

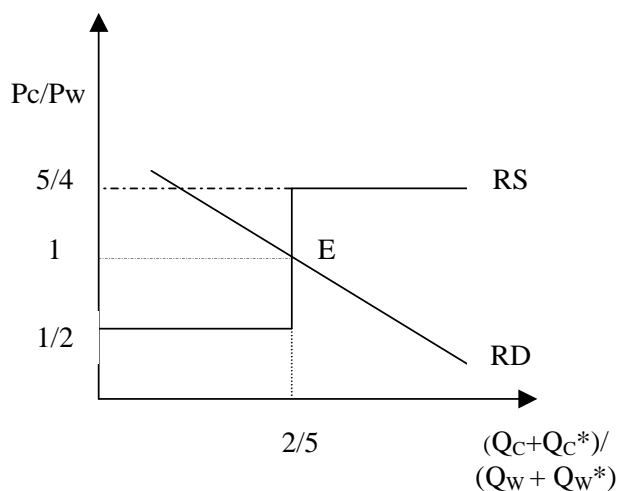
### Answer to Question from Chapter 3

(1)

	Cheese	Wine
Home	$a_{LC}=1/2$	$a_{LW}=1$
Foreign	$a^*_{LC}=1/4$	$a^*_{LW}=1/5$

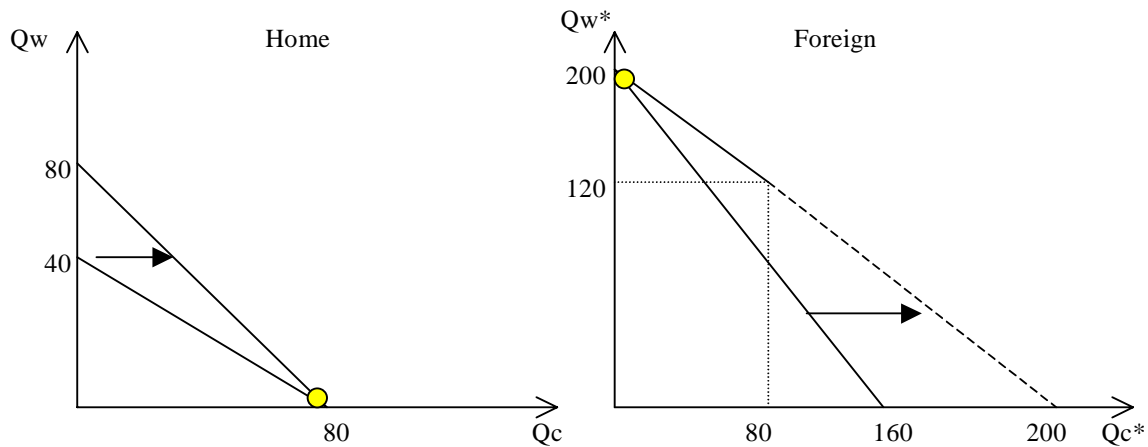
(a) Foreign is 2 times as efficient in cheese production and 5 times more efficient in wine production. Therefore, foreign has an absolute advantage in the production of both goods ( $a_{LC} > a^*_{LC}$  and  $a_{LW} > a^*_{LW}$ ) and a comparative advantage in wine ( $a_{LC}/a_{LW} < (a^*_{LC}/a^*_{LW})$ ). Home has a comparative advantage in cheese (where they are the least inefficient). The pre-trade relative price of cheese (in terms of wine) in each country is the opportunity cost of cheese in terms of wine. The cost of cheese at home is  $1/2$  ( $a_{LC}/a_{LW}$ ) wine, while the cost of cheese abroad is  $5/4$  ( $a^*_{LC}/a^*_{LW}$ ) wine.

(b) If the traded price is 1, then it lies between the two pre-trade prices (i.e.,  $1/2 < (P_C/P_W)_t < 5/4$ ) and each country will specialize in the good in which it has a comparative advantage. If the price of cheese in terms of wine were 0.5 instead of 1, then Home produces both goods while Foreign produces wine.



(c) If the traded price is below  $1/2$ , both countries produce wine and the RS of cheese is zero. If the price is equal to  $1/2$ , the home country produces both goods and Foreign produces wine. Home is willing to supply any relative amount of the two goods producing a flat section of the RS curve. If the price lies between the two pre-trade prices, both countries completely specialize in the good in which they have a comparative advantage. Foreign produces 200 gallons of wine and Home produces 80 pounds of cheese. If the traded price equals  $5/4$ , Foreign produces both goods and Home continues to produce cheese. If the price rises above  $5/4$  both countries produce cheese, so the RS of cheese is infinite.

(d) CPF is higher with trade than without. Before trade the CPF=PPF.



(e) Wages are the value of what a worker can produce in 1 hour.

**Home:** Before Trade: produce 2 lb of cheese or 1 gal of wine  
 After Trade: produce 2 lb of cheese in exchange for 2 gal of wine

**Foreign:** Before Trade: produce 4 lb of cheese or 5 gal wine  
 After Trade: produce 5 gal of wine in exchange for 5 lb of cheese

Trade makes Home's labor 2 times as productive (in terms of wine) and Foreign's labor 1.25 times as productive (in terms of cheese). Before trade, (in terms of wine) the Foreign wage rate is 5 times the Home wage rate. After trade, the Foreign wage rate (in terms of wine) is 2.5 times the Home wage rate. Wages do not equalize with trade but they move closer together.