

TestBanks Chapter 02: Trade and Technology: The Ricardian Model

1. Which of the following is NOT a reason why countries trade goods with one another?
 - ☐ differences in technology used in different countries
 - ☐ differences in countries' total amount of resources
 - ☐ the proximity of countries to one another
 - ☒ differences in countries' languages and cultures
2. David Ricardo's model, which provided an explanation of why nations trade, was based on:
 - ☐ labor productivity.
 - ☒ technology.
 - ☐ population.
 - ☐ government control.
3. Which of the following is the MOST likely explanation for a Detroit construction company's imports of Canadian concrete blocks made in Windsor, Ontario?
 - ☐ the Ricardian model
 - ☐ offshoring
 - ☐ technology
 - ☒ proximity
4. What is the MOST likely reason neighboring nations engage in trade?
 - ☐ labor availability
 - ☐ similar tastes and preferences
 - ☒ proximity
 - ☐ shared membership in a free-trade area
5. A country's factors of production include its:
 - ☐ labor.
 - ☐ capital.
 - ☐ natural resources.
 - ☒ labor, capital, and natural resources.
6. Which of the following is NOT considered to be a factor of production?
 - ☐ labor
 - ☐ capital
 - ☐ natural resources
 - ☒ government
7. When a firm in one nation purchases unfinished products internationally and adds further processing to sell in the domestic market, this is known as:
 - ☐ barter.
 - ☒ offshoring.
 - ☐ factor movement.
 - ☐ marketing arrangements.
8. In trade, if—due to technology—a nation can produce a good (such as Germany's production of snowboards) with fewest resources, it is known as a(n):
 - ☒ absolute advantage.
 - ☐ technology advantage.
 - ☐ comparative advantage.
 - ☐ resource advantage.

- 9  The focus of the Ricardian model is on how:
- ☐ countries' resource bases explain international trade.
 - ☒ countries' different technologies explain international trade.
 - ☐ transportation costs explain international trade.
 - ☐ different languages and cultures explain international trade.
- 10  When a country requires *fewer* resources to produce a product than other countries, it is said to have a(n):
- ☒ absolute advantage in the production of the product.
 - ☐ comparative advantage in the production of the product.
 - ☐ higher opportunity cost of producing the product.
 - ☐ lower opportunity cost of producing the product.
- 11  When a country requires *more* resources to produce a product than other countries, it is said to have a(n):
- ☒ absolute disadvantage in the production of the product.
 - ☐ comparative disadvantage in the production of the product.
 - ☐ lower opportunity cost of producing the product.
 - ☐ higher opportunity cost of producing the product.
- 12  The primary explanation of trade among nations is Ricardo's theory of:
- ☐ offshoring.
 - ☐ resource abundance.
 - ☐ absolute advantage.
 - ☒ comparative advantage.
- 13  The focus of the Ricardian model is on how differences in _____ influence international trade patterns.
- ☐ demand
 - ☒ comparative costs
 - ☐ absolute costs
 - ☐ transportation costs
- 14  Ricardo's theory of trade discredited the idea that inflows of gold or silver as a result of exporting helped a nation, while outflows of gold or silver as a result of importing hurt a nation; that was known as:
- ☐ export preference.
 - ☒ mercantilism.
 - ☐ monetary economics.
 - ☐ price-specie-flow mechanism.
- 15  Ricardo's theory made a number of assumptions, including which of the following?
- ☐ Nations had balanced trade with their partners.
 - ☐ There were no barriers to trade (free trade).
 - ☐ There was no transfer of gold or silver.
 - ☒ Nations had balanced trade with their partners, and there were no barriers to trade (free trade).
- 16  According to Ricardo:
- ☐ all countries can gain from trade if they export goods for which they have an absolute advantage.
 - ☐ one country can gain from trade only at the expense of another country.
 - ☒ all countries can gain from trade if they export goods for which they have a comparative advantage.
 - ☐ all countries lose from international trade.

- 17 ☐ ☐ ☐ According to the Ricardian principle of comparative advantage, international trade increases a nation's total output because:
- ☒ the nation's resources are used where they are most productive.
 - ☐ the output of the nation's trading partner declines.
 - ☐ the nation can produce to the exterior of its production possibilities frontier.
 - ☐ the nation is able to increase its consumption.

- 18 ☐ ☐ ☐ David Ricardo believed that:
- ☐ trade is a zero-sum game; that is, a country benefits at the expense of other countries.
 - ☐ trade will benefit countries when it generates gold and silver for the national treasury.
 - ☒ all nations can gain from free international trade.
 - ☐ trade cannot increase the world's output of goods.

- 19 ☐ ☐ ☐ Mercantilists believed that:
- ☐ exporting goods will leave fewer goods for the local economy.
 - ☐ importing goods is beneficial for the economy.
 - ☐ any kind of trade is a bad trade.
 - ☒ exports are good and imports are bad.

- 20 ☐ ☐ ☐ Ricardo's theory showed that if nations are allowed to trade freely, the result will be that:
- ☒ all trading nations benefit by trade.
 - ☐ the manufacturing sector benefits but the consumers lose out.
 - ☐ workers benefit but the government loses tax revenue.
 - ☐ the gains from trade offset the losses from trade exactly.

- 21 ☐ ☐ ☐ The Ricardian model can be simplified and made more explanatory by assuming that there is only one resource used in producing goods. What did Ricardo assume the resource was?
- ☐ capital
 - ☐ technology
 - ☒ labor
 - ☐ loanable funds

- 22 ☐ ☐ ☐ What is the marginal product of labor?
- ☐ the average output of a unit of labor
 - ☒ the extra output obtained by using one more unit of labor
 - ☐ the average output obtained by using one more unit of labor
 - ☐ the total output obtained by using one more unit of labor

- 23 ☐ ☐ ☐ In the Ricardian model, the marginal product of labor:
- ☐ first rises, then falls, as more labor is employed to produce a good.
 - ☐ first falls, then rises, as more labor is employed to produce a good.
 - ☐ continuously falls, as more labor is employed to produce a good.
 - ☒ does not change, as more labor is employed to produce a good.

- 24 ☐ ☐ ☐ The Ricardian model assumes that the marginal product of labor is:
- ☐ increasing.
 - ☐ decreasing.
 - ☒ constant.
 - ☐ zero.

- 25 Production possibilities frontiers in the Ricardian model:



- ☒ are linear (i.e., straight lines), with end points showing a country's production when it produces only one or the other good.
- ☐ are bowed out from the origin, with end points showing a country's production when it produces only one or the other good.
- ☐ are linear and begin from the origin.
- ☐ are curvilinear and increase at a decreasing rate.

26  When the production possibilities frontier is a straight line, then production occurs under conditions of:

- ☐ increasing costs.
- ☐ decreasing costs.
- ☒ constant costs.
- ☐ increasing, then decreasing, then constant costs.

27  The Ricardian model employs the concept of alternate uses of economic resources in production. We refer to this technique as:

- ☒ the production possibilities frontier.
- ☐ the labor theory of value technique.
- ☐ the least-cost option.
- ☐ the labor productivity model.

28  With the assumption that the marginal product of labor is constant and that labor is the only variable resource, the slope of the PPF is:

- ☐ positive and increasing.
- ☐ negative and decreasing.
- ☒ negative and constant.
- ☐ unrelated to the issue at hand.

29  Assume the $MPL_t = 5$ tennis rackets and $MPL_b = 4$ baseball bats. If the economy has 100 workers, then the economy can produce:

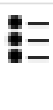
- ☒ a maximum of 500 tennis rackets.
- ☐ a maximum of 350 baseball bats.
- ☐ 500 tennis rackets and 400 baseball bats.
- ☐ either 100 tennis rackets only or 100 baseball bats only.

30  Assume the $MPL_c = 2$ cars and the $MPL_b = 5$ boats. There are 150 workers in this hypothetical economy. What is the maximum number of boats that can be produced?

- ☐ 30
- ☐ 300
- ☒ 750
- ☐ 150

31  The slope of the PPF can be expressed as:

- ☐ the ratio of abundance of capital to labor.
- ☐ the preferences of consumers in terms of marginal utility.
- ☐ the ratio of the quantities of good 1 and good 2.
- ☒ the negative of the ratio of the marginal products of labor in producing each good.

32  If the maximum number of units of cloth produced is 300 and the maximum number of units of corn produced is 600, then with a $MPL_{\text{cloth}} = 2$, what is the number of workers in the economy?

- ☐ 100
- ☐ 200
- ☒ 150
- ☐ 600

33 If the maximum number of units of cloth produced is 300 and the

- — maximum number of units of corn produced is 600, then with a MPL_{cloth}
- — = 2, what is the MPL_{corn} ?
- ☒ 4
- ☐ 5
- ☐ 6
- ☐ 7

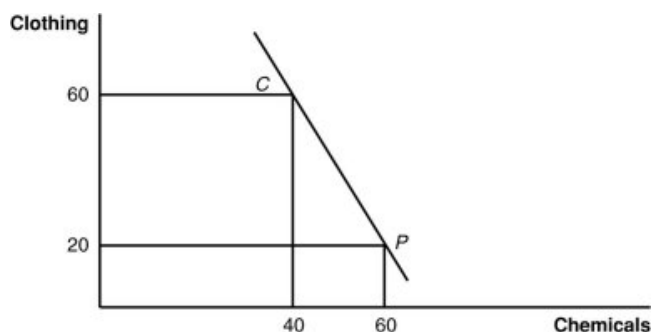
- 34 ■ — To complete the model of international trade using the PPF, we must also use the idea of indifference curves. These curves represent:
- ☒ a set of alternate quantities of both goods (sloped negatively), whereby consumers are equally satisfied in their level of utility gained.
 - ☐ consumers who are indifferent to everything.
 - ☐ producers who do not care which production method is chosen.
 - ☐ a fixed quantity of one good (such as wheat) and a varying amount of the other good.

- 35 ■ — As a consumer moves down one of her indifference curves, her satisfaction:
- ☐ falls.
 - ☐ rises.
 - ☒ remains unchanged.
 - ☐ first falls, then levels out.

- 36 ■ — If a consumer moves to a higher indifference curve, her satisfaction:
- ☐ falls.
 - ☒ rises.
 - ☐ remains unchanged.
 - ☐ first falls, then levels out.

- 37 ■ — International trade allows countries to:
- ☐ produce outside their PPF.
 - ☐ produce inside their PPF.
 - ☐ consume inside their PPF.
 - ☒ consume outside their PPF.

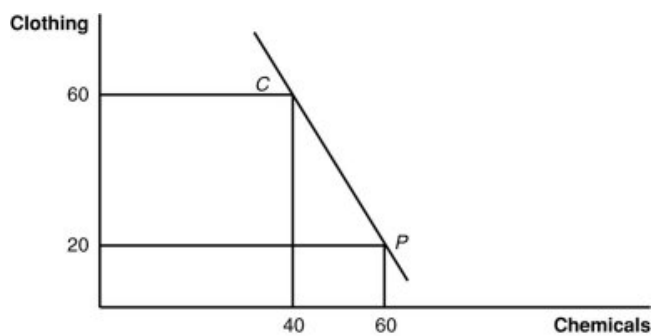
- 38 ■ — **Figure: Home Production and Consumption**



Reference: Ref 2-1

(Figure: Home Production and Consumption) The figure gives Home's international trading pattern. Point P is production with trade, and point C is consumption with trade. Which product does Home export?

- ☐ clothing
 - ☒ chemicals
 - ☐ It exports neither chemicals nor clothing.
 - ☐ It exports both chemicals and clothing.
- 39 ■ — **Figure: Home Production and Consumption**

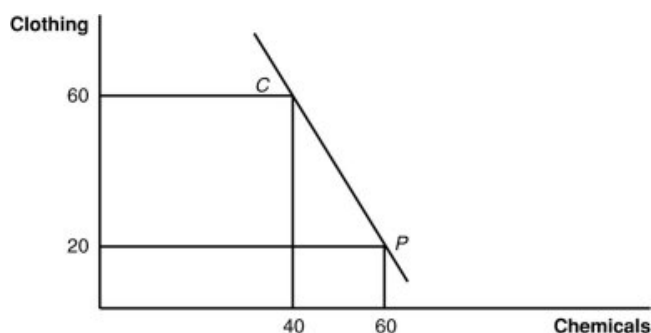


Reference: Ref 2-1

(Figure: Home Production and Consumption) The figure gives Home's international trading pattern. Point P is production with trade, and point C is consumption with trade. Which product does Home import?

- ☒ clothing
- ☐ chemicals
- ☐ It imports neither chemicals nor clothing.
- ☐ It imports both chemicals and clothing.

40 **Figure: Home Production and Consumption**



Reference: Ref 2-1

(Figure: Home Production and Consumption) The figure gives Home's international trading pattern. Point P is production with trade, and point C is consumption with trade. What is the international price of chemicals according to the figure?

- ☐ 1/2 unit of clothing per unit of chemicals
- ☐ one unit of clothing per unit of chemicals
- ☒ two units of clothing per unit of chemicals
- ☐ three units of clothing per unit of chemicals

41 **Where will a nation that gains from trade find its consumption point located?**

- ☐ inside its production possibilities frontier
- ☐ along its production possibilities frontier
- ☒ outside its production possibilities frontier
- ☐ at the center of its production possibilities frontier

42 **When a nation is in autarky (a no-trade state) and maximizes its living standard, its consumption and production points are:**

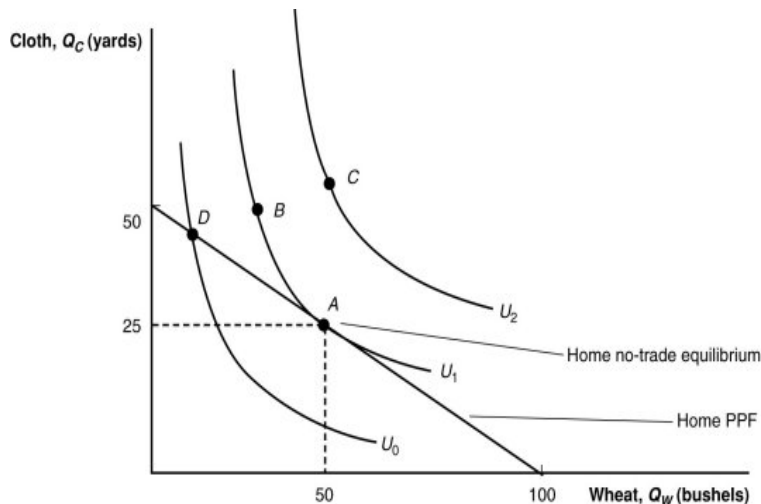
- ☒ along its production possibilities frontier.
- ☐ above its production possibilities frontier.
- ☐ beneath production possibilities frontier.
- ☐ along, above, or beneath its production possibilities frontier.

