

## Chapter 2: The Basic Theory Using Demand and Supply

### Multiple Choice Questions

1. If an individual consumes more of good X when his/her income doubles, we can infer that
  - a. the individual is highly sensitive to changes in the price of good X.
  - b. good X is a normal good.
  - c. good X is an inferior good.
  - d. the demand for good X is perfectly inelastic.

Answer: B

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Demand and Supply

2. Which of the following factors can lead to an increase in demand for coffee at Starbucks?
  - a. An increase in household income
  - b. An increase in the price of sugar
  - c. An increase in the price of coffee beans
  - d. A 10 percent decline in local population

Answer: A

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Demand and Supply

3. If the price of a normal good is measured along the vertical axis and its quantity along the horizontal axis, an increase in the price of the good will lead to:
  - a. a downward movement along the demand curve.
  - b. an upward movement along the demand curve.
  - c. a rightward shift of the demand curve.
  - d. a leftward shift of the demand curve.

Answer: B

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective

Topic: Demand and Supply

4. Everything else remaining unchanged, when the price of a normal good increases, consumers:
- purchase more of the good.
  - purchase less of the good.
  - purchase the same amount of the good.
  - do not purchase any amount of the good.

Answer: B

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Demand and Supply

5. Suppose good X is a substitute of good Y. Everything else remaining unchanged, an increase in price of good Y will lead to:
- an increase in demand for good Y.
  - a decrease in demand for good X.
  - an increase in demand for good X.
  - a decrease in price of good X.

Answer: C

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Demand and Supply

6. Which of the following events would lead to a decrease in demand for air travel?
- A decrease in the number of people who are afraid to fly
  - A decrease in oil prices
  - A decrease in rail fares
  - An increase in income levels

Answer: C

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Demand and Supply

7. Harry used work in a laundrette and earned \$30 a day. After work, he normally had a chicken burger worth \$5 at McDonalds. However, his pay was lowered to \$20 some days later. Then after work he used to have a vegetable burger worth \$3. Here the vegetable burger is an example of a(n):
- inferior good.
  - normal good.
  - complement good.
  - luxury good.

Answer: A  
Difficulty: 03 Hard  
Blooms: Analyze  
AACSB: Analytic  
Topic: Demand and Supply

8. The value of price elasticity of demand for a normal commodity is negative because it indicates:
- the inverse relationship between the price and the quantity demanded for the commodity.
  - that the value of the consumer surplus is negative for a normal good.
  - that the changes in quantity demanded are much less compared to the changes in price for a normal good.
  - the direct relationship between price and consumer surplus from the commodity.

Answer: A  
Difficulty: 01 Easy  
Blooms: Remember  
AACSB: Reflective Thinking  
Topic: Demand and Supply

9. Which of the following will cause a rightward shift of the market supply curve?
- An increase in the product price
  - A decrease in input prices
  - Change in consumers' tastes
  - An increase in national income

Answer: B  
Difficulty: 02 Medium  
Blooms: Understand  
AACSB: Reflective Thinking  
Topic: Demand and Supply

10. Which of the following is a “unit-free” measure?
- Consumer surplus when the demand curve is horizontal
  - Producer surplus when the supply curve is vertical
  - Market supply
  - Price elasticity of demand

Answer: D  
Difficulty: 01 Easy  
Blooms: Remember  
AACSB: Reflective Thinking  
Topic: Demand and Supply

11. If a 1% increase in the price of DVD players leads to a 3% reduction in its sales, we can conclude that:
- the supply of DVD players is perfectly inelastic.
  - DVD players are inferior goods.
  - the demand for DVD players is relatively elastic.
  - the demand for DVD's is relatively inelastic.

Answer: C

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Demand and Supply

12. Which of the following is true of consumer surplus?
- It is graphically represented as the area under the equilibrium price and above the supply curve of a good.
  - It is the net gain in economic well-being associated with producing and selling the equilibrium quantity of a good.
  - It is used to measure the impact of a change in price on the economic well-being of the producers.
  - It is the difference between the value that one places on a good and the price paid for the good.

