

**ECON 305**  
**INTERNATIONAL ECONOMICS I**  
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**Exercise 5**

1. Suppose that  $L^A = 150$ ,  $K^A = 250$ ,  $L^B = 100$ , and  $K^B = 200$ . Which country is capital-abundant? Labor-abundant?
2. Suppose that  $W^A = 5/\text{day}$ ,  $r^A = 2/\text{day}$ ,  $W^B = 6/\text{day}$ , and  $r^B = 3/\text{day}$ . Which country is capital-abundant? Labor-abundant?
3. Suppose that  $L_X^A = 100$ ,  $K_X^A = 100$ ,  $L_Y^A = 50$ , and  $K_Y^A = 150$ . Which industry in country A is labor-intensive? Capital-intensive?
4. Suppose that  $L_X^B = 75$ ,  $K_X^B = 25$ ,  $L_Y^B = 25$ , and  $K_Y^B = 175$ . Which industry in country B is labor-intensive? Capital-intensive?
5. Given (1), (2), and (3) for countries A and B, and industries X and Y, which country is expected to export which commodity according to Heckscher-Ohlin (H-O) theorem?
6. Given (1) for countries A and B, and given that technology and preferences are identical across countries, what can you say about relative factor prices in these countries?
7. The lower the relative price of the factor that is intensively used in the production of a commodity, the lower is that commodity's relative price. True or false. Explain.
8. Given (1), rental price of capital in country A will rise after countries A and B open up their economies to trade with each other. True or false. Explain.
9. Given (7), the relative use of capital in country A will rise. True or false. Explain.
10. After countries A and B open up their economies to trade with each other, the rental price of labor in country B will rise. True or false. Explain.
11. Given (1), capital owners of Country B will increase their real income after trade. True or false. Explain.

**12.** Suppose two countries, Malaysia and Thailand, can be described by a **Heckscher-Ohlin model**. Assume they each produce *rice* and *palm oil* using labor and capital as inputs. Suppose Malaysia is capital-abundant with respect to Thailand while rice production is labor-intensive. Suppose the two countries move from autarky to free trade with each other. In the boxes below indicate the effect of free trade on the variables listed in the first column in both Malaysia and Thailand. You do not need to show your work. Use the following notation:  
 + the variable increases; - the variable decreases; **0** the variable does not change; **A** the variable change is ambiguous (i.e. it may rise, it may fall)

	<b>in Malaysia</b>	<b>in Thailand</b>
the price ratio $P_{po}/P_r$		
output of palm oil		
output of rice		
exports of palm oil		
imports of rice		
real wage in terms of palm oil		
real wage in terms of rice		
real rental rate in terms of palm oil		
real rental rate in terms of rice		
capital-labor ratio in palm oil production		
capital-labor ratio in rice production		