43 **Assume the $MPL_C = 2$ cars and the $MPL_B = 5$ boats. There are 150 workers in this hypothetical economy; the slope of the PPF for this economy is:**

- ☐ 20/500.
- ☐ 200/50.
- ☒ 2/5.
- ☐ 1/5.

- 44 ☒ Because the marginal product of labor measures the quantity of labor required to produce a unit of a good, the slope of the PPF can also be expressed as:
- ☐ the ratio of abundance of labor to capital.
 - ☐ consumer utility.
 - ☒ the opportunity cost (in units of labor) to obtain an additional unit of good 1 in terms of what we give up of good 2.
 - ☐ the ratio of the marginal products of labor to the marginal product of capital.

45 ☒ **Figure: Home Equilibrium with No Trade**

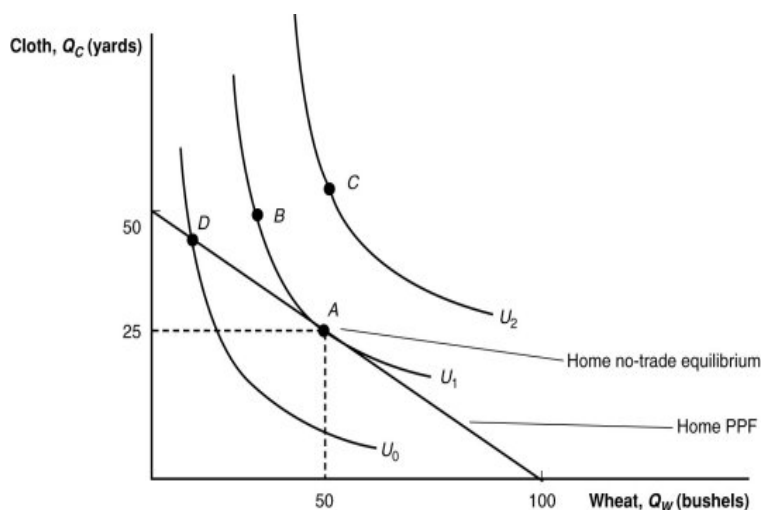


Reference: Ref 2-2

(Figure: Home Equilibrium with No Trade) Under the condition of no trade, which combination gives the nation the MOST utility?

- ☒ A
- ☐ B
- ☐ C
- ☐ D

46 ☒ **Figure: Home Equilibrium with No Trade**



Reference: Ref 2-2

(Figure: Home Equilibrium with No Trade) Under the condition of no trade, which combination of the following is NOT attainable?

- ☐ A
- ☒ B
- ☐ C
- ☐ D

47 ☒ Assume a hypothetical economy where cloth and wheat can be produced.

- What is the opportunity cost of producing wheat in this economy?
- ☒ the amount of cloth that must be given up to produce one more unit of wheat
 - ☐ the amount of money received by selling wheat
 - ☐ the number of workers it takes to produce all the wheat
 - ☐ More information is needed to answer the question.

48  Among the indifference curves for an economy, to achieve higher utility:

- ☒ you must move to the indifference curve farthest away from the origin.
- ☐ you must move to the indifference curve closest to the origin.
- ☐ It is necessary to always close the borders.
- ☐ It does not matter which indifference curve you select; your utility is the same along every curve.

49  If the opportunity cost is constant (the PPF is a straight line), then a country will:

- ☐ partially specialize in the production of its exported product.
- ☒ completely specialize in the production of its exported product.
- ☐ not benefit from importing goods from another country.
- ☐ benefit by raising trade barriers.

50  Moving to a lower indifference curve means that a country is:

- ☐ better off.
- ☒ worse off.
- ☐ indifferent.
- ☐ lowering production.

51  In order for the production possibilities frontier to be a straight line, production must exhibit:

- ☐ increasing costs.
- ☐ decreasing costs.
- ☒ constant costs.
- ☐ increasing, then decreasing, then constant costs.

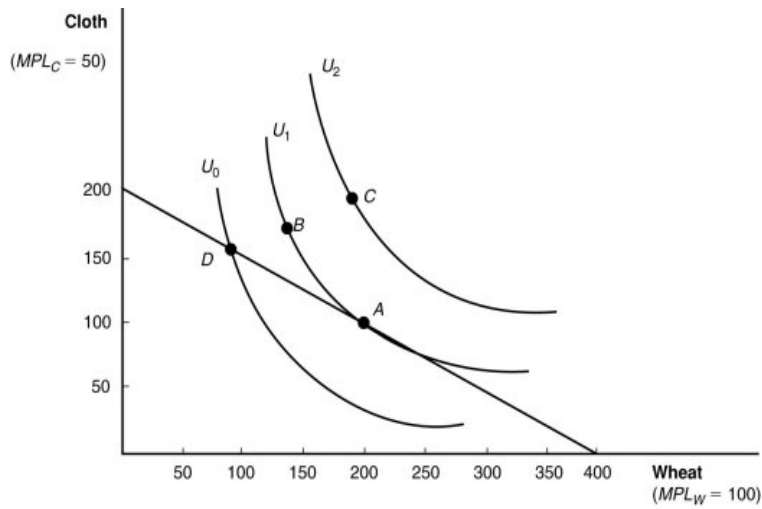
52  In the absence of trade, a nation is in equilibrium where an indifference curve:

- ☐ lies above its production possibilities frontier.
- ☒ is tangent to its production possibilities frontier.
- ☐ intersects its production possibilities frontier.
- ☐ lies below its production possibilities frontier.

53  A country's indifference curve describes combinations of goods that:

- ☐ a country can purchase.
- ☒ yield equal satisfaction to a country.
- ☐ yield satisfaction to a country.
- ☐ a country can produce.

54  **Figure: Indifference Curves**

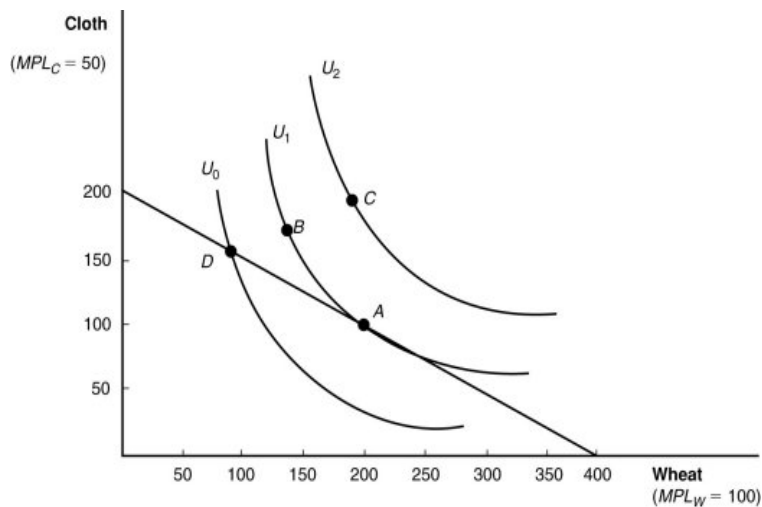


Reference: Ref 2-3

(Figure: Indifference Curves) If this economy produces no cloth, how many units of wheat are possible?

- ☐ 50
- ☐ 200
- ☐ 300
- ☒ 400

55 Figure: Indifference Curves

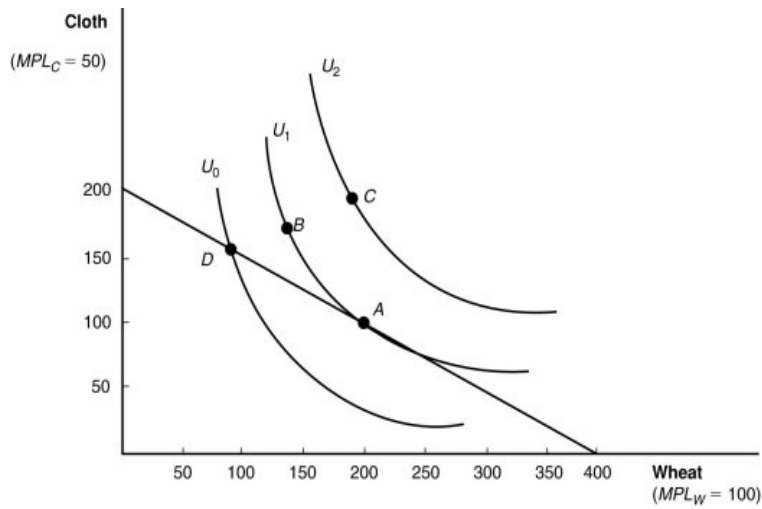


Reference: Ref 2-3

(Figure: Indifference Curves) What is the opportunity cost of cloth in terms of wheat in this example?

- ☐ A unit of cloth may be obtained by foregoing a unit of wheat.
- ☒ A unit of cloth "costs" 2 units of wheat.
- ☐ A unit of cloth "costs" 1/2 unit of wheat.
- ☐ Not enough information is given to answer.

56 Figure: Indifference Curves

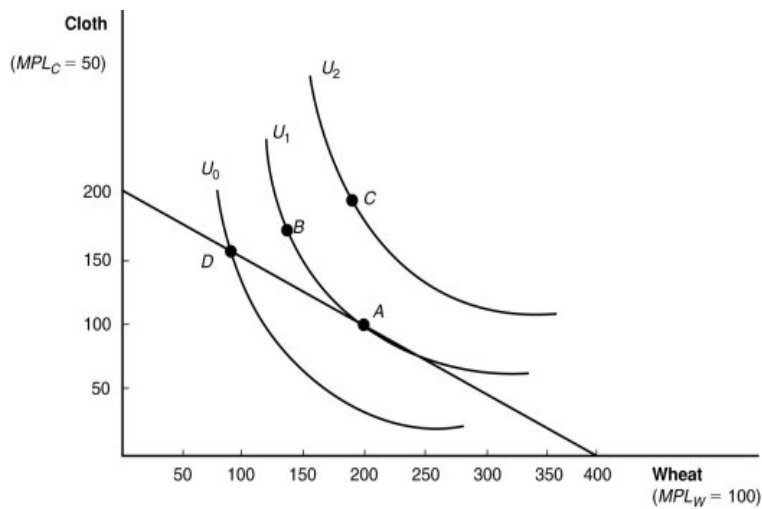


Reference: Ref 2-3

(Figure: Indifference Curves) Of the following points of consumption, which is MOST desirable for consumers?

- ☐ A
- ☐ B
- ☒ C
- ☐ D

57 Figure: Indifference Curves

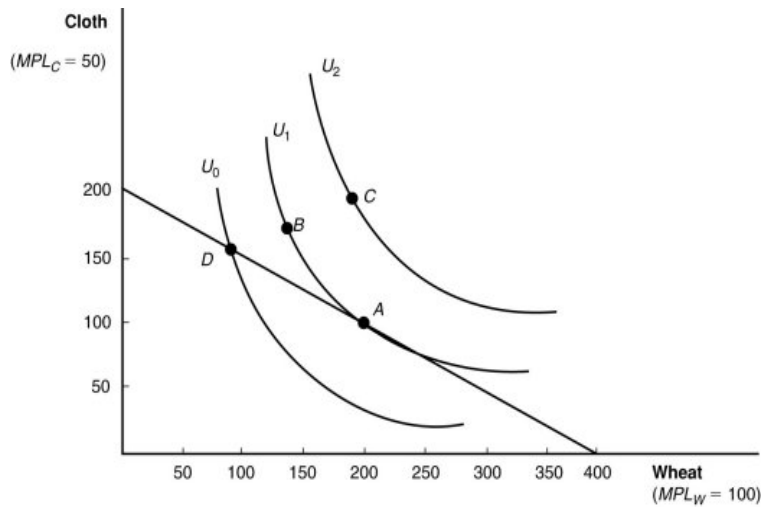


Reference: Ref 2-3

(Figure: Indifference Curves) Of the following points of consumption, which is LEAST desirable for consumers?

- ☐ A
- ☐ B
- ☐ C
- ☒ D

58 Figure: Indifference Curves

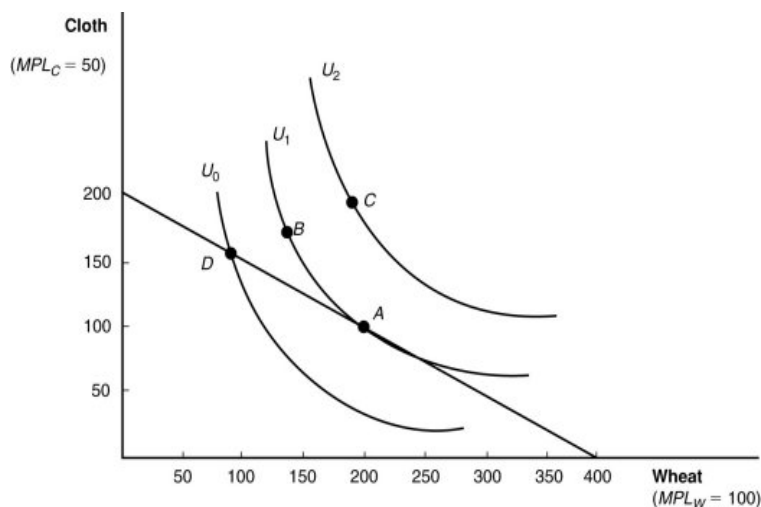


Reference: Ref 2-3

(Figure: Indifference Curves) Which point on the diagram represents the "home" equilibrium in the absence of international trade?