Answer: D

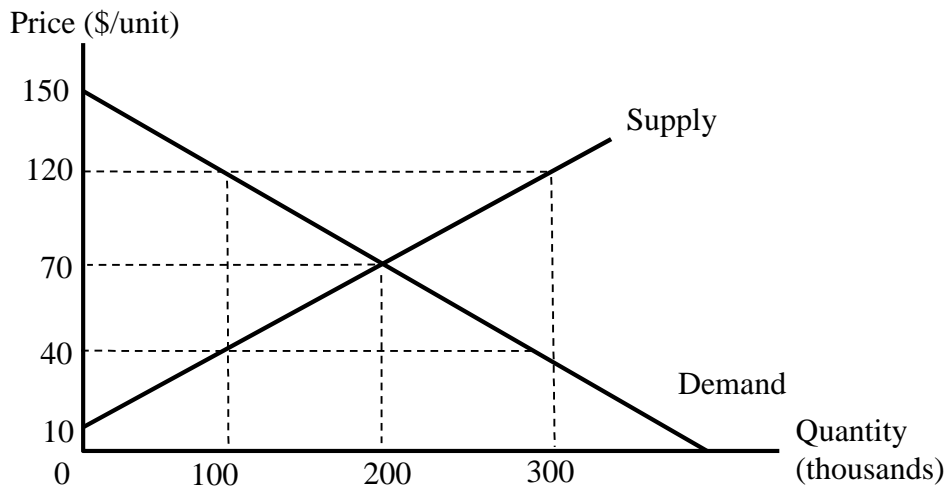
Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Demand and Supply

13. Refer to Figure 2.1 below. At a price of \$70, the consumer surplus equals:



- a. \$6,000,000.
- b. \$8,000,000.
- c. \$5,000,000.
- d. \$10,000,000.

Answer: B

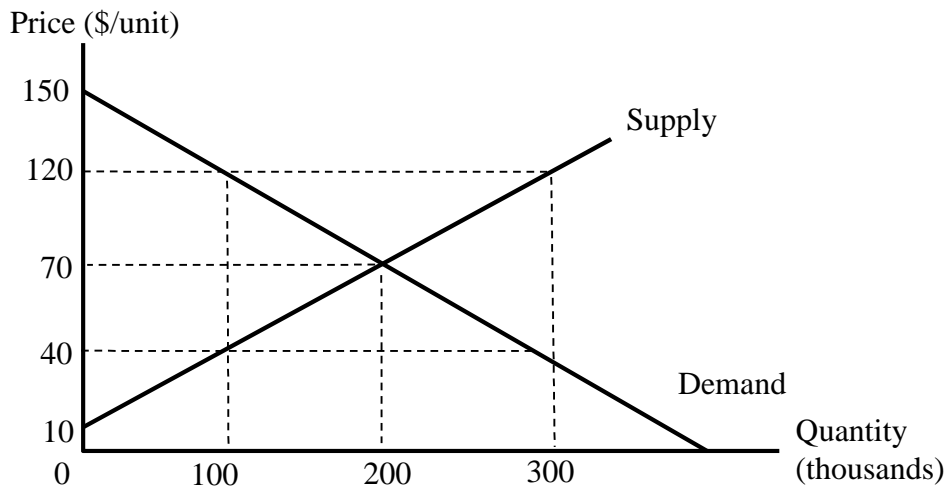
Difficulty: 03 Hard

Blooms: Apply

AACSB: Analytic

Topic: Demand and Supply

14. Refer to Figure 2.1 below. At a price of \$70, the producer surplus equals:



- a. \$6,000,000.
- b. \$8,000,000.
- c. \$15,000,000.
- d. \$30,000,000.

Answer: A

Difficulty: 03 Hard

Blooms: Apply

AACSB: Analytic

Topic: Demand and Supply

15. To maximize profit a perfectly competitive firm supplies a good up to the point at which:

- a. the marginal revenue is higher than the marginal cost.
- b. the marginal cost of producing the good is zero.
- c. the price of the good equals marginal cost.
- d. the average revenue equals average cost.

