

Ricardian Model: Practice Problem

International Trade

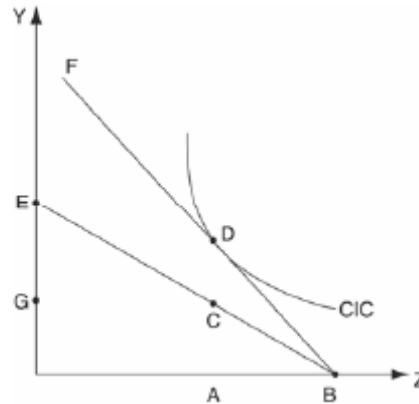
John T. Dalton

Question 1 Suppose the United States and Mexico are the only countries in the world, and labor is the only productive input. Suppose the technology of the two countries is characterized by the following input requirement table:

	TVs (X)	Computers (Y)
Mexico	6 hrs/unit	4 hrs/unit
United States	3 hrs/unit	3 hrs/unit

- Which country has absolute advantage in X? In Y? Explain.
- Determine the pretrade relative prices, i.e. the price of a television (X) in units of computers (Y) in each country?
- Calculate the opportunity cost of production of each good for both countries.
- Which country has comparative advantage in X? In Y? Explain.
- Suppose that each country has 60 hours of labor available. Draw the PPF for each country and determine its slope.
- If Mexico and the United States form a free trade area, in what range would the terms of trade (that is, the price of a television (X) in units of computer (Y) under free trade) have to fall? Why?
- Denote the wage rate in Mexico, the wage rate in the United States, and the exchange rate that translates units of pesos into dollars by W^M , W^{US} , and E , respectively. If trade is to occur along the lines of comparative advantage, in what range would the relative wage rate, $W^{US}/(E * W^M)$ have to fall?

Question 2 Answer the following questions based on the diagram below.



EB represents the country's PPF, FB represents the terms of trade line, and CIC is the country's indifference curve.

- a) This country has comparative advantage in good
 - a. S
 - b. T
 - c. Y
 - d. Z

- b) In the equilibrium under free trade, this country produces at point
 - a. B
 - b. C
 - c. D
 - d. E

- c) In the equilibrium under free trade, this county consumes at point
 - a. B
 - b. C
 - c. D
 - d. E

- d) Exports for this country equal
 - a. OA units of Z
 - b. AB units of Z
 - c. AC units of Y
 - d. AD units of Y

- e) Imports for this country equal
 - a. OA units of Z
 - b. AB units of Z
 - c. AC units of Y
 - d. AD units of Y