

**Question 5.** In Australia one unit of labor can produce 25 computers or 25 bushels of wheat. In Taiwan one unit of labor can make 30 computers or 50 bushels of wheat. Assume that computers and wheat are the only two goods in the world. (What is the purpose of this assumption?)

	Computers	Wheat
Australia	25(1)	25(1)
Taiwan	30(5/3)	50(3/5)

Figures in parenthesis refer to the opportunity cost.

1. Australia's O.C(opportunity cost) of making a computer = 1 bushel of wheat.  
Taiwan's O.C of making a computer = 5/3 bushels of wheat
2. Australia's O.C of producing a bushel of wheat = 1 computer  
Taiwan's O.C of producing a bushel of wheat = 3/5 computer.
3. No. Taiwan has absolute advantage in both.
4. Australia has comparative advantage in producing computers.  
Australia's O.C of making a computer  $1 <$  Taiwan's O.C of making a computer  $5/3$
5. Taiwan has comparative advantage in producing wheat.  
Taiwan's O.C of producing a bushel of wheat  $3/5 <$  Australia's O.C of producing a bushel of wheat  $1$
6. Yes. Australia will only agree to trade if the price of computer is more than 1 bushels of wheat.  
The range of prices at which trade can occur is when the price of computer is  
 $1 \text{ bushel of wheat} < 1 \text{ computer} < 5/3 \text{ bushel of wheat}$
7. Yes. Taiwan will only agree to trade if the price of wheat is more than 3/5 computer.  
The range of prices at which trade can occur is when the price of wheat is  
 $3/5 \text{ computer} < 1 \text{ bushel of wheat} < 1 \text{ computer}$
8. The limiting terms of trade, outside of which exchange between Australia and Taiwan will not occur is  
 $x < 0.6$  ,  $x > 1$  (where,  $x = \text{computer}/\text{wheat}$ )

**Question 6.**

1. If Omega turns out to be exporting and importing rather than manufacturing, the productivity of manufacturing industry turns out to be lower. So US could lose absolute advantage in the manufacturing industry. If the proportion of Omega Inc, which was thought to be highly productive in the manufacturing industry, was large, production resources could not be reallocated to efficient firms. It reduce productivity of the entire economy of US.
2. Free trade is not simply an alternate means of production. Production firms invest in R&D to increase profit. Advances in technology reduce the production resources. Since productivity increases, the terms of trade of US is improved.

3. Yes, International trade do these same things.

We should fear international trade less than entrepreneurship.

Losing jobs due to domestic production innovation, which requires less labor, is less damaging.

Domestic innovation in production → Increasing firm's productivity → Export market entry → Increasing the proportion of highly productive firms in the market → Reallocation of Production resources to highly productive firms → Increasing aggregate industry productivity

4. Free trade → Larger market → Increasing the output of firms → Division of labor → Increasing competition → Decreasing of profits for firms with low productivity → Falling or stagnant incomes of many US workers, especially those who are less educated.

5. There is no reason to US workers should be paid more than Indian or Chinese workers with the same qualifications doing the same work. And people are entitled to be supported in the manner to which they have become accustomed. The U.S. workers who want paid more should abandon low-tech industries that are not competitive against India and China and switch to high-tech industries. Because there will be a tendency for the prices of the inputs (wages, rents, etc.) used to produce the goods to converge to a world input price level.