Answer: C

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Demand and Supply

16. Which of the following groups is most likely to be benefitted when a country engages in free trade?

- a. All the domestic producers of the country
- b. The manufacturers of exportable goods
- c. The producers in the import-competing industries
- d. The workers employed in the import-competing industries

Answer: B

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

17. Which of the following is an example of arbitrage?

- a. A firm sells a box of cereal at \$10 when the average cost of producing it is \$6.
- b. Thomas buys a new stock issued by a firm on the stock exchange.
- c. A local salon charges 5 percent more for all its services than a competing salon in the same locality.
- d. Romi buys a DVD from Walmart at \$10 and sells it on eBay for \$20.

Answer: B

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

18. An increase in the imports of clothing into the United States from India will benefit the \_\_\_\_\_ and hurt the \_\_\_\_\_.

- a. U.S. clothing producers; Indian clothing producers
- b. Indian consumers; Indian clothing producers
- c. the U.S. consumers; Indian clothing producers
- d. the U.S. consumers; the U.S. clothing producers

Answer: D

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

19. Suppose country A and country B are the only two countries in the world. Country A imports good X from country B and exports good Y. In the absence of any transportation cost, at the world price of good X:
- country B's export supply curve is perfectly inelastic.
  - both country A's import demand curve and country B's export supply curve are positively sloped.
  - country A's import demand curve will be perfectly inelastic.
  - country A's import demand curve will intersect country B's export supply curve.

Answer: D

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

20. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for skateboards in the United States are given by the following set of equations:

$$Q^S = -60 + 3P$$

$$Q^D = 390 - 2P$$

In the absence of international trade in skateboards, what will be the equilibrium price of skateboards in the United States?

- \$66
- \$90
- \$45
- \$150

Answer: B

Difficulty: 03 Hard

Blooms: Apply

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade

21. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for skateboards in the United States are given by the following set of equations:

$$Q^S = -60 + 3P$$

$$Q^D = 390 - 2P$$

In the absence of international trade in skateboards how many skateboards will be sold in the United States?

- 138
- 258
- 210
- 930

Answer: C

Difficulty: 03 Hard

Blooms: Apply

AACSB: Analytic



Topic: Two National Markets and the Opening of Trade

22. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for skateboards in the United States are given by the following set of equations:

$$\begin{aligned}Q^S &= -60 + 3P \\ Q^D &= 390 - 2P\end{aligned}$$

If the United States can imports skateboards from the rest of the world at a per unit price of \$75, how many skateboards will be produced in the United States?

- a. 165
- b. 240
- c. 285
- d. 215

Answer: A

Difficulty: 03 Hard

Blooms: Apply

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade

23. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for skateboards in the United States are given by the following set of equations:

$$\begin{aligned}Q^S &= -60 + 3P \\ Q^D &= 390 - 2P\end{aligned}$$

If the United States can import skateboards from the rest of the world at a per unit price of \$75, what will be the total demand for skateboards in the United States?

- a. 165
- b. 240
- c. 285
- d. 245

Answer: B

Difficulty: 03 Hard

Blooms: Apply

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade

24. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for skateboards in the United States are given by the following set of equations:

$$Q^S = -60 + 3P$$

$$Q^D = 390 - 2P$$

If the U.S. engages in free trade and the international price of skateboards is \$75, it would import \_\_\_\_\_ skateboards from the rest of the world.

- a. 65
- b. 85
- c. 75
- d. 95

Answer: C

Difficulty: 03 Hard

Blooms: Apply

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade

25. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for skateboards in the United States are given by the following set of equations:

$$Q^S = -60 + 3P$$

$$Q^D = 390 - 2P$$

In the absence of trade with the rest of the world, the consumer surplus in the United States skateboard market equals \_\_\_\_\_ and the producer surplus equals \_\_\_\_\_.

- a. \$7,050; \$11,525
- b. \$31,500; \$9,450
- c. \$20,474; \$7,350
- d. \$11,025; \$7,350

Answer: D

Difficulty: 03 Hard

Blooms: Apply

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade

26. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for skateboards in the United States are given by the following set of equations:

$$Q^S = -60 + 3P$$

$$Q^D = 390 - 2P$$

Calculate the change in consumer surplus when the United States engages in free trade and imports skateboards from the rest of the world at a per unit price of \$75.