- ☒ A
- ☐ B
- ☐ C
- ☐ D

59 Figure: Indifference Curves



Reference: Ref 2-3

(Figure: Indifference Curves) Which combination of wheat and cloth is represented by point A in the diagram?

- ☐ 200 units of wheat and 400 units of cloth
- ☒ 100 units of cloth and 200 units of wheat
- ☐ 200 units of cloth and 100 units of wheat
- ☐ 300 units of cloth and 150 units of wheat

60 A nation will gain from trade if it:

- ☐ produces and consumes along its PPF.
- ☐ produces outside its PPF and consumes along its PPF.
- ☒ consumes outside its PPF and produces along its PPF.
- ☐ produces and consumes outside its PPF.

61 The "home" equilibrium will provide the highest level of consumer satisfaction from domestic resources whenever:

- ☐ the marginal products of labor are equal.
- ☐ capital and technology are not factors in the decision of what to produce.
- ☒ perfect competition in product and labor markets exists.

- ☐ Adam Smith's "invisible hand" is not an interfering factor.

62 ☐ ☐ ☐ In competitive labor markets, the wage equals:

- ☒ the marginal product of labor times the price of output.
- ☐ the marginal product of labor minus the price of output.
- ☐ the marginal product of labor plus the price of output.
- ☐ the price of output.

63 ☐ ☐ ☐ Which of the following statements describes the way our home equilibrium reflects the concepts of competitive markets?
I. The opportunity cost of each good is the inverse of the ratio of labor productivity.
II. Prices of each good reflect opportunity cost.
III. Wages are equal and reflect the value of the marginal product of labor ($MPL \times P$) for each good.

- ☐ I
- ☐ II
- ☐ III
- ☒ I, II, and III

64 ☐ ☐ ☐ In the home equilibrium situation, the relative price of wheat is the same as:

- ☐ the relative price of cloth.
- ☒ the slope of the PPF.
- ☐ the marginal product of wheat.
- ☐ the cost of labor to produce wheat.

65 ☐ ☐ ☐ In equilibrium, which of the following statements regarding the relative price of a tomato versus a book is CORRECT?

I. It is the opportunity cost of a tomato.
II. It is how much the production of books must fall in order to produce another tomato.

- ☐ I
- ☒ II
- ☐ Neither is correct.
- ☐ Both are correct.

66 ☐ ☐ ☐ **SCENARIO: ABSOLUTE ADVANTAGE**

☐ *The United States requires 20 hours of labor to produce a ton of steel and 30 hours of labor to produce 1,000 board feet of lumber. In Canada, 20 hours of labor are required to produce a ton of steel and 25 hours of labor to produce 1,000 board feet of lumber.*

Reference: Ref 2-4

(Scenario: Absolute Advantage) Which country has an absolute advantage in the production of steel?

- ☐ the United States
- ☐ Canada
- ☒ Neither the United States nor Canada has an absolute advantage.
- ☐ Both the United States and Canada have an absolute advantage.

67 ☐ ☐ ☐ **SCENARIO: ABSOLUTE ADVANTAGE**

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- ☐ the United States
- ☒ Canada
- ☐ Neither the United States nor Canada has an absolute advantage.

- ☐ Both the United States and Canada have an absolute advantage.

68 ■ ■ ■ **SCENARIO: ABSOLUTE ADVANTAGE**

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(Scenario: Absolute Advantage) Which country has a comparative advantage in the production of steel?

- ☒ the United States
☐ Canada
☐ Neither the United States nor Canada has a comparative advantage.
☐ Both the United States and Canada have a comparative advantage.

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70 ■ ■ ■ **SCENARIO: ABSOLUTE AND COMPARATIVE ADVANTAGE**

- — *Poland requires 4 hours of labor to produce a ton of coal and 10 hours of labor to produce 10 bushels of wheat. The Czech Republic requires 6 hours of labor to produce a ton of coal and 10 hours of labor to produce 10 bushels of wheat.*

Reference: Ref 2-5

(Scenario: Absolute and Comparative Advantage) Which country has an absolute advantage in the production of wheat?

- ☐ Poland
☐ the Czech Republic
☒ Neither country has an absolute advantage.
☐ Both countries have an absolute advantage.

71 ■ ■ ■ **SCENARIO: ABSOLUTE AND COMPARATIVE ADVANTAGE**

- — *Poland requires 4 hours of labor to produce a ton of coal and 10 hours of labor to produce 10 bushels of wheat. The Czech Republic requires 6 hours of labor to produce a ton of coal and 10 hours of labor to produce 10 bushels of wheat.*

Reference: Ref 2-5

(Scenario: Absolute and Comparative Advantage) Which country has an absolute advantage in the production of coal?

- ☒ Poland
☐ the Czech Republic
☐ Neither country has an absolute advantage.
☐ Both countries have an absolute advantage.

72 ■ ■ ■ **SCENARIO: ABSOLUTE AND COMPARATIVE ADVANTAGE**

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Reference: Ref 2-5

(Scenario: Absolute and Comparative Advantage) Which country has a

comparative advantage in the production of coal?

- ☒ Poland
- ☐ the Czech Republic
- ☐ Neither country has a comparative advantage.
- ☐ Both countries have a comparative advantage.

73 ■ ■ ■ **SCENARIO: ABSOLUTE AND COMPARATIVE ADVANTAGE**

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Reference: Ref 2-5

(Scenario: Absolute and Comparative Advantage) What is the opportunity cost of coal in Poland?

- ☐ 0.25 hour of labor/ton of coal
- ☒ 2.5 bushels of wheat/ton of coal
- ☐ 4 hours of labor/ton of coal
- ☐ 0.4 bushels of wheat/ton of coal

75 ■ ■ ■ **SCENARIO: ABSOLUTE AND COMPARATIVE ADVANTAGE**

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Reference: Ref 2-5

(Scenario: Absolute and Comparative Advantage) The international price of wheat must fall between which of the following two prices?

- ☒ between 1/6 ton and 1/4 ton of coal per bushel of wheat
- ☐ between 1 2/3 ton and 2 1/2 tons of coal per bushel of wheat
- ☐ between 1/6 hour and 1/4 hour of labor per bushel of wheat
- ☐ between 4 tons and 6 tons of coal per bushel of wheat

76 ■ ■ ■ **SCENARIO: ABSOLUTE AND COMPARATIVE ADVANTAGE**

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Reference: Ref 2-5

(Scenario: Absolute and Comparative Advantage) Suppose that the international price of coal is 4 1/4 bushels of wheat per ton of coal. Which country is likely to have the larger gain from trade?

- ☐ Poland
- ☒ the Czech Republic
- ☐ Neither country has the larger gain.
- ☐ Both countries have the larger gain.

77 ■ ■ ■ **SCENARIO: ABSOLUTE AND COMPARATIVE ADVANTAGE**

- — *Poland requires 4 hours of labor to produce a ton of coal and 10 hours of labor to produce 10 bushels of wheat. The Czech Republic requires 6*

hours of labor to produce a ton of coal and 10 hours of labor to produce 10 bushels of wheat.

Reference: Ref 2-5

(Scenario: Absolute and Comparative Advantage) Suppose that Poland has 1,000 hours of labor and that it completely specializes according to its comparative advantage. How many units of which product will it produce?

- ☒ 250 tons of coal
- ☐ 1,000 bushels of wheat
- ☐ 100 bushels of wheat
- ☐ 4,000 tons of coal

78 ■ ■ ■ **SCENARIO: ABSOLUTE AND COMPARATIVE ADVANTAGE**

■ — Poland requires 4 hours of labor to produce a ton of coal and 10 hours of labor to produce 10 bushels of wheat. The Czech Republic requires 6 hours of labor to produce a ton of coal and 10 hours of labor to produce 10 bushels of wheat.

Reference: Ref 2-5

(Scenario: Absolute and Comparative Advantage) In Poland, what is the marginal product of labor in coal production?

- ☐ 2.5 tons per hour
- ☒ 0.4 tons per hour
- ☐ 4 tons per hour
- ☐ 0.4 tons per bushel of wheat

79 ■ ■ ■ To explain why some nations purchase products from abroad, even when they have an absolute advantage in production, we have to use the theory of:

- ☐ absolute advantage.
- ☐ relative pricing.
- ☒ comparative advantage.
- ☐ industrial advantage.

80 ■ ■ ■ Whenever a nation has a lower opportunity cost of producing any good or service in relative terms, that nation is said to have:

- ☐ an absolute advantage.
- ☒ a comparative advantage.
- ☐ low labor costs.
- ☐ better technology to produce that good or service.

81 ■ ■ ■ Comparative advantage in production of a product is reflected in:

- ☐ a lower relative price.
- ☐ a lower opportunity cost.
- ☐ higher labor productivity.
- ☒ a lower relative price and a lower opportunity cost.

82 ■ ■ ■ **Table: Output in the United States and China**

	U.S. Output per Worker	Chinese Output per Worker
Apparel	\$100,000	\$10,000
Wheat	\$200,000	\$5,000

Reference: Ref 2-6

(Table: Output in the United States and China) Which of the following statements is CORRECT?

- ☐ The United States has an absolute advantage in both apparel and wheat and a comparative disadvantage in wheat.
- ☐ China has an absolute advantage in both apparel and wheat and a comparative advantage in apparel.

- ☐ The United States has an absolute advantage in both apparel and wheat and a comparative advantage in neither apparel nor wheat.
- ☒ China has an absolute disadvantage in both apparel and wheat and a comparative advantage in apparel.

83 **Table: Output in the United States and China**

	U.S. Output per Worker	Chinese Output per Worker
Apparel	\$100,000	\$10,000
Wheat	\$200,000	\$5,000

Reference: Ref 2-6

(Table: Output in the United States and China) Which of the following products will the United States export to China?

- ☒ wheat
- ☐ apparel
- ☐ The United States will export neither wheat nor apparel.
- ☐ The United States will export both wheat and apparel.

84 **Table: Production in the United States and China**

	United States Sales/Employee	China Sales/Employee
Apparel	\$120,000	\$13,500
Textiles	\$40,000	\$9,000

	Bushels/Hour	Bushels/Hour
Wheat	27.5	0.1

Reference: Ref 2-7

(Table: Production in the United States and China) In the table, the productivity of workers in the textile and apparel and wheat sectors is given for the United States and China. The average worker in the United States produces _____ more apparel sales than the average worker in China.

- ☐ 0.88
- ☒ 8.8
- ☐ 80
- ☐ 10.9

85 **Table: Production in the United States and China**

	United States Sales/Employee	China Sales/Employee
Apparel	\$120,000	\$13,500
Textiles	\$40,000	\$9,000

	Bushels/Hour	Bushels/Hour
Wheat	27.5	0.1

Reference: Ref 2-7

(Table: Production in the United States and China) In the table, the productivity of workers in the textile and apparel and wheat sectors is given for the United States and China. The table shows that the United States has an absolute advantage in:

- ☐ textile manufacturing
- ☐ apparel manufacturing.
- ☐ The United States has an absolute advantage in neither textile nor apparel manufacturing.
- ☒ The United States has both an absolute advantage in textile and apparel manufacturing.

86 **Table: Production in the United States and China**

	United States Sales/Employee	China Sales/Employee
Apparel	\$120,000	\$13,500
Textiles	\$40,000	\$9,000

	Bushels/Hour	Bushels/Hour
Wheat	27.5	0.1

Reference: Ref 2-7

(Table: Production in the United States and China) Consider the productivity of workers in the table. In the United States, to produce an additional \$1,000 worth of apparel sales, _____ bushels of wheat must be forgone. In China, to produce an additional \$1,000 worth of apparel sales, _____ bushels of wheat must be forgone.

- ☐ 0.23; 7.0
- ☒ 0.23; 0.007
- ☐ 0.10; 0.7
- ☐ 6.9; 70

87 It can be shown that differences in "before-trade" relative prices will determine:

- ☐ which nation has the absolute advantage.
- ☒ which good each nation will export or import.
- ☐ the quantity traded by each nation.
- ☐ which nation has the comparative advantage.

88 A nation will export the product in which it has a comparative advantage, which results from the good being relatively _____ than in the importing nation.

- ☒ cheaper
- ☐ more expensive
- ☐ lower in quality
- ☐ less available

89 At some point, as the price of exported products is bid up and the price of the product imported falls, the prices of the products in both nations:

- ☐ become more unequal.
- ☐ approach zero.
- ☐ approach infinity.
- ☒ equalize.

90 When two nations have achieved identical relative prices of the two traded products, we have:

- ☐ a standoff.
- ☐ a stalemate.
- ☒ international trade equilibrium.
- ☐ absolute advantage once again.

91 Compared with constant cost production, if production occurs under increasing cost conditions, it is MORE likely that countries will:

- ☐ completely specialize.
- ☒ incompletely specialize.
- ☐ not engage in international trade.
- ☐ trade with one another.

92 Suppose a nation increases the quantity of a product it exports. To attract the labor resources needed to support the increased production, it must:

- ☒ pay higher wages.

- ☐ lay off workers.
- ☐ borrow capital abroad.
- ☐ find new sites for production near population centers.

- 93 ☐ ☐ ☐ ☐ The Ricardian model (with constant opportunity costs) predicts that a nation will _____ in the production of the good it exports.
- ☐ have a comparative disadvantage
 - ☐ develop shortages
 - ☐ lower the cost of production
 - ☒ specialize completely

94 ☐ ☐ ☐ ☐ **Output in the United States and China**

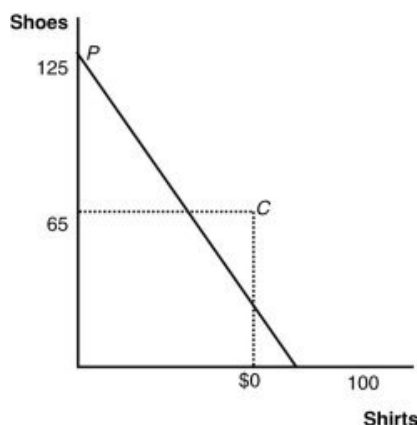
	U.S. Output per Worker	Chinese Output per Worker
Apparel	\$100,000	\$10,000
Wheat	\$200,000	\$5,000

Reference: Ref 2-8

(Table: Output in the United States and China) Using the data in the table, what will happen to the U.S. labor force after trade occurs with China?

