1. Suppose you have the following information about the Steel and Textile industries in HOME and in FOREIGN. You should assume Steel and Textiles are the only two products produced in these countries. Production of each good requires two factors, Capital and Labor.

<table>
<thead>
<tr>
<th></th>
<th>Home</th>
<th>Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor used to produce Steel</td>
<td>500</td>
<td>800</td>
</tr>
<tr>
<td>Total Labor</td>
<td>1300</td>
<td>1800</td>
</tr>
<tr>
<td>Capital used to produce Textiles</td>
<td>1000</td>
<td>2000</td>
</tr>
<tr>
<td>Capital used to produce Steel</td>
<td>1000</td>
<td>2000</td>
</tr>
</tbody>
</table>

A. (2 points) Please use this information to determine how to fill in the blanks in the following statements:

HOME is labor abundant.

**HOME has this ratio of Labor to Capital:** \( 1300/(1000 + 1000) = 1300/2000 = 0.65 \). **FOREIGN’s ratio is** \( 1800/(2000 + 2000) = 1800/4000 = 0.45 \). As **HOME’s ratio is higher**, HOME is labor abundant.

B. (2 points) According to **The Heckscher-Ohlin Theorem** (please choose the best answer)

i. HOME will export Steel and import Textiles

ii. FOREIGN will export Steel and import Textiles

iii. The return to labor will fall in HOME and rise in FOREIGN

iv. There is no basis for trade

v. There is not enough information to be able to answer this question.

Steel is Capital intensive, since \( K/L = 1000/500 = 2 \) in the Steel industry, and \( K/L = 1000/(1300-500) = 1.25 \) in the Textile industry (in HOME. In FOREIGN, the K/L ratios are \( 2000/800 = 2.5 \) in Steel, and \( 2000/1000 = 2 \) in Textiles).


a. (2 points) Each of the graphs also includes a consumption opportunities line (with trade). Which of the two graphs is consistent with the assumption that Country B has the lower opportunity cost of producing Wheat? **GRAPH 1**

In **GRAPH 1**, the country has a lower opportunity cost of Wheat with trade than in autarky. That would be consistent with this country trading with a low-opportunity-cost partnet (Country B).

b. (2 points) In the graph you chose in part a, please indicate which good is the export good, and show what quantity of this good Country A exports. Draw in any additional lines or curves that are necessary in order to do this.
You have to indicate the production point and draw in an indifference curve OR indicate a consumption point, and show the excess of production over consumption.

3. (1 point) Consider the example we have been working with in lecture: HOME and FOREIGN produce and consume Cloth and Food, Cloth production is labor intensive, and HOME is labor abundant. Suppose the two countries are identical in every other respect (same tastes, same technology). Which of the following things cannot possibly happen if HOME and FOREIGN begin to trade with each other?

a. \( w^*/r^* \) rises
b. \( w/r \) rises
c. \( P_C/P_F \) falls (relative to autarky) in FOREIGN and rises in HOME
d. Landowners in FOREIGN will have more purchasing power, landowners in HOME will have less purchasing power.

In FOREIGN, Land is the abundant factor. When FOREIGN begins to trade, the return to Land rises, while the wage falls.

4. (1 point) A country decides to allow unlimited immigration, with the result that the country’s population grows by 10%. Which International Trade theorem predicts what effect this expansion will have on production in industries that are not labor intensive?

i. The Heckscher-Ohlin Theorem
ii. The Stolper-Samuelson Theorem
iii. The Rybczynski Theorem
iv. The Krugman-Obstfeld Theorem