- a. +\$2,850
- b. -\$2,850
- c. -\$6,300
- d. +\$3,375

Answer: D

Difficulty: 03 Hard

Blooms: Apply  
AACSB: Analytic  
Topic: Two National Markets and the Opening of Trade

27. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for skateboards in the United States are given by the following set of equations:

$$Q^S = -60 + 3P$$
$$Q^D = 390 - 2P$$

Calculate the change in producer surplus when the United States engages in free trade and imports skateboards from the rest of the world at a per unit price of \$75.

- a. +\$2,812.50.
- b. -\$2,812.50.
- c. +\$3,375.
- d. -\$3,375.

Answer: B  
Difficulty: 03 Hard  
Blooms: Apply  
AACSB: Analytic  
Topic: Two National Markets and the Opening of Trade

28. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for MP3 players in the United States are given by the following set of equations:

$$Q^S = -25 + 10P$$
$$Q^D = 875 - 5P$$

In the absence of international trade in MP3 players, what will be the price of MP3 players in the United States?

- a. \$60
- b. \$65
- c. \$90
- d. \$70

Answer: A  
Difficulty: 02 Medium  
Blooms: Understand  
AACSB: Reflective Thinking  
Topic: Two National Markets and the Opening of Trade

29. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for MP3 players in the United States are given by the following set of equations:

$$Q^S = -25 + 10P$$

$$Q^D = 875 - 5P$$

In the absence of international trade in MP3 players, how many MP3 players will be sold in the United States?

- a. 825
- b. 575
- c. 608
- d. 925

Answer: B

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

30. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for MP3 players in the United States are given by the following set of equations:

$$Q^S = -25 + 10P$$

$$Q^D = 875 - 5P$$

If the United States can import MP3 players from the rest of the world at a per unit price of \$50, how many MP3 players will be produced in the United States?

- a. 625
- b. 475
- c. 925
- d. 525

Answer: B

Difficulty: 03 Hard

Blooms: Apply

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade

31. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for MP3 players in the United States are given by the following set of equations:

$$Q^S = -25 + 10P$$

$$Q^D = 875 - 5P$$

If the United States can import MP3 players from the rest of the world at a per unit price of \$50, what will be the total demand for MP3 players in the United States?

- a. 625
- b. 475
- c. 925
- d. 550

Answer: A

Difficulty: 03 Hard

Blooms: Apply  
AACSB: Analytic  
Topic: Two National Markets and the Opening of Trade

32. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for MP3 players in the United States are given by the following set of equations:

$$Q^S = -25 + 10P$$

$$Q^D = 875 - 5P$$

If the U.S. engages in free trade and the international price of MP3 players is \$50, it would import \_\_\_\_\_ MP3 players from the rest of the world.

- a. 150
- b. 250
- c. 475
- d. 225

Answer: A

Difficulty: 03 Hard

Blooms: Analyze

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade

33. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for MP3 players in the United States are given by the following set of equations:

$$Q^S = -25 + 10P$$

$$Q^D = 875 - 5P$$

In the absence of trade with the rest of the world, the consumer surplus in the United States' MP3 player market is \_\_\_\_\_.

- a. \$22,562.50
- b. \$30,062.50
- c. \$33,062.50
- d. \$19,500.00

Answer: C

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

34. Suppose the domestic supply ( $Q^S$ ) and demand ( $Q^D$ ) for MP3 players in the United States are given by the following set of equations:

$$Q^S = -25 + 10P$$

$$Q^D = 875 - 5P$$

The consumer surplus will \_\_\_\_\_ by \_\_\_\_\_ when the United States engages in international trade and the international price for MP3 players settles at \$50.

- a. increase; \$2,625
- b. increase; \$6,000
- c. decrease; \$7,150
- d. decrease; \$13,500

Answer: B

Difficulty: 03 Hard

Blooms: Analyze

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade

35. Suppose the domestic supply ( $Q^S_{U.S.}$ ) and demand ( $Q^D_{U.S.}$ ) for bicycles in the United States are given by the following set of equations:

$$Q^S_{U.S.} = 2P$$

$$Q^D_{U.S.} = 200 - 2P.$$

Demand ( $Q^D$ ) and supply ( $Q^S$ ) in the Rest of the World are given by the equations:

$$Q^S = P$$

$$Q^D = 160 - P.$$

Quantities are measured in thousands and price in U.S. dollars.