- ☐ U.S. labor will move from apparel to agriculture, where its marginal productivity is higher.
- ☐ U.S. jobs in apparel will be exported to China, wheat exports will create additional jobs in agriculture, and the value of output produced by U.S. labor will increase.
- ☐ The value of output produced by U.S. labor will increase.
- ☒ U.S. labor will move from apparel to agriculture, where its marginal productivity is higher. U.S. jobs in apparel will be exported to China, wheat exports will create additional jobs in agriculture, and the value of output produced by U.S. labor will increase.

95 ☐ ☐ ☐ ☐ **Figure: Upperia's Production and Consumption**

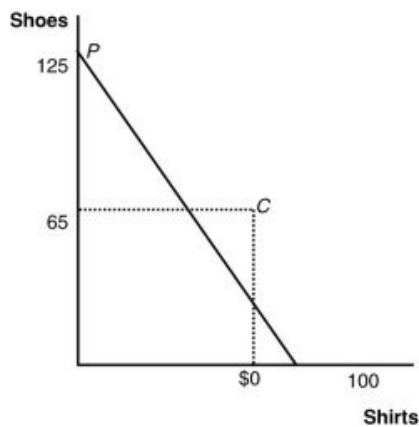


Reference: Ref 2-9

(Figure: Upperia's Production and Consumption) The graph shows Upperia's international trading pattern. Point *P* is production with trade, and point *C* is consumption with trade. Which product does Home export?

- ☒ shoes
- ☐ shirts
- ☐ Home exports neither shirts nor shoes.
- ☐ Home exports both shirts and shoes.

96 ☐ ☐ ☐ ☐ **Figure: Upperia's Production and Consumption**

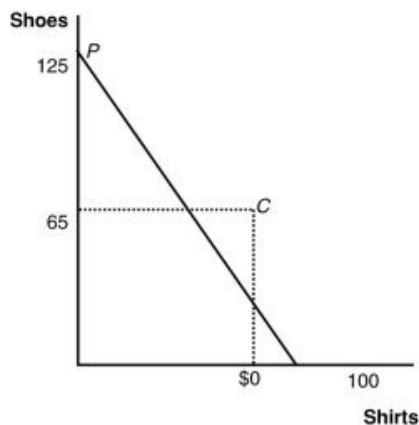


Reference: Ref 2-9

(Figure: Upperia's Production and Consumption) The graph shows Upperia's international trading pattern. Point P is production with trade, and point C is consumption with trade. Which product does Home import?

- ☐ shoes
- ☒ shirts
- ☐ Home imports neither shirts nor shoes.
- ☐ Home imports both shirts and shoes.

97 **Figure: Upperia's Production and Consumption**

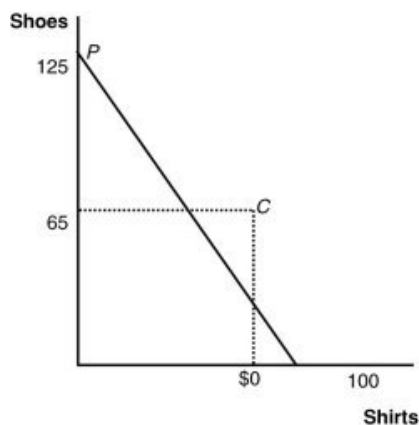


Reference: Ref 2-9

(Figure: Upperia's Production and Consumption) The graph shows Upperia's international trading pattern. Point P is production with trade, and point C is consumption with trade. What is the international price of shoes (shirts/pair of shoes)?

- ☐ $125/80$ shirts per unit of pair of shoes
- ☒ $4/3$ shirts per unit of pair of shoes
- ☐ $5/4$ shirts per unit of pair of shoes
- ☐ $3/4$ shirt per unit of pair of shoes

98 **Figure: Upperia's Production and Consumption**

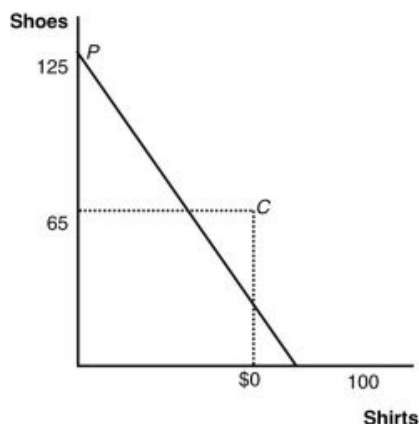


Reference: Ref 2-9

(Figure: Upperia's Production and Consumption) The graph shows Upperia's international trading pattern. Point P is production with trade, and point C is consumption with trade. Assume that the marginal product of labor in producing shoes is one pair per hour. How many hours of labor occur in Upperia?

- ☒ 125
- ☐ 100
- ☐ 80
- ☐ 65

99 **Figure: Upperia's Production and Consumption**



Reference: Ref 2-9

(Figure: Upperia's Production and Consumption) The graph shows Upperia's international trading pattern. What is the autarkic price of shirts in Upperia?

- ☐ 5/4 shirts per unit of pair of shoes
- ☒ 4/5 shirts per unit of pair of shoes
- ☐ 5/4 pair of shoes per shirt
- ☐ 4/5 pair of shoes per shirt

100 With trade, a country will maximize its economic well-being when it:

- ☒ moves to the highest possible indifference curve.
- ☐ forces the marginal rate of substitution to its lowest possible value.
- ☐ consumes more of both goods than it does in autarky.
- ☐ finds its marginal rate of substitution exceeding its marginal rate of transformation.

101 If the international terms of trade settle at a level that is between each country's opportunity cost:

- ☐ there is no basis for gainful trade for either country.
- ☒ both countries gain from trade.
- ☐ only one country gains from trade.
- ☐ one country gains and the other country loses from trade.

102 Trade between two nations is NOT possible if they have:

- ☐ identical indifference curves but different production possibilities frontiers.
- ☐ identical production possibilities frontiers but different indifference curves.
- ☐ different production possibilities frontiers and different indifference curves.
- ☒ identical production possibilities frontiers and identical indifference curves.

103 As nations trade, their total level of utility (satisfaction from consuming

goods):

- ☐ equalizes.
- ☐ levels out.
- ☐ decreases.
- ☒ increases.

104 ■ ■ ■ The increase in total utility derived from trading products is called:

- ☐ trade patterns.
- ☒ gains from trade.
- ☐ comparative advantage.
- ☐ labor productivity.

105 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

- — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produces a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) Which country has an absolute advantage in jellybean production?

- ☐ Chile
- ☐ Argentina
- ☒ Neither Argentina nor Chile has an absolute advantage.
- ☐ Both Argentina and Chile have an absolute advantage.

106 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

- — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produces a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) Which country has a comparative advantage in jellybean production?

- ☐ Chile
- ☒ Argentina
- ☐ Neither Argentina nor Chile has a comparative advantage.
- ☐ Both Argentina and Chile have a comparative advantage.

107 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

- — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produces a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) What are the endpoints of Chile's production possibilities frontier?

- ☒ 1,000 pounds of jellybeans and 500 pounds of peanut butter
- ☐ 1,000 pounds of jellybeans and 2,000 pounds of peanut butter
- ☐ 600 pounds of jellybeans and 200 pounds of peanut butter

- ☐ There are no endpoints to Chile's production possibilities frontier.

108 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

- — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produce a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) What is the price of peanut butter in Argentina before the two countries begin to trade with each other?

- ☐ 1/3 pound of jellybeans per pound of peanut butter
☐ 1/2 pound of jellybeans per pound of peanut butter
☐ 2 pounds of jellybeans per pound of peanut butter
☒ 3 pounds of jellybeans per pound of peanut butter

109 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

- — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produce a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) In order for Chile to gain from trade, the price of jellybeans must be less than:

- ☐ 2 pounds of peanut butter per pound of jellybeans.
☐ 3 pounds of peanut butter per pound of jellybeans.
☐ 1/3 pound of peanut butter per pound of jellybeans.
☒ 1/2 pound of peanut butter per pound of jellybeans.

110 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

- — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produce a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) Argentina's gains from trade will be largest when the price of jellybeans is:

- ☐ 2 pounds of peanut butter per pound of jellybeans.
☐ 3 pounds of peanut butter per pound of jellybeans.
☐ 1/3 pound of peanut butter per pound of jellybeans.
☒ 1/2 pound of peanut butter per pound of jellybeans.

111 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

- — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produce a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) What is the opportunity cost of a pound of peanut butter in Chile?

- ☒ 2 pounds of jellybeans per pound of peanut butter
- ☐ 3 pounds of jellybeans per pound of peanut butter
- ☐ 1/3 pound of jellybeans per pound of peanut butter
- ☐ 1/2 pound of jellybeans per pound of peanut butter

112 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

■ — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produce a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) Suppose that Chile and Argentina begin to trade with one another. Each completely specializes in the product in which it finds its comparative advantage. How many pounds of peanut butter and jellybeans do the two countries jointly produce?

- ☐ 1,000 pounds of jellybeans and 400 pounds of peanut butter
- ☒ 1,000 pounds of jellybeans and 500 pounds of peanut butter
- ☐ 500 pounds of jellybeans and 1,000 pounds of peanut butter
- ☐ 333.33 pounds of jellybeans and 500 pounds of peanut butter

113 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

■ — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produce a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) Suppose that Chile and Argentina begin to trade with each other. Each completely specializes in the product in which it finds its comparative advantage. How many more pounds of peanut butter and jellybeans do the two countries jointly produce compared with production before they began to trade?

- ☐ 1,000 pounds of jellybeans and 500 pounds of peanut butter
- ☐ 0 pounds of jellybeans and 500 pounds of peanut butter
- ☐ 1,000 pounds of jellybeans and 0 pounds of peanut butter
- ☒ 0 pounds of jellybeans and 100 pounds of peanut butter

114 ■ ■ ■ **SCENARIO: CHILE AND ARGENTINA**

■ — *Chile and Argentina each produce jellybeans and peanut butter, using labor as their only resource. Each country has 1,000 hours of labor. In Chile, an hour produces a pound of jellybeans and 2 hours produce a pound of peanut butter. In Argentina, an hour produces a pound of jellybeans and 3 hours produce a pound of peanut butter. When they do not trade with each other, Chile consumes 600 pounds of jellybeans and 200 pounds of peanut butter, and Argentina consumes 400 pounds of jellybeans and 200 pounds of peanut butter.*

Reference: Ref 2-10

(Scenario: Chile and Argentina) Which of the following groups will benefit from trade between Chile and Argentina?

- ☐ Chilean consumers
- ☐ Argentinean peanut butter producers
- ☐ Argentinean consumers
- ☒ Chilean consumers, Argentinean peanut butter producers, and

- 115 ☐ ☐ ☐ Suppose there are two countries (Home and Foreign) that produce two goods. Home's wages are 100% greater than Foreign's wages. Will trade be possible between Home and Foreign?
- ☐ No, because Foreign's wages are lower than Home's wages.
 - ☐ Yes, Foreign will be able to export both products to Home.
 - ☒ Yes, as long as Home's marginal productivity of labor in one product is at least 100% higher than Foreign's marginal productivity of labor in the same product.
 - ☐ No, because prices will be the same in each country.

- 116 ☐ ☐ ☐ According to the principle of comparative advantage, specialization and trade increase a nation's total output because:
- ☒ resources are directed to their highest productivity.
 - ☐ the output of the nation's trading partner declines.
 - ☐ the nation can produce outside its production possibilities frontier.
 - ☐ the problem of unemployment is eliminated.

- 117 ☐ ☐ ☐ Assume that two countries (Home and Foreign) each produce two goods (corn and wheat) under constant cost production. Home produces 0.5 ton of corn or 1 ton of wheat with a day of labor. Without trade (in autarky), Home's daily production is 20 tons of wheat and 10 tons of corn. What is Home's price of corn in autarky?
- ☐ 0.5 ton of wheat per ton of corn
 - ☐ 20 tons of wheat per ton of corn
 - ☐ 10 tons of wheat
 - ☒ 2 tons of wheat

- 118 ☐ ☐ ☐ Assume that two countries (Home and Foreign) each produce two goods (corn and wheat) under constant cost production. Home produces 0.5 ton of corn or 1 ton of wheat with a day of labor. Without trade (in autarky), Home's daily production is 20 tons of wheat and 10 tons of corn. How large is Home's labor force?
- ☐ 50 workers
 - ☒ 40 workers
 - ☐ 30 workers
 - ☐ 20 workers

- 119 ☐ ☐ ☐ Assume that two countries (Home and Foreign) each produce two goods (corn and wheat) under constant cost production. Home produces 0.5 ton of corn or a ton of wheat with a day of labor. Without trade (in autarky), Home's daily production is 20 tons of wheat and 10 tons of corn. Now suppose that Home has the opportunity to trade with Foreign at an international price of corn equal to a ton of wheat per ton of corn. In which product will Home find its comparative advantage?
- ☒ wheat
 - ☐ corn
 - ☐ Home will find its competitive advantage in neither corn nor wheat.
 - ☐ Home will find its competitive advantage in both corn and wheat.

- 120 ☐ ☐ ☐ Assume that two countries (Home and Foreign) each produce two goods (corn and wheat) under constant cost production. Home produces 0.5 ton of corn or 1 ton of wheat with a day of labor. Without trade (in autarky), Home's daily production is 20 tons of wheat and 10 tons of corn. Suppose that Home completely specializes, and it consumes 20 tons of wheat after it begins trading with Foreign. Home trades with Foreign at a 1-to-1 ratio of corn for wheat. How many tons of corn does it consume when it trades with Foreign?
- ☐ 10 tons of corn
 - ☒ 20 tons of corn
 - ☐ 30 tons of corn
 - ☐ 40 tons of corn

- 121 ■ ■ ■ Assume that two countries (Home and Foreign) each produce two goods (corn and wheat) under constant cost production. Home produces 0.5 ton of corn or a ton of wheat with a day of labor. Foreign produces a ton of corn and 0.5 ton of wheat. Without trade (in autarky), Home's daily production is 20 tons of wheat and 10 tons of corn. At which international price will Home's gains from trade be largest?
- ☒ 0.5 ton of wheat per ton of corn
 - ☐ 1 ton of wheat per ton of corn
 - ☐ 1.5 tons of wheat per ton of corn
 - ☐ 2 tons of wheat per ton of corn

- 122 ■ ■ ■ Assume that two countries (Home and Foreign) each produce two goods (corn and wheat) under constant cost production. Home produces 0.5 ton of corn or a ton of wheat with a day of labor. Without trade (in autarky), Home's daily production is 20 tons of wheat and 10 tons of corn. Suppose that, after trade occurs, the international price actually becomes 1.5 tons of wheat per ton of corn. Which of the following statements is TRUE?
- ☐ Home will gain from trade but Foreign will not.
 - ☐ Foreign will gain from trade but Home will not.
 - ☐ Neither home nor Foreign will gain from trade.
 - ☒ Both Home and Foreign will gain from trade.

