## **Problem No.1**

## **Opportunity Cost, Production Possibilities and Comparative Advantage**

Suppose that labor is the only factor of production and that output is related to labor in the following constant way in the U.S. and Japan.

	Labor Per Unit of Output	
	<u>VCRs</u>	Burgers
US	6	3
Japan	3	2

The U.S. has a labor force of 300, while Japan has a labor force of 150.

## **Explain your answers carefully** to each of the following questions.

- 1. What is the opportunity cost of one burger in i) the U.S. ii) in Japan?
- 2. What is the relative price of one VCR in terms of burgers in i) the U.S. ii) in Japan?
- 3. Draw the PPFs for i) the U.S. ii) Japan? (Put burgers on the vertical axis)
- 4. Explain the relationship between the opportunity cost and the slope of the PPF.
- 5. What does the U.S. have a comparative advantage in? What about Japan?
- 6. Which country has an absolute advantage?
- 7. Can both nations gain from trading with each other?
- 8. What will be the relative price of burgers in terms of VCRs at which the two countries trade?
- 9. Which nation has a higher standard of living?
- 10 (more difficult). Construct the world production possibility frontier, i.e., the combined U.S. and Japanese **efficient** production points of VCRs and Hamburgers.