

ECO 181 Summer 2023 - Homework #02

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The PDF version is more comprehensive and includes additional practice problems. You do not need to submit this version of the homework.

Q2.1 Which one of the following statements is false?

- A. Demand curves tend to slope downward.
- B. The relationship between price and quantity demanded is generally positive.
- C. The relationship between price and quantity supplied is generally direct.
- D. At equilibrium, the quantity demanded equals the quantity supplied.
- E. A shortage occurs when the quantity demanded exceeds the quantity supplied.

Q2.2 Suppose when the price of ice cream increases from \$1 to \$3, the quantity supplied increases. This change is best described as _____

Q2.3 Which of the following is an example of movement along a supply curve?

- A. The quantity of apples offered for sale increases as the price of apples rises.
- B. An apple orchard burns down in an accidental fire, decreasing the number of suppliers on the market.
- C. Thanks to good weather conditions, apple growers enjoy a bumper crop this year.
- D. The price of pears doubles, increasing demand for apples.
- E. The price of fertilizer increases, making it more expensive to produce apples.

Q2.4

a) Based on the Figure 1, how many apartment owners would be willing to sell their apartments for \$91,000. _____

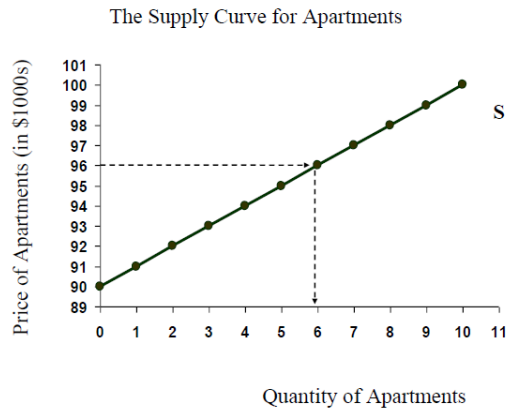


Figure 1: Q1.3

b) In the graph above, up to ten apartments may be available for sale. Suppose that ten more apartment owners enter the market, for a total of twenty available apartments. These new entrants into the market would be willing to sell their apartments for any price above \$90,000. The supply curve _____.

c) In the situation described in part (b) how many apartment owners would be willing to sell their apartments for \$91,000. _____

Q2.5 Which of the following would shift the supply of umbrellas to the left?

- A. Rainfall is expected to be unusually low in the coming year.
- B. The price of an umbrella increases by \$12.
- C. The cost of the fabric used to make umbrellas decreases.
- D. The number of firms making umbrellas decreases.

Q2.6 Suppose sunflowers are currently selling for \$45 per dozen, but the equilibrium price of sunflowers is \$25 per dozen. We would expect a _____ to exist and the market price of sunflowers to _____.

Q2.7 Which of the following events would cause both the equilibrium price and equilibrium quantity of number two grade potatoes to increase if number two grade potatoes are an inferior good?

- A. An increase in consumer income
- B. A decrease in consumer income
- C. Greater government restrictions on agricultural chemicals

D. Fewer government restrictions on agricultural chemicals

**Please read the following information and answer the question
Q2.8 - Q2.10**

You graduate and decide to start a new business with some of your classmates. The product your business makes is an App for students to take notes on ipad, which is called Mynote. Consumers can pay a monthly subscription to get access to your app. Your position in the business is as Chief Financial Officer and part of your responsibilities are to predict changes in the supply and demand for Mynote.

Please draw graphs to indicate the change in the supply(S) and demand(D) for Mynote, and the change in equilibrium price(P_e) and equilibrium quantity(Q_e).

Q2.8 Congress passes a bill to subsidize Mynote by giving the business \$3 per subscription to partially cover production costs.

Q2.9 A competitor in the market called Pennote (a similar product that helps students to take notes on ipad) decides to lower the price of their subscription.

Q2.10 Scenarios (Q2.9) and (Q2.10) occur simultaneously.

Please use Figure 2 answer the question Q2.11 - Q2.14

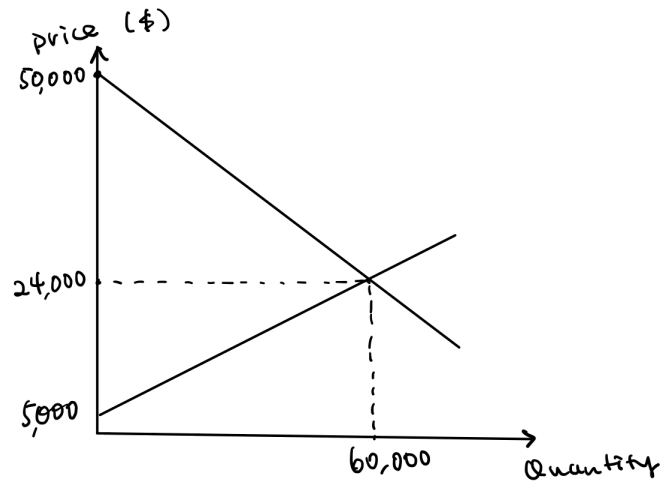


Figure 2: Auto Industry

Q2.11 If the price of a car is \$24,000 and 60,000 are sold, so the consumer surplus = _____ dollars.