- 123 ■ ■ ■ Assume that Germany and China can produce beer and cloth. If the MPL_C/MPL_B for Germany is $2/5$ and MPL_C/MPL_B for China is 1, then Germany and China have a comparative advantage in:
- ☐ cloth and beer, respectively.
 - ☒ beer and cloth, respectively.
 - ☐ beer.
 - ☐ cloth.

- 124 ■ ■ ■ Assume that Germany and China can produce beer and cloth. If the MPL_C/MPL_B for Germany is $2/5$ and MPL_C/MPL_B for China is 1, then China should:
- ☐ specialize in producing beer and export beer.
 - ☒ specialize in producing cloth and export cloth.
 - ☐ not specialize, because China will not benefit from it.
 - ☐ specialize in producing cloth and import cloth.

- 125 ■ ■ ■ Assume that Germany and China can produce beer and cloth. If the MPL_C/MPL_B for Germany is $2/5$ and MPL_C/MPL_B for China is 1, then Germany should:
- ☒ specialize in producing beer and export beer.
 - ☐ specialize in producing cloth and export cloth.
 - ☐ not specialize, because Germany will not benefit from it.
 - ☐ specialize in producing cloth and import cloth.

- 126 ■ ■ ■ Using the marginal product theory of wages, a worker's "real" wage is:
- ☐ twice the amount of the "money" wage.
 - ☒ what the "money" wage will purchase in terms of products.
 - ☐ what she earns after taxes.
 - ☐ what she would earn if her employer paid her fairly.

- 127 ■ ■ ■ A worker's "real" wage is related to:
- ☐ his productivity in the workplace.
 - ☐ the value of his production to his employer.
 - ☐ the nation's absolute advantage in production of that product.
 - ☒ his productivity in the workplace, the value of his production to his employer, and the nation's absolute advantage in production of that product.

- 128 ■ ■ ■ Which of the following statements describe what the Ricardian model predicts as a nation improves its technology and productivity?
- I. Its standard of living will rise.
 - II. Wages of its workers will rise.
 - III. It will lose its absolute advantage.
- ☐ I
 - ☐ II
 - ☐ III
 - ☒ I and II

- 129 ■ ■ ■ For China, the result of opening its economy was:
- ☐ a decline in its wages.
 - ☒ an increase in wages.
 - ☐ a reduction in the amount exported.
 - ☐ a reduction in the amount imported.

- 130 ■ ■ ■ The case study of wages and productivity in the textbook demonstrates that:
- ☐ workers lose out when international trade occurs.
 - ☒ internationally, worker productivity varies directly with real wages.
 - ☐ workers who get educated get higher wages.
 - ☐ workers become more productive, but most of the value added goes to the owners of capital.

- 131 ■ ■ ■ **SCENARIO: United States Versus United Kingdom**
- — *In the United States, one worker can produce 10 tons of steel per day or 20 tons of chemicals per day. In the United Kingdom, one worker can produce 5 tons of steel per day or 15 tons of chemicals per day.*
- Reference: Ref 2-11

(Scenario: United States Versus United Kingdom) The United States has the absolute advantage in the production of:

- ☐ steel.
- ☐ chemicals.
- ☐ The United States has the absolute advantage in neither steel nor chemicals.
- ☒ The United States has the absolute advantage in both steel and chemicals.

- 132 ■ ■ ■ **SCENARIO: United States Versus United Kingdom**
- — *In the United States, one worker can produce 10 tons of steel per day or 20 tons of chemicals per day. In the United Kingdom, one worker can produce 5 tons of steel per day or 15 tons of chemicals per day.*
- Reference: Ref 2-11

(Scenario: United States Versus United Kingdom) The United Kingdom has the absolute advantage in the production of:

- ☐ steel.
- ☐ chemicals.
- ☒ The United Kingdom has the absolute advantage in neither steel nor chemicals.
- ☐ The United Kingdom has the absolute advantage in both steel and chemicals.

- 133 ■ ■ ■ **SCENARIO: United States Versus United Kingdom**
- — *In the United States, one worker can produce 10 tons of steel per day or 20 tons of chemicals per day. In the United Kingdom, one worker can produce 5 tons of steel per day or 15 tons of chemicals per day.*
- Reference: Ref 2-11

(Scenario: United States Versus United Kingdom) The United Kingdom has a comparative advantage in the production of:

- ☐ steel.

- ☒ chemicals.
- ☐ The United Kingdom has a comparative advantage in neither steel nor chemicals.
- ☐ The United Kingdom has a comparative advantage in both steel and chemicals.

134 ■ ■ ■ **SCENARIO: United States Versus United Kingdom**

- — *In the United States, one worker can produce 10 tons of steel per day or 20 tons of chemicals per day. In the United Kingdom, one worker can produce 5 tons of steel per day or 15 tons of chemicals per day.*

Reference: Ref 2-11

(Scenario: United States Versus United Kingdom) If trade occurs between the United States and the United Kingdom, American firms should specialize in producing:

- ☒ steel.
- ☐ chemicals.
- ☐ American firms should specialize in neither steel nor chemicals.
- ☐ American firms should specialize in both steel and chemicals.

135 ■ ■ ■ **SCENARIO: United States Versus United Kingdom**

- — *In the United States, one worker can produce 10 tons of steel per day or 20 tons of chemicals per day. In the United Kingdom, one worker can produce 5 tons of steel per day or 15 tons of chemicals per day.*

Reference: Ref 2-11

(Scenario: United States Versus United Kingdom) International trade will occur between the United States and the United Kingdom so long as a ton of steel trades for:

- ☐ at least a ton of chemicals, but no more than 2 tons of chemicals.
- ☒ at least 2 tons of chemicals, but no more than 3 tons of chemicals.
- ☐ at least 0.33 ton of chemicals, but no more than 0.5 ton of chemicals.
- ☐ at least 0.55 ton of chemicals but no more than 0.75 ton of chemicals.

136 ■ ■ ■ **SCENARIO: United States Versus United Kingdom**

- — *In the United States, one worker can produce 10 tons of steel per day or 20 tons of chemicals per day. In the United Kingdom, one worker can produce 5 tons of steel per day or 15 tons of chemicals per day.*

Reference: Ref 2-11

(Scenario: United States Versus United Kingdom) The United Kingdom will gain the most from trade if a ton of steel trades for:

- ☐ 2 tons of chemicals.
- ☐ 3 tons of chemicals.
- ☒ 0.5 ton of chemicals.
- ☐ 0.33 ton of chemicals.

137 ■ ■ ■ **SCENARIO: United States Versus United Kingdom**

- — *In the United States, one worker can produce 10 tons of steel per day or 20 tons of chemicals per day. In the United Kingdom, one worker can produce 5 tons of steel per day or 15 tons of chemicals per day.*

Reference: Ref 2-11

(Scenario: United States Versus United Kingdom) Which of the following statements is CORRECT?

- ☒ U.S. wages will be higher than U.K. wages.
- ☐ U.K. wages will be higher than U.S. wages.
- ☐ Wages in the United States and the United Kingdom will be equal.
- ☐ There will be no relationship between U.S. and U.K. wages.

138 ■ ■ ■ If export prices are higher than the import prices, what can we expect

- — the wages in the export sector to do?

- ☒ increase

- ☐ decrease
- ☐ stay the same
- ☐ The answer cannot be determined from the information provided.

139 ■■■ What does the term *value added per hour* help us measure?

- ☐ terms of trade
- ☒ labor productivity
- ☐ volume of exports
- ☐ volume of imports

140 ■■■ In the Ricardian model, wages are equal across industries because:

- ☐ employers care for their workers.
- ☐ workers prefer to work in exporting industries.
- ☒ workers are freely mobile between industries.
- ☐ workers are freely mobile between countries.

141 ■■■ Suppose that the introduction of computers increases the productivity of workers in the developed world. What you would expect wages to do?

- ☒ Rise mainly in the developed countries.
- ☐ Rise mainly in the developing countries.
- ☐ Fall mainly in the developed countries.
- ☐ Fall mainly in the developing countries.

142 ■■■ If a home country is exporting corn and importing bikes and if the relative price P_c/P_b is increasing, then:

- ☒ the home country will export less corn.
- ☐ the home country will export more corn.
- ☐ the home country will import the same number of bikes.
- ☐ there is no change in the trade pattern for the home country.

143 ■■■ It is possible to determine how much a nation will export over and above its domestic consumption at various international prices, other things being equal, by finding a set of equilibria. This schedule is:

- ☐ the import demand curve for a nation.
- ☒ the export supply curve for a nation.
- ☐ the production possibilities frontier for a nation.
- ☐ the "no-trade" equilibrium.

144 ■■■ The flat part of Home's export supply curve in the Ricardian model is due to the assumption that:

- ☐ Home has a comparative advantage in its export.
- ☐ Home has an absolute advantage in its export.
- ☒ the marginal product of labor is constant in the export good.
- ☐ Home has more labor than Foreign.

145 ■■■ It is possible to determine how much a nation will import at various international prices, other things being equal, by finding a set of equilibria. This schedule is the:

- ☒ import demand curve for a nation.
- ☐ export supply curve for a nation.
- ☐ production possibilities frontier for a nation.
- ☐ "no-trade" equilibrium.

146 ■■■ Because the PPF is a straight line in the Ricardian model, Foreign's import demand curve is:

- ☐ upward sloping in parts.
- ☒ flat in parts.
- ☐ downward sloping in parts.
- ☐ flat everywhere.

147 ■ ■ ■ International trade equilibrium occurs where:

- ☐ there is no further way to increase production of any commodity.
- ☐ the excess supply curve intersects with the excess demand curve.
- ☒ the total world import demand curve intersects with the total world export supply curve.
- ☐ the amount produced in each nation is just equal to the amounts produced in every other nation.

148 ■ ■ ■ The international relative price and total quantity of a traded good or service is determined by:

- ☐ labor shortages that occur worldwide.
- ☐ the World Trade Organization.
- ☒ the intersection of the total world import demand curve with the total world export supply curve.
- ☐ natural resource availability compared with the industrial demand for those products.

149 ■ ■ ■ If prices of a nation's exported products rise in comparison to prices paid for imports, that nation experiences a:

- ☒ rise in its international terms of trade.
- ☐ decline in its international terms of trade.
- ☐ reduction in its imports.
- ☐ reduction in its exports.

150 ■ ■ ■ Suppose that the U.S. price index for its imports rose from 100 to 120 from 2010 to 2011 and the price index for its exports remained unchanged. Which of the following statements is CORRECT?

- ☒ The U.S. terms of trade worsened between 2010 and 2011.
- ☐ The U.S. terms of trade improved between 2010 and 2011.
- ☐ The U.S. terms of trade improved in 2010 and worsened in 2011.
- ☐ There was no change in the U.S. terms of trade between 2010 and 2011.

151 ■ ■ ■ Suppose that there is an improvement in a country's terms of trade between 2010 and 2011. This improvement means that:

- ☒ it can purchase more imports in 2011, with the same volume of exports as in 2010.
- ☐ it can purchase more exports in 2011, with the same volume of exports as in 2010.
- ☐ it needs to increase its exports in order to purchase the same volume of imports as in 2011.
- ☐ regarding its international trade, it is worse off in 2011 than it was in 2010.

152 ■ ■ ■ If the foreign import demand curve intersects the home country's export supply curve in its horizontal portion, then:

- ☐ the home country will suffer a loss from international trade.
- ☒ the home country will not gain from trade.
- ☐ the home country will gain from trade.
- ☐ the foreign country will not gain from trade.

153 ■ ■ ■ **SCENARIO: RELATIVE PRICES AND TRADE LEVELS**

■ — Home has a comparative advantage in wheat, and Foreign has a comparative advantage in cloth. Once trade occurs, Home produces 1,000 bushels of wheat, and Foreign produces 1,000 yards of cloth. The following table shows the amount of wheat that Home is willing to supply and Foreign is willing to buy at various international prices.

International Price	Home's Wheat Exports	Foreign's Wheat Imports
1 yard/1 bushel	100 bushels	900 bushels

2 yards/1 bushel	200 bushels	800 bushels
3 yards/1 bushel	300 bushels	700 bushels
4 yards/1 bushel	400 bushels	600 bushels
5 yards/1 bushel	500 bushels	500 bushels
6 yards/1 bushel	600 bushels	400 bushels
7 yards/1 bushel	700 bushels	300 bushels
8 yards/1 bushel	800 bushels	200 bushels
9 yards/1 bushel	900 bushels	100 bushels

Reference: Ref 2-12

(Scenario: Relative Prices and Trade Levels) What is the international price of wheat?

- ☐ 1 yard/bushel
- ☐ 3 yards/bushel
- ☒ 5 yards/bushel
- ☐ 7 yards/bushel

154 ■ ■ ■ **SCENARIO: RELATIVE PRICES AND TRADE LEVELS**

■ — Home has a comparative advantage in wheat, and Foreign has a comparative advantage in cloth. Once trade occurs, Home produces 1,000 bushels of wheat, and Foreign produces 1,000 yards of cloth. The following table shows the amount of wheat that Home is willing to supply and Foreign is willing to buy at various international prices.

