the PPF's for the US and Mexico on two graphs (put Shoes on the vertical-axis) and show the autarky production and consumption bundles chosen.
- b) Which country has a lower opportunity cost of producing hats? Justify.  
Which country has a comparative advantage in the production of Shoes?. Justify
- c) Suppose that before NAFTA (the North American Free Trade Agreement, signed between the US and Mexico in 1993), the US and Mexico did not trade these two goods. What was the relationship between the autarky relative prices of Shoes ( $P_S/P_H$ ) in the US and Mexico?
- d) Suppose that after the NAFTA agreement was signed and free trade occurs between the two countries, the world relative price of Hats is 1.5 (i.e.  $P_H/P_S = 3/2 = 1.5$ ).
  - ( i ) What is the pattern of trade?
  - ( ii ) Did the US and Mexico enjoy welfare improvements or losses after NAFTA? (Use a diagram for each country to respond to this question).