

**Practice Questions**  
**Frank -- Chapter 2**  
**Comparative Advantage**  
**Dr. McGahagan -- Microeconomics**

The following information applies to questions 1 - 6.

Good X is X-ray machines, and good Y is yogurt.

In Australia, a worker can produce 10 units of good X a week or 70 gallons of good Y a week.

In Burma, a worker can produce 5 X-ray machines a week or 50 gallons of good Y a week.

Wages in Australia are 500 Australian dollars a week; wages in Burma are 1000 Burmese kyats a week.

- \_\_\_\_ 1. How does the above relate to the absolute and comparative advantages of Australia and Burma?
- a. Australia had the absolute advantage in both goods; Burma has the comparative advantage in both goods.
  - b. Australia has the absolute advantage in both goods and Australia also has the comparative advantage in both.
  - c. Australia has the absolute advantage in both goods, but Burma has the comparative advantage in good X.
  - d. Australia has the absolute advantage in both goods, but Burma has the comparative advantage in good Y.
  - e. Burma has the absolute advantage in both goods, but Australia has the comparative advantage in good X.
  - f. Burma has the absolute advantage in both goods, but Australia has the comparative advantage in good Y.
- \_\_\_\_ 2. The activity requirements in Burma will be:
- a. 5 for X-ray machines and 50 for yogurt.
  - b. 10 for X-ray machines and 70 for yogurt
  - c. 1/5 for X-ray machines and 1/50 for yogurt.
  - d. 1/10 for X-ray machines and 1/70 for yogurt.
  - e. 250 for X-ray machines and 1/250 for yogurt.
- \_\_\_\_ 3. If the wage in Burma is 1000 kyats a month, the minimum possible price of X-ray machines would be:
- a. 20 kyats
  - b. 200 kyats
  - c. 5000 kyats
  - d. 50,000 kyats
  - e. \$ 500.
- \_\_\_\_ 4. If the price of a gallon of yogurt in Burma is 400 kyats, the maximum possible wage in Burma would be:
- a. 8 kyats
  - b. 80 kyats
  - c. 100 kyats
  - d. \$ 400
  - e. 20,000 kyats.
- \_\_\_\_ 5. In the above example, the opportunity cost of an X-ray machine in Australia is ---- and the opportunity cost of an X-ray machine in Burma is ----.
- a. 7 gallons of yogurt; 10 gallons of yogurt.
  - b. 500 Australian dollars, 1000 Burmese kyats.
  - c. 50 Australian dollars, 200 Burmese kyats.
  - d. 10 gallons of yogurt, 7 gallons of yogurt.
  - e. half times the cost of a Burmese X-ray machine; twice the cost of an Australian X-ray machine.

Question 6. (Graphical; use a separate sheet of paper). Assume that each country has a work force of 42 million. Sketch the (straight line) production possibility frontiers of each.

\_\_\_\_\_ 7. Andorra can produce a maximum of 2500 wool blankets a month OR a maximum of 5000 leather wineskins a month. The workforce in Andorra is 1000 workers. The wage of an Andorran worker is 200 euros a month. What is the opportunity cost of producing another wool blanket?

- a. 1/2 of a wineskin.
- b. Two wineskins.
- c. 2.5 times the worker's wage of 200 euros = 500 euros.
- d.  $200 / 2.5 = 80$  euros.

\_\_\_\_\_ 8. Given the data on Andorra from the last problem, what is the activity requirement for blankets in Andorra?

- a. 500 euros.
- b. 80 euros.
- c. 2.5 wool blankets per month.
- d.  $1 / 2.5 = 0.4$  months of work per blanket.

\_\_\_\_\_ 9. The price of blankets in Andorra (assuming that labor costs are the only costs of production) will be: --- (fill in the blank with the appropriate number; use the proper units for the price).

\_\_\_\_\_ 10. The relative price of blankets in Andorra will be:---. Again fill in the blank with the appropriate number, and use the proper units for the relative price).

\_\_\_\_\_ 11. Suppose Andorra enters into trade with Spain, which can produce a maximum of 25,000 wool blankets a month OR a maximum of 100,000 wineskins per month with its workforce of 20,000 workers. We can conclude from these numbers that:

- a. Spain can outproduce Andorra in both goods, so has the absolute advantage in both goods.
- b. Spain can outproduce Andorra in both goods, so has the comparative advantage in both goods.
- c. Spain has both the absolute and the comparative advantage in both goods.
- d. The standard of living will be higher in Spain than in Andorra.
- e. Spain has a absolute advantage in neither good.

\_\_\_\_\_ 12. In the Andorra-Spain example of the last question, the pattern of trade expected on the basis of the Ricardian model would be:

- a. Spain will export both goods to Andorra, and Andorra will be unable to export either to Spain.
- b. Andorra will export both goods to Spain, though Spain can export wineskins to Andorra.
- c. Spain will export blankets to Andorra; Andorra will export wineskins to Spain.
- d. Andorra will export blankets to Spain, and Spain will export wineskins to Andorra.
- e. The two countries will not trade with one another since Andorra has a comparative disadvantage in both goods.

13. Explain your answer to questions 11 and 12, using the terms "comparative advantage", "absolute advantage" and "opportunity cost" below:

\_\_\_\_\_ 14. Recall that the maximum production in Andorra was either 2500 blankets or 5000 wineskins. Let blankets be good X and wineskins be good Y.

The equation of the production possibility frontier (supposing it is a straight line) will be:

- a.  $Y = 5000 - 2500 X$
- b.  $Y = 2500 - 5000 X$
- c.  $Y = 5000 - 2 X$
- d.  $Y = 5000 - 0.5 X$
- e.  $Y = 2500 - 0.25 X$

Given the equation for the Andorran production possibility frontier, are the following production bundles:

- A. Efficient.
- B. Inefficient
- C. Impossible to attain

Again, assume a straight line PPF. Show your calculations.

\_\_\_\_\_ 15. 1250 blankets and 2500 wineskins.

\_\_\_\_\_ 16. 1000 blankets and 3500 wineskins.

\_\_\_\_\_ 17. 500 blankets and 2000 wineskins.

\_\_\_\_\_ 18. 1500 blankets and 1500 wineskins.

How would the Andorran PPF change in response to the following changes? Your options are:

- A. The PPF would not change at all, but Andorra would move to a different point on the PPF
- B. The PPF would shift inwards parallel to itself.
- C. The PPF would shift outwards parallel to itself.
- D. the PPF would rotate, and the slope of the PPF would be steeper (recall that wineskins = Y).
- E. the PPF would rotate, and the slope of the PPF would be flatter (recall that wineskins = Y).

\_\_\_\_\_ 19. The Andorran workforce increases.

\_\_\_\_\_ 20. Andorran sheep die off due to a sheep-specific disease; Andorran cattle are unaffected.

\_\_\_\_\_ 21. A leather-sewing machine is invented that makes it possible to manufacture wineskins more rapidly.

\_\_\_\_\_ 22. Power looms make it possible to manufacture blankets more rapidly.

\_\_\_\_\_ 23. Andorran consumers decide that they want fewer wool blankets due to global warming.

\_\_\_\_\_ 24. Andorran enters into trade and exports one of the goods to Spain.

\_\_\_\_\_ 25. In which of the above cases would the relative price of wineskins increase?

- A. Question 19.
- B. Question 21.
- C. Question 22.
- D. Question 23.