In the absence of international trade, \_\_\_\_\_ thousand bicycles will be sold in the United States at a per unit price of \_\_\_\_\_.

- a. 50; \$50
- b. 100; \$100
- c. 150; \$50
- d. 100; \$50

Answer: D

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

36. Suppose the domestic supply ( $Q_{U.S.}^S$ ) and demand ( $Q_{U.S.}^D$ ) for bicycles in the United States are given by the following set of equations:

$$Q_{U.S.}^S = 2P$$
$$Q_{U.S.}^D = 200 - 2P.$$

Demand ( $Q^D$ ) and supply ( $Q^S$ ) in the Rest of the World are given by the equations:

$$Q^S = P$$
$$Q^D = 160 - P.$$

Quantities are measured in thousands and price in U.S. dollars.

In the absence of international trade, \_\_\_\_\_ thousand bicycles will be sold in the Rest of the World at a per unit price of \_\_\_\_\_.

- a. 80; \$80
- b. 100; \$100
- c. 50; \$100
- d. 100; \$50

Answer: A

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

37. Suppose the domestic supply ( $Q_{U.S.}^S$ ) and demand ( $Q_{U.S.}^D$ ) for bicycles in the United States are given by the following set of equations:

$$Q_{U.S.}^S = 2P$$
$$Q_{U.S.}^D = 200 - 2P.$$

Demand ( $Q^D$ ) and supply ( $Q^S$ ) in the Rest of the World are given by the equations:

$$Q^S = P$$
$$Q^D = 160 - P.$$

Quantities are measured in thousands and price in U.S. dollars.

After the opening of free trade with the Rest of the World, if the world price of the bicycles settles at \$60, the U.S. will:

- a. export 40,000 bicycles.
- b. export 60,000 bicycles.
- c. import 60,000 bicycles.
- d. import 40,000 bicycles.

Answer: A

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

38. Suppose the domestic supply ( $Q^S_{U.S.}$ ) and demand ( $Q^D_{U.S.}$ ) for bicycles in the United States are given by the following set of equations:

$$Q^S_{U.S.} = 2P$$
$$Q^D_{U.S.} = 200 - 2P.$$

Demand ( $Q^D$ ) and supply ( $Q^S$ ) in the Rest of the World are given by the equations:

$$Q^S = P$$
$$Q^D = 160 - P.$$

Quantities are measured in thousands and price in U.S. dollars.

After the opening of free trade with the United States, if the world price of the bicycles settles at \$60, the Rest of the World will:

- export 40,000 bicycles.
- export 60,000 bicycles.
- import 60,000 bicycles.
- import 40,000 bicycles.

Answer: D

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

39. Suppose the domestic supply ( $Q^S_{U.S.}$ ) and demand ( $Q^D_{U.S.}$ ) for bicycles in the United States are given by the following set of equations:

$$Q^S_{U.S.} = 2P$$
$$Q^D_{U.S.} = 200 - 2P.$$

Demand ( $Q^D$ ) and supply ( $Q^S$ ) in the Rest of the World are given by the equations:

$$Q^S = P$$
$$Q^D = 160 - P.$$

Quantities are measured in thousands and price in U.S. dollars.

After the opening of free trade between the U.S. and the Rest of the World:

- neither the U.S. nor the Rest of the World gain from trade.
- both countries gain from trade, but the U.S. gains more than the Rest of the World.
- both countries gain from trade, but the Rest of the World gains more than the U.S.
- the net change in total surplus in the U.S. is zero but the Rest of the World gains.

Answer: C

Difficulty: 03 Hard

Blooms: Analyze

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade



## True/False Questions

40. An increase in demand for a good will lead to a larger increase in price if the supply is relatively elastic.

Answer: FALSE

Difficulty: 03 Hard

Blooms: Analyze

AACSB: Analytic

Topic: Demand and Supply

41. A decrease in income will lead to an increase in the demand for an inferior good.

Answer: TRUE

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Demand and Supply

42. An increase in individual income will lead to an inward shift of the demand curve for a commodity.

Answer: FALSE

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Demand And Supply

43. If a 1% increase in an individual's income leads to a 0.5% increase in the demand for a good, the good is considered to be a normal good.