International Price	Home's Wheat Exports	Foreign's Wheat Imports
1 yard/1 bushel	100 bushels	900 bushels
2 yards/1 bushel	200 bushels	800 bushels
3 yards/1 bushel	300 bushels	700 bushels
4 yards/1 bushel	400 bushels	600 bushels
5 yards/1 bushel	500 bushels	500 bushels
6 yards/1 bushel	600 bushels	400 bushels
7 yards/1 bushel	700 bushels	300 bushels
8 yards/1 bushel	800 bushels	200 bushels
9 yards/1 bushel	900 bushels	100 bushels

Reference: Ref 2-12

(Scenario: Relative Prices and Trade Levels) How many bushels of wheat will Foreign import?

- ☐ 900 bushels
- ☐ 700 bushels
- ☒ 500 bushels
- ☐ 300 bushels

155 ■ ■ ■ **SCENARIO: HOME'S WILLINGNESS TO TRADE WHEAT FOR CLOTH**

■ — Home has a comparative advantage in wheat, and Foreign has a comparative advantage in cloth. Once trade occurs, Home produces 1,500 bushels of wheat, and Foreign produces 1,000 yards of cloth. The following table shows the amount of wheat that Home is willing to trade to acquire more cloth.

Home's Wheat Exports	Foreign's Cloth Exports
400 bushels	200 yards
650 bushels	350 yards
850 bushels	500 yards
1,000 bushels	600 yards
1,100 bushels	650 yards

1,150 bushels	700 yards
1,175 bushels	800 yards
800 bushels	200 yards
900 bushels	100 yards

Reference: Ref 2-13

(Scenario: Home's Willingness to Trade Wheat for Cloth) If the international price of cloth is 1.5 bushels of wheat per yard, how many bushels of wheat will Home export to Foreign?

- ☒ 1,150 bushels
- ☐ 1,100 bushels
- ☐ 850 bushels
- ☐ 650 bushels

156 **SCENARIO: HOME'S WILLINGNESS TO TRADE WHEAT FOR CLOTH**

Home has a comparative advantage in wheat, and Foreign has a comparative advantage in cloth. Once trade occurs, Home produces 1,500 bushels of wheat, and Foreign produces 1,000 yards of cloth. The following table shows the amount of wheat that Home is willing to trade to acquire more cloth.

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850 bushels	500 yards
1,000 bushels	600 yards
1,100 bushels	650 yards
1,150 bushels	700 yards
1,175 bushels	800 yards
800 bushels	200 yards
900 bushels	100 yards

Reference: Ref 2-13

(Scenario: Home's Willingness to Trade Wheat for Cloth) Suppose that Home's export price rose from 0.5 bushel of wheat per yard of cloth in 2009 to a bushel of wheat per yard of cloth in 2010. What does this movement represent in terms of Home's terms of trade?

- ☐ It is an improvement in Home's terms of trade.
- ☒ It is a deterioration in Home's terms of trade.
- ☐ There is no change in Home's terms of trade.
- ☐ The answer cannot be determined based on the information provided.

157 **SCENARIO: HOME'S WILLINGNESS TO TRADE WHEAT FOR CLOTH**

Home has a comparative advantage in wheat, and Foreign has a comparative advantage in cloth. Once trade occurs, Home produces 1,500 bushels of wheat, and Foreign produces 1,000 yards of cloth. The following table shows the amount of wheat that Home is willing to trade to acquire more cloth.

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400 bushels	200 yards
650 bushels	350 yards
850 bushels	500 yards
1,000 bushels	600 yards
1,100 bushels	650 yards
1,150 bushels	700 yards

1,175 bushels	800 yards
800 bushels	200 yards
900 bushels	100 yards

Reference: Ref 2-13

(Scenario: Home's Willingness to Trade Wheat for Cloth) Suppose that Home's export price rose from 0.5 bushel of wheat per yard of cloth in 2009 to a bushel of wheat per yard of cloth in 2010. Which of the following statements is TRUE?

- ☐ Home's situation had greatly improved in 2010.
- ☒ Home's situation had deteriorated in 2010.
- ☐ Home's situation was the same as it was in 2009.
- ☐ Home's situation had slightly improved in 2010.

158 ■ ■ ■ **SCENARIO: HOME'S WILLINGNESS TO TRADE WHEAT FOR CLOTH**

■ — Home has a comparative advantage in wheat, and Foreign has a comparative advantage in cloth. Once trade occurs, Home produces 1,500 bushels of wheat, and Foreign produces 1,000 yards of cloth. The following table shows the amount of wheat that Home is willing to trade to acquire more cloth.

Home's Wheat Exports	Foreign's Cloth Exports
400 bushels	200 yards
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1,000 bushels	600 yards
1,100 bushels	650 yards
1,150 bushels	700 yards
1,175 bushels	800 yards
800 bushels	200 yards
900 bushels	100 yards

Reference: Ref 2-13

(Scenario: Home's Willingness to Trade Wheat for Cloth) Suppose that Home's export price rose from 0.5 bushel of wheat per yard of cloth in 2009 to a bushel of wheat per yard of cloth in 2010. We conclude that the change in Home's export price means that Home was worse off in 2010 than it was in 2009. Which of the following statements *best* explains this conclusion?

- ☒ Home had to export twice as much wheat to obtain a yard of cloth in 2010 as it did in 2009.
- ☐ Home had to export half as much wheat to obtain a yard of cloth in 2010 as it did in 2009.
- ☐ Home had to export the same amount of wheat to obtain a yard of cloth in both 2009 and 2010.
- ☐ Home had to export three times the amount of wheat to obtain a yard of cloth in 2010 as it did in 2009.

159 ■ ■ ■ In 2000, the U.S. terms of trade was one. In 2009 the U.S. export price index was 1.15 and the U.S. import price index was 1.18. Which of the following statements is the *best* interpretation of the change in the U.S. terms of trade between 2000 and 2009?

- ☒ In 2009, the United States had to export 2% more in order to obtain the same amount of imports as in 2000.
- ☐ In 2009, the United States could export 2% less to obtain the same of amount of imports as in 2000.
- ☐ Prices of U.S. exports rose more rapidly than prices of U.S. imports.
- ☐ The U.S. terms of trade improved between 2000 and 2009.

160 With other things unchanged, a rise in the average price of imports or a

160 ■ ■ ■ — fall in the average price of exports will:

- ☐ improve the terms of trade.
- ☒ worsen the terms of trade.
- ☐ expand the production possibilities frontier.
- ☐ contract the production possibilities frontier.

161 ■ ■ ■ — **Table: The Prices of Ghana's Exports and Imports**

	2012	2013
Export price	100	120
Import price	100	110

Reference: Ref 2-14

(Table: The Prices of Ghana's Exports and Imports) Suppose that the table gives values of price indices for Ghana's exports and imports in 2012 and in 2013. Did Ghana's terms of trade improve, deteriorate, or not change between 2010 and 2013?

- ☒ It improved.
- ☐ It deteriorated.
- ☐ It did not change.

162 ■ ■ ■ — An increase in the price of imported goods will:

- ☐ increase the volume of imports.
- ☒ decrease the volume of imports.
- ☐ shift the production possibility frontier inward.
- ☐ shift the production possibility frontier outward.

163 ■ ■ ■ — The Prebisch-Singer hypothesis concludes that:

- ☐ due to unfair trading practices, labor in developing countries is exploited.
- ☒ developing countries experience a long-run decline in their terms of trade, as the demand for primary products in higher-income countries declines relative to their demand for manufactured goods.
- ☐ OPEC has been responsible for a slowdown in the world's standard of living.
- ☐ technology lowers the cost of manufactured products, so developing countries should see an increase in their terms of trade.

164 ■ ■ ■ — The textbook authors conclude that the Prebisch-Singer hypothesis:

- ☐ is not true.
- ☐ is true.
- ☒ is valid in some instances but showed no consistent trend and cannot be considered a general rule.
- ☐ is valid only since 1995, when the World Trade Organization began its operations.

165 ■ ■ ■ — Several economists have hypothesized that the terms of trade for developing countries will decline over time. Which of the following might be a cause of this decline?

- ☐ Technological progress in manufactured goods has caused their prices to fall.
- ☐ Some developing countries are able to keep the price of their exports high by restricting supplies on the world market.
- ☐ Increased demand for developing country exports has caused prices of developing country exports to rise.
- ☒ The demand for primary product exports from developing countries has not risen as fast as the demand for manufactured exports of industrialized countries.

166  What are the shapes of production possibilities frontiers in the Ricardian model?

Answer:

They are linear with endpoints that give a country's production when it completely specializes in producing only one or the other good.

167  In an autarkic situation, demonstrate that a country will be at its optimal production if it produces where an indifference curve is tangent to the production possibilities frontier.

Answer:

If the country produces where an indifference curve is tangent to its production possibilities frontier, then it is impossible to attain a point on a higher indifference curve.

168  Why is a country able to consume outside its production possibilities frontier when it engages in international trade?

Answer:

It can completely specialize in the good in which it has a comparative advantage, export that good and import the other, and receive a higher relative price for its export and pay a lower relative price for its import.

169  If a country has a comparative advantage in producing rice and a comparative disadvantage in producing pencils, does the Ricardian model predict that the real wage in rice production will fall and the real wage in pencil production will rise as a result of international trade?

Answer:

No; the Ricardian model predicts that real wages in both rice and pencil production will increase, since the relative price of rice will increase. If workers are paid the value of their marginal products, then labor will move into rice production with a corresponding higher real wage. Since, in equilibrium, wages must be equal across all production, the real wage must then also increase in pencil production.

170  Assume that, in autarky, an economy has 150 workers and the MPL_c is two cars and the MPL_b is five boats. Demonstrate how one can derive the autarkic price of cars in this economy.

Answer:

If one worker can produce two cars or five boats, then moving a worker from boat to car production lowers boat production by five and increases car production by two. So a single car must trade for $5/2$ boats.

171  **SCENARIO: HOME'S WILLINGNESS TO TRADE WHEAT FOR CLOTH**

Home has a comparative advantage in wheat, and Foreign has a comparative advantage in cloth. Once trade occurs, Home produces 1,500 bushels of wheat, and Foreign produces 1,000 yards of cloth. The following table shows the amount of wheat that Home is willing to trade to acquire more cloth.

Home's Wheat Exports	Foreign's Cloth Exports
400 bushels	200 yards
650 bushels	350 yards
850 bushels	500 yards
1,000 bushels	600 yards
1,100 bushels	650 yards
1,150 bushels	700 yards
1,175 bushels	800 yards

800 bushels	200 yards
900 bushels	100 yards

Reference: Ref 2-13

(Scenario: Home's Willingness to Trade Wheat for Cloth) If the international price of cloth is 1.5 bushels of wheat per yard, how many yards of cloth will Foreign export to Home?

- ☐ 500 yards
- ☐ 600 yards
- ☒ 700 yards
- ☐ 1,150 yards

172  Suppose that:

- Malaysia requires an hour of labor to produce a pound of rice and 2 hours of labor to produce a pencil;
- Indonesia requires 2 hours of labor to produce a pound of rice and 4 hours of labor to produce a pencil;
- each country has 10,000 hours of labor to allocate between the production of rice and pencils; and
- in autarky, Malaysia consumes 5,000 pounds of rice and 2,500 pencils.

Which country has an absolute advantage in rice production? In pencil production?

Which country has a comparative advantage in rice production? In pencil production?

Will trade between the two countries be mutually beneficial?

Answer:

Malaysia has an absolute advantage in both rice and pencil production. Neither country has a comparative advantage in either product, since autarkic prices are the same in each country. Trade will not occur between the two countries, since neither has a comparative advantage in either product.

173  Why does the United States import textiles from Asian nations when it has an absolute advantage in textile production?

Answer:

The United States has a comparative disadvantage in textiles and a comparative advantage in wheat. The opportunity cost of producing a unit of textiles is greater than the same relative cost incurred by other nations, including China, in producing a unit of textiles. Therefore, although in absolute terms, the United States has a productivity advantage in both wheat and textiles, it obtains greater gains in exporting wheat and in importing textiles.

174  Use the following table to determine the absolute and comparative advantages of China and the United States in producing wheat and textiles.

Output Per Worker		
	United States	China
Textiles	\$165,000	\$27,000
Wheat	12,260 bushels	300 bushels

Answer:

Comparison of outputs per worker between the United States and China indicates that the United States has absolute advantages in both products. However, the United States is relatively more efficient in wheat production (the ratio of U.S. wheat production per worker to Chinese

wheat production per worker is 41), and China is relatively less inefficient in textile production (the similar ratio for textile production is 6.1). Hence, the United States has a comparative advantage in wheat production, and China has a comparative advantage in textile production.

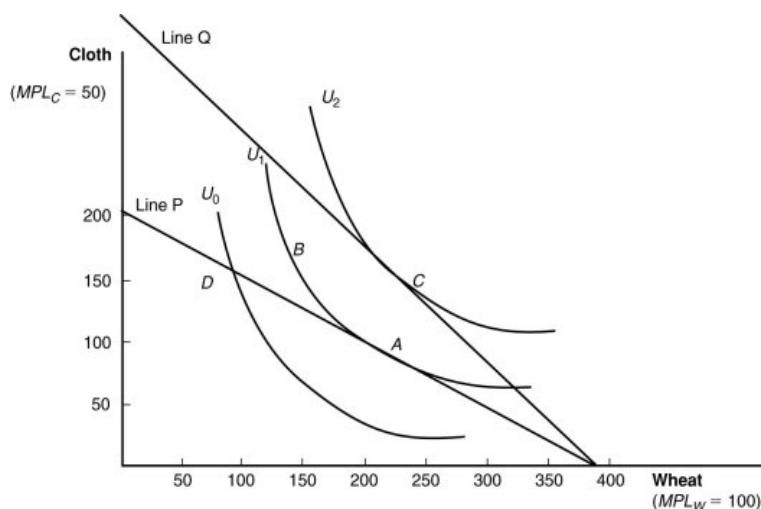
- 175  In the Ricardian model, what is expected to happen to real wages in each country as trade occurs?

