Study Questions

(THESE ARE NOT TO BE HANDED IN, BUT YOU MAY FIND IT USEFUL TO THINK ABOUT THESE BEFORE LOOKING AT THE QUESTIONS BELOW)

1. Compare the Ricardian, Specific Factors, and Heckscher-Ohlin Models
a. How are the assumptions different?
b. What determines differences across countries in autarky prices?
c. What determines the pattern of comparative advantage, specialization and trade?
d. Who gains and who loses in the move from autarky to free trade?

2. In the Specific Factors Model
a. Why do relative supply curves look different across countries?
b. What determines the allocation of labor across sectors?

3. Define the following concepts used in the Heckscher-Ohlin Model
a. Isoquant
b. Factor intensity (e.g. capital intensity)
c. Factor abundance (e.g. capital abundance)
d. Terms of trade
e. Skill premium/Wage inequality

4. In the Heckscher-Ohlin Model
a. Why would autarky factor prices differ across economies?
b. How does a firm choose the mix of K and L to be used in producing a good?
c. How does that mix change as the price of K,L change in an economy?
d. Why might computers be more capital intensive to produce than textiles?
e. What is the relationship between factor prices and goods prices in an economy?
f. How does trade change goods prices? How does that affect factor prices?

Questions to be Handed In

T/F/U. **Grade is based entirely on T/F/U answer**.
(Suggestion: for your benefit, you should write out why you think its right or wrong for later comparison with the answer key. These notes will be ignored on grading.)

Use the Heckscher-Ohlin model to evaluate questions 1-20. We have two countries (US, Malaysia), two goods (televisions, shoes) produced using capital and labor. Shoes are more labor intensive to produce than TVs. The US is relatively abundant in capital. Define the wage = w, return on capital = r, marginal product of labor = MPL, marginal product of capital MPK.

1. If shoe manufacturers increase their use of capital, it results in an increase in both the total and marginal product of labor.

2. If TV manufacturers increase their use of capital, it results in an increase in both the total and marginal product of capital.

3. A shoe manufacturer currently has (MPL/w) > (MPK/r). It should hire more labor.

4. Autarky prices depend on the MPL in shoes relative to the MPL in TV's.

5. In autarky, the US and Malaysia produce equal ratios of TVs/Shoes. The price of shoes relative to TVs is higher in the US.

6. The autarky factor price ratio (w/r) in the US is higher than (w/r) in Malaysia.

7. With free trade, the factor price ratio (w/r) in the US is higher than (w/r) in Malaysia.

8. The relative supply (TVs/Shoes) curve for Malaysia lies to the right of the RS (TV/Shoes) for the US.

9. The US should specialize in producing TVs and export them in exchange for shoes.

10. The free trade relative price of shoes/TV's should fall in the US relative to autarky.

11. The free trade relative price of TV/shoes should fall in Malaysia relative to autarky.

12. Everyone in Malaysia is better off as a result of free trade.

13. The return to capital in the US should fall as a result of free trade.

14. Trade increases the demand for capital relative to labor in Malaysia.

15. For the US, foreign investment in Malaysia has the same affect on factor prices as trading with Malaysia.

16. At any relative factor price (w/r), shoes use a lower capital/labor ratio than TVs.

17. Malaysian shoe manufacturers should use more capital/labor under free trade than in autarky.

18. US TV manufacturers should use more capital/labor under free trade than in autarky.

19. In free trade, the US will only produce its export good.

20. US gains from trade increase when the relative price of its export/import good rise.

Short Answer Problems

1. Suppose we have a specific factors model with two goods (chocolate, trucks) produced using specific capital and mobile labor.
a. What determines the demand for labor in each sector?
b. Show how to determine the allocation of labor between sectors
c. Increase the price of chocolate.
    i. Show what happens to the allocation of labor
    ii. What happens to output?
    iii. What happens to the return to capital invested in the chocolate sector?

2. Many people have argued that increases in international trade are responsible for increases in US wage inequality. What evidence argues against trade as a source / the only source of the change?