Answer: TRUE

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Demand and Supply

44. Consumer surplus is the net economic benefit to consumers who are able to buy a good at a price lower than the highest price that they are willing to pay.

Answer: TRUE

Difficulty: 03 Hard

Blooms: Analyze

AACSB: Analytic

Topic: Demand and Supply

45. The net economic gains from free trade are usually negative.

Answer: FALSE

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

46. The price elasticity of demand measures the responsiveness of consumers to changes in the price of a product.

Answer: TRUE

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Demand and Supply

47. The net national gain from trade can be measured by the change in consumer and producer surplus that results from trade.

Answer: TRUE

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

48. If markets are perfectly competitive, the free-trade price of a good in an importing country is expected to be lower than the pre-trade price of the good in that country.

Answer: TRUE

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

49. When free trade begins, producers in the importing nation gain while producers in the exporting nation are worse off.

Answer: FALSE

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

50. Free trade is a zero-sum activity because a country always gains at the expense of its trading partner.

Answer: FALSE

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

51. The gains from trade are divided in proportion to the price changes that trade brings to the trading countries.

Answer: TRUE

Difficulty: 01 Easy

Blooms: Remember

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

52. If the world price is higher than the no-trade domestic price, then domestic producers gain and domestic consumers lose as a result of free trade.

Answer: TRUE

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

53. While international trade will benefit both the importing and exporting country in a two-country world, the gains from trade in the exporting country must be greater than the gains from trade in the importing country.

Answer: FALSE

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

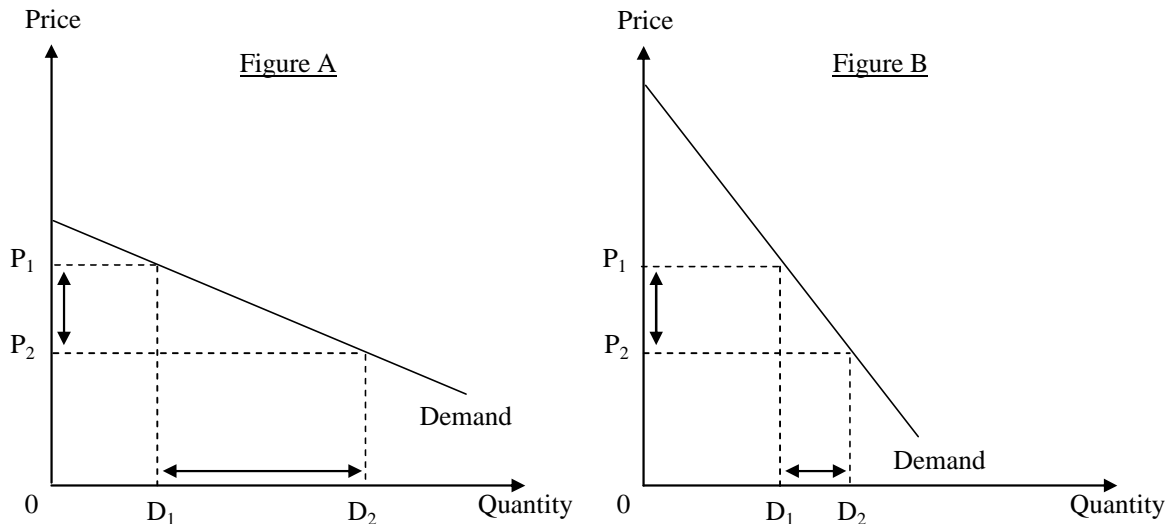
Topic: Two National Markets and the Opening of Trade

## Essay Questions

54. What is the measure of responsiveness of quantity demanded of a product to a change in its price? Why is it a negative number for a typical good? With the help of suitable diagrams, explain the difference between elastic and inelastic demand.

**POSSIBLE RESPONSE:** The price elasticity of demand is a measure of responsiveness of quantity demanded of a product to a change in its price. The price elasticity of demand measures the percentage change in quantity demanded of a product resulting from a 1 percent change in its

price. It is a unit-free measure. Since an increase in price of a typical product results in a decrease in its quantity demanded and vice versa, the price elasticity of demand is a negative number. The difference between price-elastic and price-inelastic demand can be explained with the help of the following two figures.