Q2.12 Please explain the economic meaning of the consumer surplus in Q2.11.

Q2.13 If the price of a car is \$24,000 and 60,000 are sold, so the producer surplus = _____ dollars.

Q2.14 The total surplus = _____ dollars.

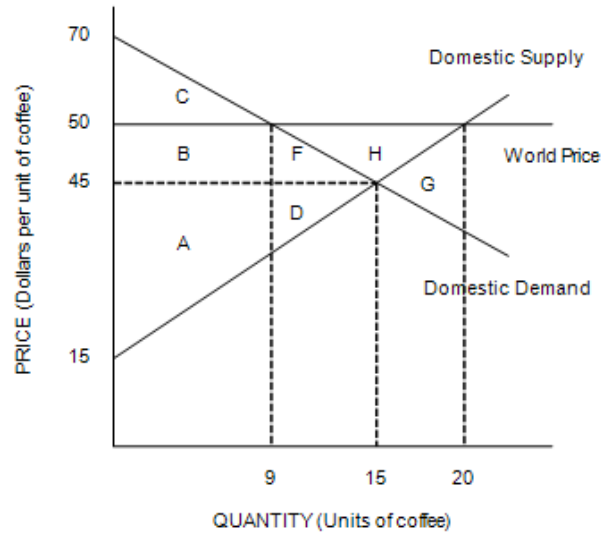
Please use the following table answer the question Q2.15 - Q2.16

Price (Dollars per unit)	Quantity Demanded (Units)	Quantity Supplied (Units)
0	15	0
1	13	3
2	11	6
3	9	9
4	7	12
5	5	15
6	3	18

Q2.15 Equilibrium price = _____ dollars; Equilibrium quantity = _____ units.

Q2.16 Suppose sellers of the good successfully lobby Congress to impose a price floor \$2 above the equilibrium price in this market. Following the imposition of a price floor \$2 above the equilibrium price, irate buyers convince Congress to repeal the price floor and to impose a price ceiling \$1 below the former price floor. The resulting market price is _____ dollars.

Please use the following table answer the question Q2.17 - Q2.18



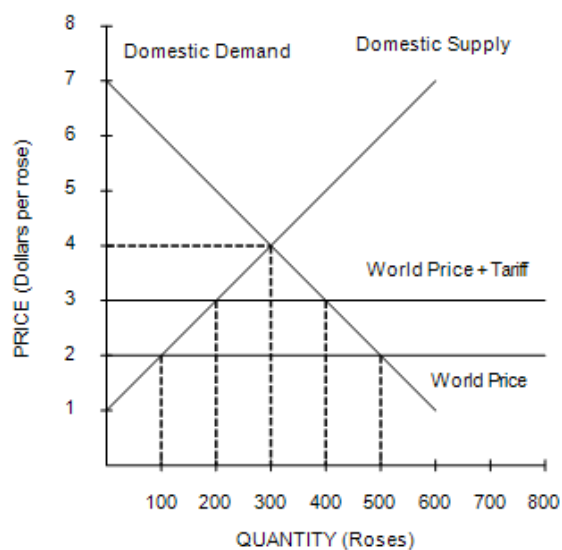
Q2.17 When trade in coffee is allowed, consumer surplus in Uganda

- A. increases by the area B + F.
- B. increases by the area A + D.
- C. decreases by the area B + F.
- D. decreases by the area F + H.

Q2.18 When trade is allowed,

- A. Ugandan producers of coffee become better off and Ugandan consumers of coffee become worse off.
- B. Ugandan consumers of coffee become better off and Ugandan producers of coffee become worse off.
- C. both Ugandan producers and consumers of coffee become better off.
- D. both Ugandan producers and consumers of coffee become worse off.

Please use the following table answer the question Q2.19 - Q2.21



Q2.19 With trade and without a tariff. Please indicate whether the following statements are true or false.

1. the domestic price is equal to the world price.
2. roses are sold at \$4 in this market.
3. there is a shortage of 400 roses in this market.
4. this country imports 200 roses.

Q2.20 The size of the tariff on roses is _____.

Q2.21 The amount of deadweight loss caused by the tariff equals _____.

Q2.22 In the GDP accounts production equals

- A. income.
- B. income + saving.
- C. income - government expenditures.
- D. income - imports.

Q2.23 Which of the following is included in the calculation of GDP?

- A. The purchase of tutoring services from a tutor who holds citizenship outside the country but resides within the country.
- B. The purchase of a new edition of a foreign textbook that was produced in a different nation.
- C. The purchase of ink and paper supplies by a textbook company for the production of new textbooks.
- D. The purchase of a used textbook from a friend who took the same class last year.