Answer:

Real wages (the purchasing power of exports) will increase in both countries. Use the following table to see this result. Country A has a comparative advantage in cloth; Country B has a comparative advantage in wheat. When trade occurs, Country A can obtain more wheat ($3/2$ bushel) for each yard exported and Country B can obtain more cloth ($2/3$ yard) for each bushel exported. The purchasing power of wages in each country will increase.

	Country A	Country B
MPL in wheat	1 bushel	2 bushels
MPL in Cloth	1 yard	1 yard
Autarkic prices	1 bushel = 1 yard	2 bushels = 1 yard
Trade prices	$3/2$ bushel = 1 yard	$3/2$ bushel = 1 yard
Real wage with trade	$3/2$ bushel = 1 yard	$2/3$ yard = 1 bushel

- 176  **Figure: International Trade Equilibrium**



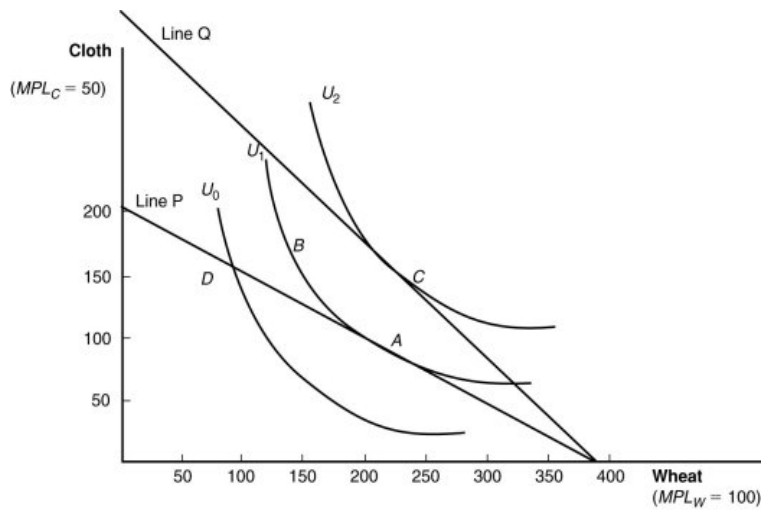
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Which is the “before trade” point of production and consumption?

Answer:

point A

- 177  **Figure: International Trade Equilibrium**



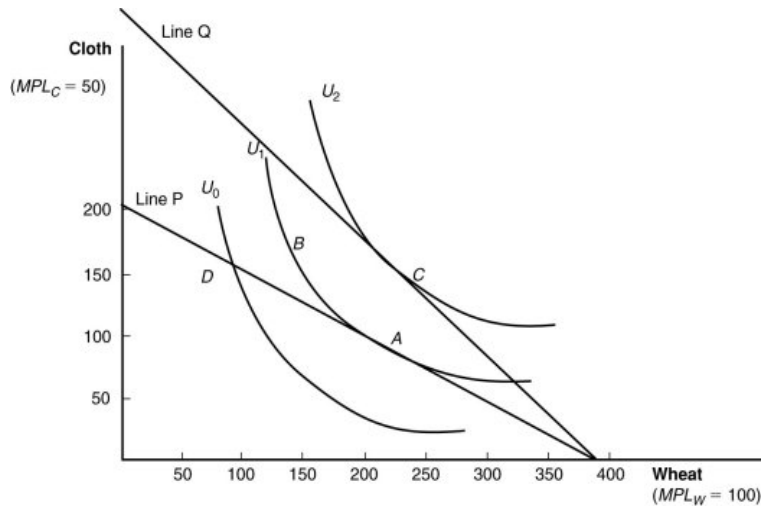
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Which line shows the “before trade” relative price in this nation?

Answer:

Line P

178 Figure: International Trade Equilibrium



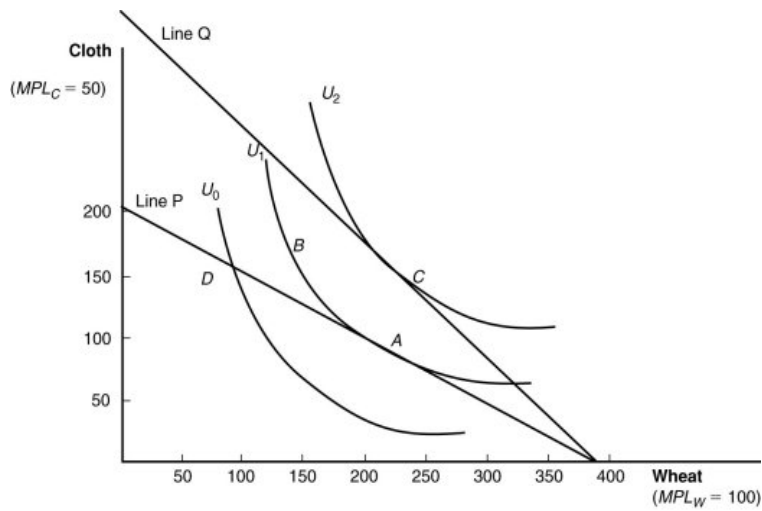
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Which point shows the “after trade” point of consumption?

Answer:

point C

179 Figure: International Trade Equilibrium



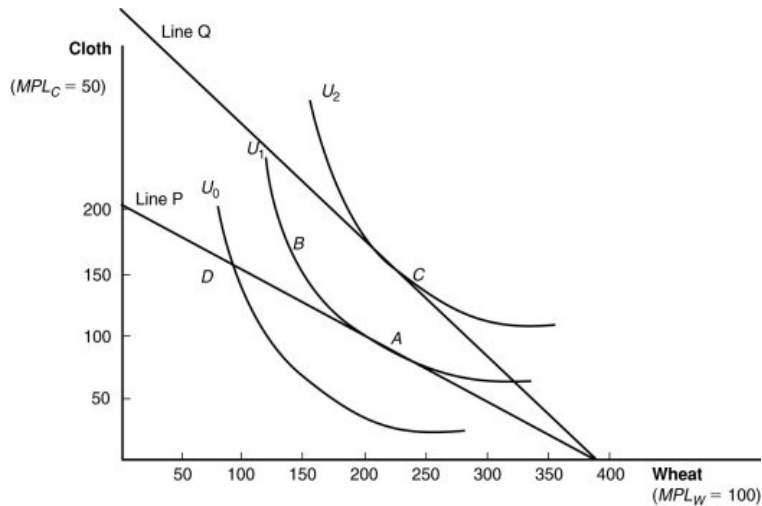
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Which line shows the new equilibrium “world” price determined by trade?

Answer:

Line Q

180 Figure: International Trade Equilibrium



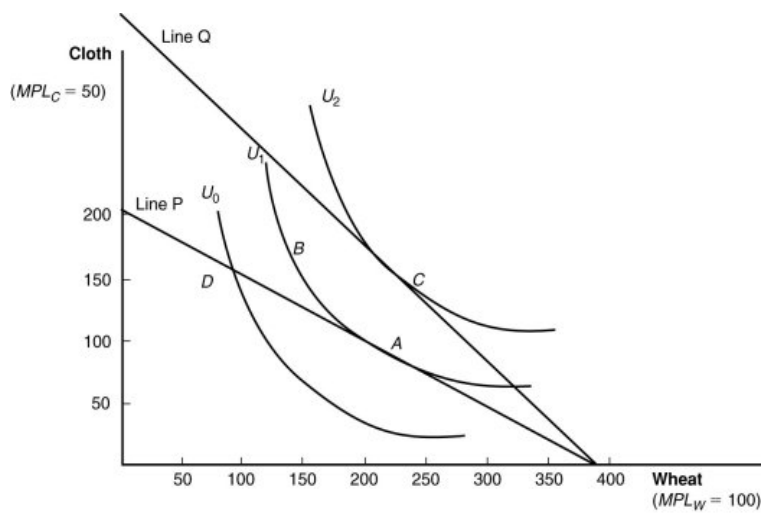
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Before trade, how many units of wheat will this nation produce?

Answer:

210

181 Figure: International Trade Equilibrium



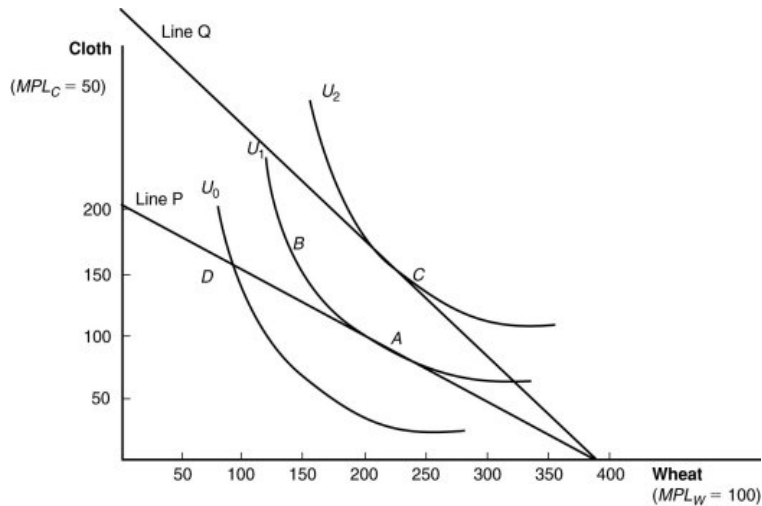
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Before trade, how many units of wheat will this nation consume?

Answer:

210

182 Figure: International Trade Equilibrium



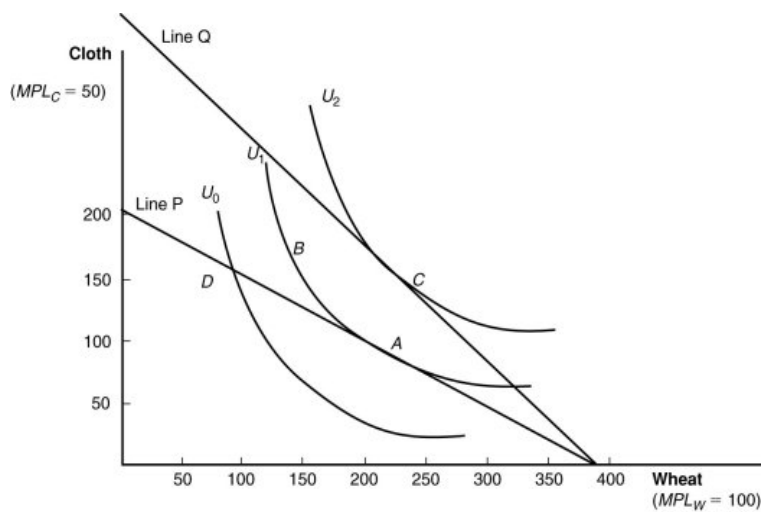
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Before trade, how many units of cloth will this nation produce?

Answer:

90

183 Figure: International Trade Equilibrium



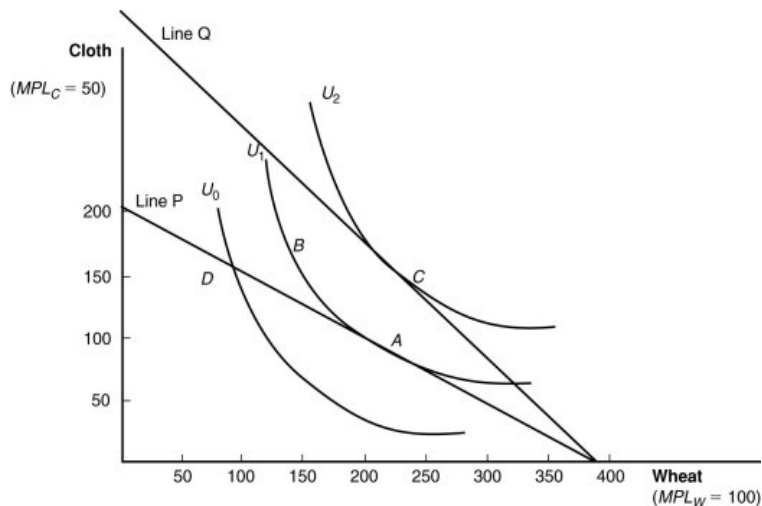
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Before trade, how many units of cloth will this nation consume?

Answer:

90

184 Figure: International Trade Equilibrium



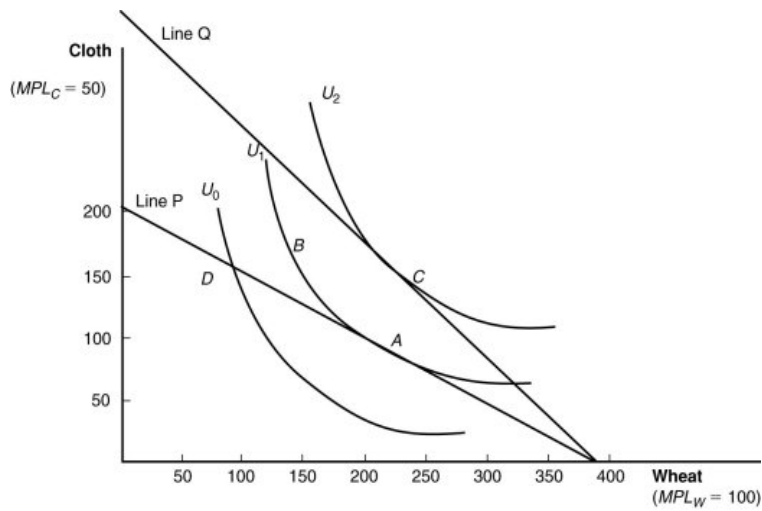
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Assume that the country specializes in the good in which it has comparative advantage. After trade, how many units of wheat will this nation produce?