The two figures show two demand curves, each with the same starting point of price  $P_1$  and quantity  $D_1$ . Now consider the same decrease in price, from  $P_1$  to  $P_2$ , for each figure. Let's say that this change in price is a 40 percent decrease. In Figure A, the quantity demanded would change to  $D_2$ , which is a change of 200 percent. In Figure B, the change in quantity would be to  $D_2$ , which is a change of 30 percent. For the same starting point ( $P_1$  and  $D_1$ ) and the same decrease in price to  $P_2$ , the price elasticity is  $-5$  ( $= 200\% / (-40\%)$ ) for Figure 1, and the price elasticity is  $-0.75$  ( $= 30\% / (-40\%)$ ) for Figure 2. For this range around the same starting point, demand is price elastic (greater than one in absolute value) for the demand curve shown in Figure A, and demand is price inelastic (less than one in absolute value) for the demand curve shown in Figure B. For the same starting point, the flatter demand curve is more price elastic.

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Demand and Supply

55. In a two-country world, the opening of free trade does not make everyone in the two countries better off. What assumption(s) must be made in order to make the claim that both countries do in fact benefit from the free trade?

POSSIBLE RESPONSE: It is true that free trade does not benefit everyone within a country. However, if we accept the one-dollar-one-vote metric, and measure the national well-being of a country, we will find that there are net national gains from trade. That means that the gainers are gaining more than the losers are losing. Among the gainers are the consumers in the importing country, who enjoy lower prices, and possibly a wider variety of the product, and the producers in the exporting country, who are expanding their production as they are receiving a higher price

by accessing foreign demand through free trade. Among the losers are the consumers of the product in the exporting country and the import-competing producers.

Difficulty: 02 Medium

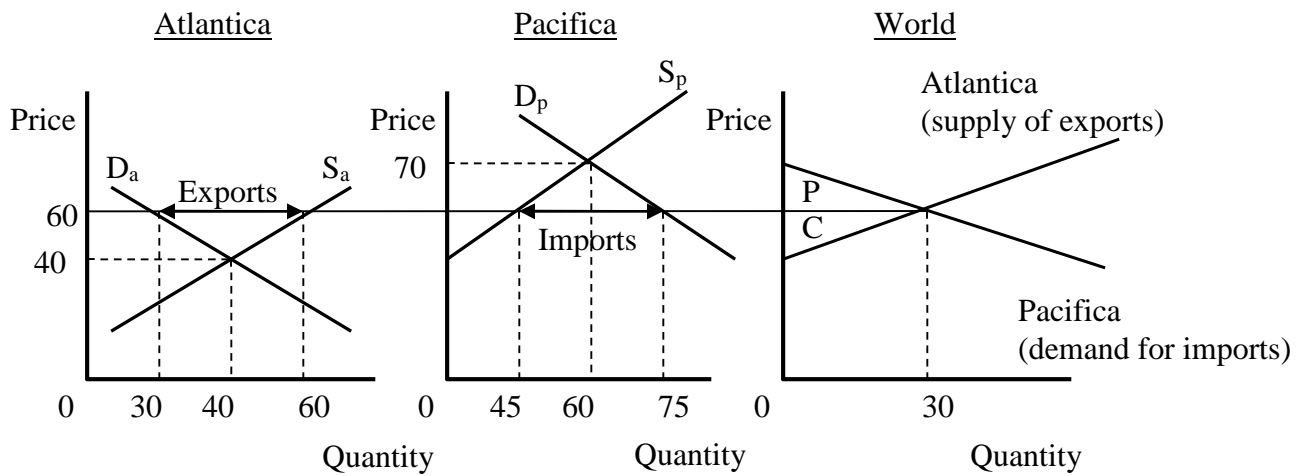
Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

56. Assume that there are only two countries in the world, Pacifica and Atlantica. Both countries produce and consume surfboards. The pre-trade price of surfboards in Atlantica is lower than the pre-trade price of surfboards in Pacifica. Draw a three-graph diagram to depict the Pacifica, Atlantica, and international markets for surfboards illustrating the pre-trade price difference. Now assume that free trade opens up between Pacifica and Atlantica. Depict a plausible world price in the graphs. What happens to overall economic welfare in the two countries? Be sure to label and refer to the graphs in your answer.

