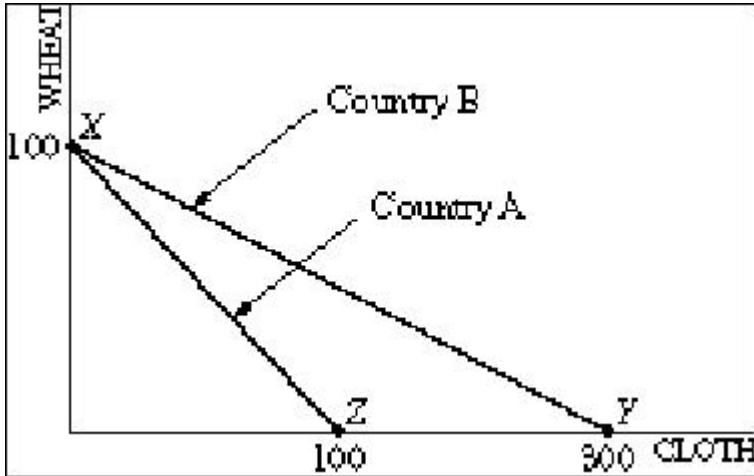


## Question 2



Assume that Countries A and B have equal amounts of resources and identical technologies. Country A can produce 100 bushels of wheat or 100 yards of cloth or any combination, as shown by the line XZ in the figure above. Country B can produce 100 bushels of wheat or 300 yards of cloth or any combination, as shown by the line XY in the figure above.

- Which country has an absolute advantage in the production of wheat and which has an absolute advantage in the production of cloth? Explain how you determined your answer.
- Which country has a comparative advantage in the production of wheat and which has a comparative advantage in the production of cloth? Explain how you determined your answer.
- With specialization and trade, which country will import wheat? Explain why.
- Assume that the two countries trade, and that one bushel of wheat is exchanged for two yards of cloth. Explain why the country that imports wheat will gain from trade.

## Question 3

- Using one graph for a monopoly firm and one for a perfectly competitive firm, draw and label the demand curve and the marginal revenue curve for each of these firms.
- For the perfectly competitive (a price taker) firm, explain why the relationship between demand and marginal revenue exists.
- For the monopoly firm, explain why the relationship between demand and marginal revenue exists.

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**Question 2**

**Correct Answer**

Part (a) With equal amounts of resources and identical technologies, each country can produce the same maximum quantity of wheat. Thus, neither country has an absolute advantage in wheat production. Country B has the absolute advantage in cloth production because it can produce more than country A.

Part (b) For Country A the opportunity cost of a bushel of wheat is 1 yard of cloth; for Country B, the opportunity cost of a bushel of wheat is 3 yards of cloth. Since Country A has the lower opportunity cost for producing wheat, Country A has comparative advantage in wheat production. Alternatively, Country B has the comparative advantage in the production of cloth.

Part (c) Given that comparative advantage is the basis for trade, Country B will specialize in the production of cloth, exporting cloth and importing wheat.

Part (d) County B will import wheat, exchanging 2 units of cloth for one unit of wheat. The country benefits from trade because if it produced wheat itself, a unit of wheat would be more expensive, costing 3 units of cloth.

**Scoring Rubric**

Part (a) = 1 Point, Part (b) = 2 Points, Part (c) = 1 Point, Part (d) = 1 Point; 5 Points in Total

**Part (a)**

Wheat: neither country has an absolute advantage, identical outputs (with the same resources)

Cloth: Country B, as it produces more output (with the same resources) (1 point)

**Part (b)**

Country A has comparative advantage in wheat; Country B in cloth (1 point)

Show opportunity costs: Country A gives up 1 cloth for 1 wheat; Country B gives up 3 cloth for 1 wheat; relatively more expensive for Country B to produce wheat (1 point)

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**Question 2 (cont.)**

**Part (c)**

Country B will import wheat because it has comparative advantage in cloth (and will specialize in cloth production, getting its wheat more cheaply via trade) Key point is comparative advantage (1 point)

[The student may also state that in Country B the opportunity cost of wheat is higher than in Country A; thus, Country B will import wheat.]

**Part (d)**

For country B, via trade a unit of wheat only costs 2 units of cloth, while by domestic production a unit of wheat would cost 3 units of cloth. Also the student may explain that trade increases B's consumption possibilities by making it possible to consume more of both goods (1 point)

**Note:** Besides counting points, the answer may be looked at as a whole and ultimately judged by its overall quality. The final total should mean something in terms of the overall quality of the answer. A 5 should reflect an excellent answer, but not necessarily a perfect one; a 4, an excellent answer with a flaw; a 3, a good answer; a 2, an adequate answer; a 1, a seriously deficient answer, but still an answer. A 0 has no relevant economic answer to the question. A dash (-) is given for an unresponsive or blank answer.

**Purpose of the Question and Commentary on Students' Responses**

This question relates to absolute advantage, comparative advantage, opportunity cost, and the gains from trade. Students tended to have an understanding of the concepts of absolute and comparative advantage. Often, however, explanations concerning opportunity cost were lacking. Frequently students did not clearly state that the opportunity cost of producing a unit of wheat in Country A (1 unit of cloth) was less than the opportunity cost of producing a unit of wheat in Country B (3 units of cloth); and that this differential resulted in A having comparative advantage in wheat and B having a comparative advantage in cloth. Students also did not demonstrate a good understanding of the gains from trade: either acquiring a product at lower cost through trade than through domestic production or enjoying increased consumption of both goods (consuming beyond the production possibilities curve).