Answer:

400

185 Figure: International Trade Equilibrium



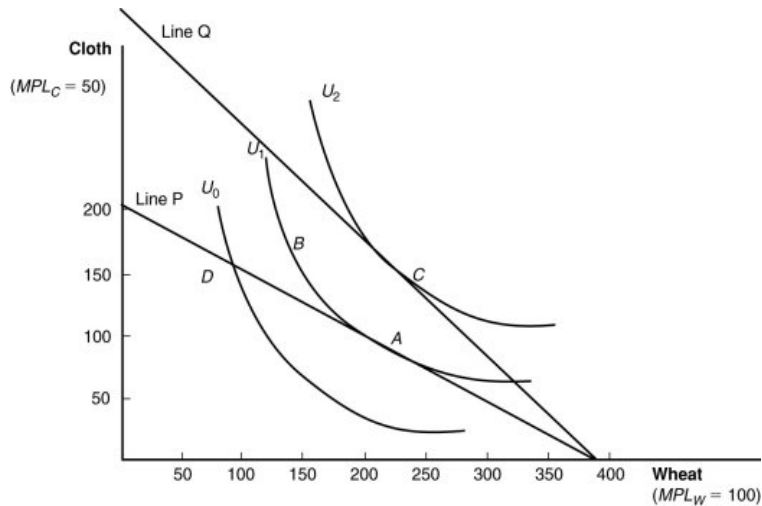
Reference: Ref 2-14

(Figure: International Trade Equilibrium) After trade, how many units of wheat will this nation consume?

Answer:

225

186 Figure: International Trade Equilibrium



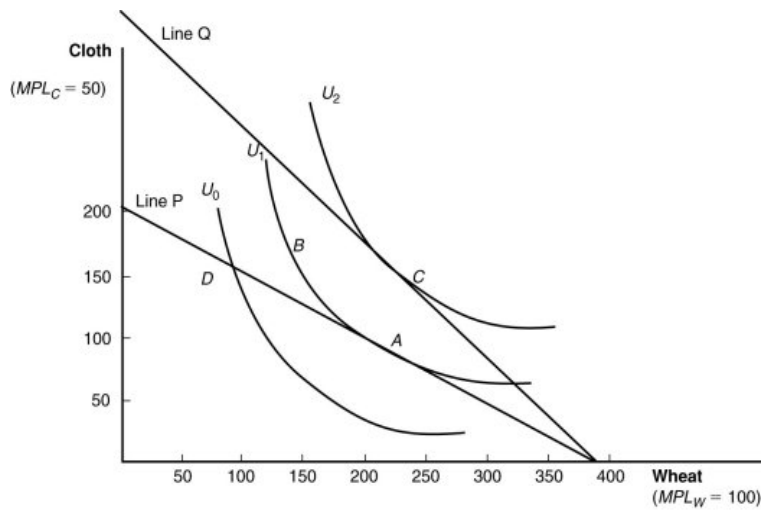
Reference: Ref 2-14

(Figure: International Trade Equilibrium) Assume that the country specializes in the good in which it has comparative advantage. After trade, how many units of cloth will this nation produce?

Answer:

0

187 Figure: International Trade Equilibrium



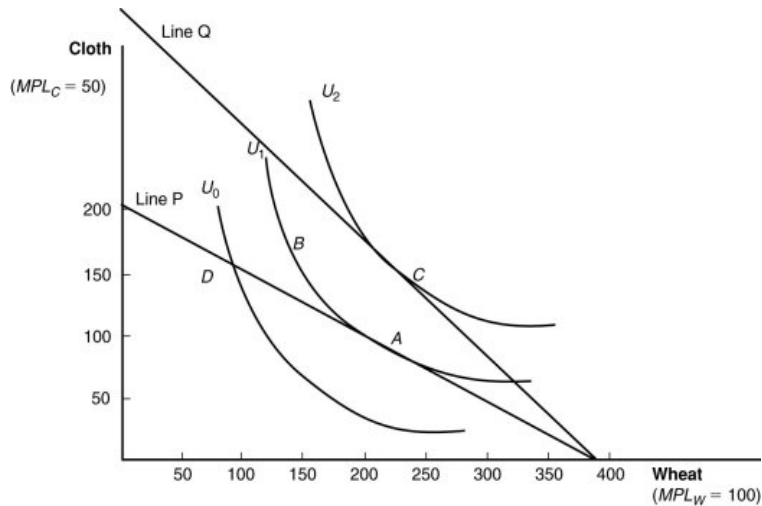
Reference: Ref 2-14

(Figure: International Trade Equilibrium) After trade, how many units of cloth will this nation consume?

Answer:

150

188 Figure: International Trade Equilibrium



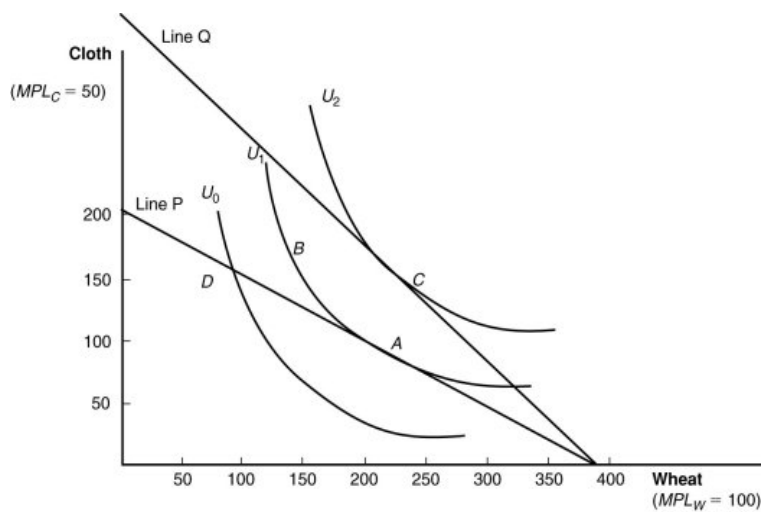
Reference: Ref 2-14

(Figure: International Trade Equilibrium) How many units of wheat will this nation export or import?

Answer:

It will export 175 units of wheat.

189 Figure: International Trade Equilibrium



Reference: Ref 2-14

(Figure: International Trade Equilibrium) How many units of cloth will this nation export or import?

Answer:

It will export 150 units of wheat.

- 190 Compare the absolute advantages in U.S. and Chinese wheat and textile production to explain why the U.S. imports textile products from China, even though the typical U.S. textile worker is 7 to 16 times more productive than the typical Chinese textile worker.

Answer:

The United States has a comparative disadvantage in textiles and a comparative advantage in wheat. The typical U.S. wheat farmer is 275 times more productive than the typical Chinese wheat farmer. The absolute advantage of the United States is relatively much higher in wheat production than textile production. So, even though the United States has absolute advantages in both textiles and wheat, its comparative advantage is found in wheat production.

- 191 Suppose that:
- Malaysia requires an hour of labor to produce a pound of rice and 2 hours of labor to produce a pencil;
 - Indonesia requires 2 hours of labor to produce a pound of rice and 3 hours of labor to produce a pencil;
 - each country has 10,000 hours of labor to allocate between the production of rice and pencils; and
 - in autarky, Malaysia consumes 5,000 pounds of rice and 2,500 pencils.
 - when trade occurs, the international price of rice becomes 3/5 pencils per pound of rice.
- A) In Malaysia, what are the marginal productivities of labor in rice and pencil production?
 - B) In Indonesia, what are the marginal productivities of labor in rice and pencil production?
 - C) What are the autarkic prices of rice and pencils in each country?
 - D) In which product will each specialize?
 - E) What happens to wages in each country when trade occurs?

Answer:

- A) The MPL in rice is 1/2 pound; the MPL in pencils is 1/3 pencil.
- B) The autarkic prices of rice and pencils in Malaysia are 1/2 pencil/pound and 2 pounds per pencil. In Indonesia, the autarkic prices are 2/3 pencils per pound and 3/2 pounds per pencil.
- C) Malaysia will specialize in rice production and Indonesia will specialize in pencil production.

- D) Prior to trade, wages were the same in the production of each product in each country. For example, in Malaysia, $W_{\text{rice}}/W_{\text{pencils}} = P_{\text{rice}}MPL_{\text{rice}}/P_{\text{pencils}}MPL_{\text{pencils}} = (1/2 \text{ pencil per pound})(1 \text{ pound/hour})/(2 \text{ pounds per pencil})(1/2 \text{ pencil per hour}) = 1/2 \text{ pencil per hour}/1 \text{ pound per hour}$. The wage in rice production is 1/2 pencil per hour and the wage in pencil production is 1 pound per hour. When trade occurs with an international price of 3/5 pencil per pound of rice, then the ratio of wages in Malaysia becomes $(3/5 \text{ pencils per pound})(1 \text{ pound per hour})/(5/3 \text{ pounds per pencil})(1/2 \text{ pencil per hour}) = (3/5 \text{ pencils per hour})/(5/6 \text{ pounds per hour})$. The wage in rice production rises from 1/2 to 3/5 pencils per hour and the wage in pencil production falls from 1 to 5/6 pounds of rice per hour. The higher wage in rice production will induce Malaysian labor to move from pencil to rice production.
- E) The MPL in rice is 1 pound; the MPL in pencils is 1/2 pencil.

- 192  Suppose that the following table gives export and import price indexes for Zimbabwe in 1990, 2000, and 2010. (The base year is 1990, so all values are 100 in that year.)

Year	1990	2000	2010
Export price index	100	110	100
Import price index	100	90	110

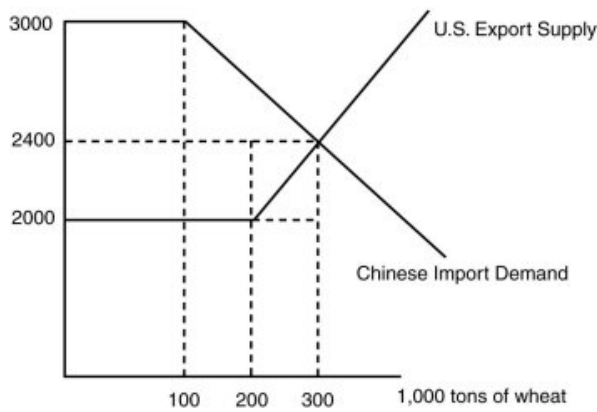
- A) How did Zimbabwe's terms of trade change between 1990 and 2000? Between 2000 and 2010? Between 1990 and 2010?
- B) Do these changes represent a deterioration or improvement in Zimbabwe's terms of trade?
- C) What are the implications of a terms of trade deterioration for the Zimbabwean economy?

Answer:

- A) Zimbabwe's terms of trade rose from 100/100 to 110/90 between 1990 and 2000, fell from 110/90 to 100/110 between 2000 and 2010, and fell over the entire period from 100/100 to 110/110.
- B) The movement in the terms of trade between 1990 and 2000 represented an improvement in Zimbabwe's terms of trade. The movement in the terms of trade between 2000 and 2010 represented a deterioration in Zimbabwe's terms of trade. The movement in the terms of trade over the entire period represented a deterioration in Zimbabwe's terms of trade.
- C) A deterioration in Zimbabwe's terms of trade means that it needed to export greater volumes of goods in order to obtain the same volume of imports in previous years.

- 193  Suppose that China and the United States only trade wheat and textiles with each other. The following graph gives the U.S. supply curve for its exports of wheat to China and the Chinese demand curve for its imports of wheat from the United States.

Price of Wheat
(yards of textiles 1000 bushels of wheat)



- How many tons of wheat did the United States produce prior to trade with China?
- How many tons of wheat did China produce prior to trade with the United States?
- What is the international price of wheat in U.S.–Chinese trade?
- What will happen to the international price of wheat and Chinese imports from the United States if there is a severe drought that reduces the size of the U.S. wheat harvest?
- What will happen to the international price of wheat and Chinese imports if there is a severe drought in China that reduces the size of its wheat harvest?

Answer:

- The United States produced 200,000 tons of wheat prior to trade with China.
- China produced 100,000 tons of wheat prior to trade with the United States.
- The international price of wheat is 2,400 yards of textiles/ton of wheat.
- A drought in the United States will most likely cause an upward shift throughout the U.S. supply curve and probably cause the kink in the curve to shift leftward to, say, 150,000 tons of wheat. These changes will cause a higher international price of wheat, lower U.S. exports, and lower Chinese wheat consumption.
- A drought in China will cause an upward shift throughout the Chinese import demand curve and probably cause the kink in the curve to shift leftward. These changes will cause a higher international price of wheat, probably larger U.S. wheat exports to China, and reduced Chinese consumption of wheat.

194  Suppose that the following table shows autarkic production and consumption in Country A and in Country B.

	Country A	Country B
Production of wheat	100 bushels	100 bushels
Production of cloth	100 yards	100 yards

- What are the autarkic prices of wheat and cloth in each country?
- Suppose the indifference curves of the two countries are identical. Will trade occur?
- Suppose the indifference curves of the two countries are NOT identical, with A showing a marked preference for wheat and B a marked preference for cloth. Under these conditions, will trade occur?

Answer:

- 1 bushel = 1 yard or 1 yard = 1 bushel
- No, since any change in relative prices will cause one country to move to a higher indifference curve and the other country to move to a lower curve.
- Yes; Country A will be willing to trade more than 1 yard of cloth per unit of wheat and Country B will be willing to accept more than 1 yard of per unit of wheat.

- 195  The authors provide evidence that wages rose at roughly the same rates as labor productivity in seven countries between 1973 and 2011. In China, many observers believe that wages have been increasing faster than labor productivity in recent years. If true, what are some implications for Chinese trade patterns?

Answer:

1) Chinese comparative advantages are changing over time, perhaps to sectors with higher labor productivities; 2) China may be losing its comparative advantages in low-productivity sectors, with resulting production shifts to other Asian countries that have lower labor costs; 3) some foreign FDI in China may be returning to their home countries (on-shoring) as Chinese labor costs per unit of output rise.

- 196  Consider the following table.

	Country A	Country B
Hours per bushel of wheat	5	8
Hours per yard of cloth	5	5

- A) Which country has an absolute advantage in wheat production?
 B) Which country has an absolute advantage in cloth production?
 C) Which country has a comparative advantage in wheat production?
 D) Which country has a comparative advantage in cloth production?
 E) In what range must the international price of wheat fall?
 F) Which country is likely to gain more from trade if the international price of wheat is 7/5 bushel per yard of cloth?

Answer:

- A) Country A
 B) neither Country A nor Country B
 C) Country A
 D) Country B
 E) $1 \text{ yard/bushel} < \text{international price of wheat} < 8/5 \text{ yard/bushel}$
 F) Country A is likely to gain more, since the international price diverges more from its autarkic price than it does for Country B.