POSSIBLE RESPONSE:



The above graph illustrates a possible international price. The graph to the left represents demand and supply in Atlantica, the graph in the middle the market in Pacifica, and the graph to the right the World market.  $D_a$  and  $S_a$  are the demand and supply curves for Atlantica respectively.  $D_p$  and  $S_p$  are the demand and supply curves for Pacifica respectively. The international price of 60 is between the no-trade prices of 40 and 70. The international price is such a price that the excess supply in Atlantica matches the excess demand in Pacifica. As a result Atlantica exports 30 units to Pacifica at a price of 60. Both countries gain from international trade. Atlantica gains area C in the right graph, and Pacifica gains area P.

Difficulty: 03 Hard

Blooms: Analyze

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade

57. Consider a product with a perfectly competitive market. Carefully explain why nations gain from engaging in international trade in this product. Do nations gain equally from trade? If not, what determines which country gains more? (In your answer you can assume a two-country world.)

**POSSIBLE RESPONSE:** Assuming a two-country world, demand and supply differ in the two countries and so prices also differ if there is no international trade. With the opening of international trade arbitrage opportunities arise: opportunities to make profit by buying the good cheaper in one country and selling it in another. Due to these opportunities the prices in the two countries equalize. The gain from trade in the importing country arises because consumers in this country gain more than producers lose as a result of the reduced price. Conversely, the gain from trade in the exporting country exists because producers gain more than local consumers lose. In general, nations do not gain equally from trade. The country which experiences a larger change in its price stands to gain more. The country with the less elastic (steeper) trade curve (import demand curve or export supply curve) gains more. More precisely, the national gain from trade is proportional to the change in the price that occurs due to the shift from no trade to free trade.

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

58. Why would winter clothing be produced in countries whose residents have very little demand for such clothing?

**POSSIBLE RESPONSE:** A country might be interested in the production of winter clothing if this country can export this good in exchange for other goods that cannot be produced at a low cost domestically in this country. This country might have an abundance of resources that make the production of winter clothing efficient (low cost), whereas this country might be unable to produce other goods at such a low cost.

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

59. Country A produces shoes at a lower cost than the country B. As a result, most of the shoes purchased in the country B are made in country A. Explain how trading with country A results in a net gain for country B?

**POSSIBLE RESPONSE:** As a result of the free trade between country A and the country B, the price of shoes in the country B will be equal to the international price. So the prices of shoes in the country B will fall (compared to the situation of no trade). Consumers will gain due to the lower price and the increased purchases of shoes (consumers' total surplus is measured by the area below the demand curve for shoes and above the international price). Facing a lower price (the international price), the domestic producers of shoes in the country B will react by

decreasing their production of shoes. Hence, there is loss of surplus to producers associated with the opening of trade. In general, consumers gain more than producers lose, so trade results in a net gain for country B.

Difficulty: 02 Medium

Blooms: Understand

AACSB: Reflective Thinking

Topic: Two National Markets and the Opening of Trade

60. The difference in the prices of a good in two countries creates opportunities for arbitrage: traders buy the good at a low price in one country and sell it at a higher price in the other. When the difference in the prices vanishes, and the world price is established in both countries, there is no scope for trade anymore because no trader will be willing to buy the good in one country and sell it in another. Discuss the validity of this statement.

POSSIBLE RESPONSE: This is not a valid statement. Consider the countries A and B, and assume that without trade the price of the good is  $P_A$  in country A and  $P_B$  in country B, where  $P_A < P_B$ . With the opening of free trade, the arbitrage possibilities will eliminate the difference in the prices in the two countries. So, the world price,  $P_W$ , will establish itself between the two local prices:  $P_A < P_W < P_B$ . There will be a surplus at the price  $P_W$  in country A, and a shortage in country B. At the price  $P_W$ , country A will be exporting the good to country B. It is the ongoing trade that keeps the price the same in the two countries.

Difficulty: 03 Hard

Blooms: Analyze

AACSB: Analytic

Topic: Two National Markets and the Opening of Trade