Liberty High School

AP Macroeconomics

Mr. Lopez

Chapter Seven

Study Guide

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ period:\_\_\_\_\_\_

Part 1 – Key terms

1. Welfare economics:
2. Willingness to pay:
3. Consumer surplus:
4. Cost:
5. Producer surplus:
6. Efficiency:
7. Equality:
8. Market failure:

Part 2 – Problems and short answers

1. The following information describes the value Lori Landlord places on having her five apartment houses repainted. She values the repainting of each apartment house at a different amount depending on how badly it needs repainting.

First apartment $5,000, Second apartment $4,000, Third apartment $3,000, Fourth apartment $2,000, and the Fifth apartment $1,000

* 1. On the graph below, plot Lori’s willingness to pay.



* 1. If the price to repaint apartments is $5,000 each, how many will she repaint? What is the value of her consumer surplus?
  2. Suppose the price to repaint her apartment falls to $2,000 each. How many apartments will Lori choose to have repainted? What is the value of her consumer surplus?
  3. What happened to Ms. Landlord’s consumer surplus when the price of having her apartments repainted fell? Why?

1. The following information shows the costs incurred by Peter Painter when he paints apartments. Because painting is a difficult work, the more he pints, the higher the costs he incurs in both back pain and chiropractic bills.

Cost of paining First apartment $1,000, Second apartment $2,000, Third apartment $3,000, Fourth apartment $4,000, and Fifth apartment $5,000

* 1. Plot Peter’s costs on the graph below.



* 1. If the price of painting apartment houses is $2,000 each, how many will he paint? What is the value of his producer surplus?
  2. Suppose the price of painting apartments rises to $4,000 each. How many apartments will Peter choose to repaint? What is the value of his producer surplus?
  3. What happened to Mr. Peter’s producer surplus when the price to paint apartments rose? Why?

1. Use the information about willingness to pay and costs from questions 9 and 10 above to answer the following questions:
   1. If a benevolent social planner sets the price for painting apartments at $5,000, what is the value of consumer surplus? Producer surplus? Total surplus?
   2. If a benevolent social planner sets the price for painting apartments at $1,000, what is the value of consumer surplus? Producer surplus? Total surplus?
   3. If the price for painting apartments is allowed to move to its free market equilibrium price of $3,000, what is the value of consumer surplus, producer surplus in the market? How does total surplus in the free market compare to the total surplus generated by the social planner?
2. In the graph below, plot the linear supply and demand curves for painting apartments implied by the information in the question 9 and 10 above. (Draw them so that they contact the vertical axis) Show consumer and producer surplus for the free market equilibrium price and quantity. Is this allocation of resources efficient? Why or why not?



1. Suppose Lori Landlord has difficulty renting her dilapidated apartments so she increases her willingness to pay for paining by $2,000 per apartment. Plot Lori’s new willingness to pay along with Peter’s costs in the graph below. If the equilibrium price rises to $4,000, what is he value of consumer surplus, producer surplus, and total surplus? Show consumer and producer surplus on the graph. Compare your answer to that in 11c above.



1. What is the relationship between buyer’s willingness to pay for a good and the demand curve for that good?
2. What is consumer surplus and how is it measured?
3. What is the value of consumer surplus for the marginal buyer? Why?
4. If the cost of James to mow a lawn is $5.00, for Larry to mow a lawn $7.00, and for Angela to mow a lawn is $9.00, what is the value of their producer surplus if each mows a lawn and the price is $10.00?
5. What is the relationship between the sellers’ cost to produce a good and the supply curve for that good?
6. What is a producer surplus, and how is it measured?
7. When the price of a good rises, what happens to the producer surplus? Why?
8. Can a benevolent social planner choose a quantity that provides greater economic welfare that the equilibrium quantity generated in a competitive market?
9. What does an economists mean by “efficiency”?
10. Is a competitive market efficient? Why or why not?
11. How does a competitive market choose which producer will produce and sell a product?

Part 3 - True or False

25.\_\_\_\_\_\_\_Consumer surplus is the amount a buyer is willing to pay for a good minus the seller’s cost?

26.\_\_\_\_\_\_\_If the demand curve in a market is stationary, consumer surplus decreases when the price in that market increases.

27.\_\_\_\_\_\_\_If your willingness to pay for a hamburger is $3.00 and the price is $2.00 your consumer surplus is $5.00

28.\_\_\_\_\_\_\_Producer surplus is a measure of the unsold inventories of suppliers in a market.

29.\_\_\_\_\_\_\_Consumer surplus is a good measure of buyers’ benefits if buyers are rational.

30.\_\_\_\_\_\_\_Cost to seller includes the opportunity cost of the seller’s time.

31.\_\_\_\_\_\_\_The height of the supply curve is the marginal seller’s cost.

32.\_\_\_\_\_\_\_Total surplus is the cost of sellers minus the value to buyers.

33.\_\_\_\_\_\_\_Free markets are efficient because they allocate output to buyers who have a willingness to pay that is below the price.

34.\_\_\_\_\_\_\_Prodicer surplus is the area above the supply curve and below the price.

35.\_\_\_\_\_\_\_The major advantage of allowing free markets to allocate resources is that the outcome of the allocation is efficient.

36.\_\_\_\_\_\_\_Equilibrium in a competitive market maximizes total surplus.

37.\_\_\_\_\_\_\_The two main types of market failure are market power and externalities.

38.\_\_\_\_\_\_\_Externalities are side effects, such as pollution, that are not taken into consideration/account by the buyers and sellers in a market.

39.\_\_\_\_\_\_\_Producing more of a product always add to total surplus.

Part 4 – Additional Critical Thinking

Suppose you are having an argument with your best friend about whether the federal government should subsidize the production of food. Your friend argues that because food is something that is unambiguously good (unlike liquor, guns, and drug which might be considered inherently evil by some members of society), we simply cannot have too much of it. That is, because food is clearly good, having more of it must improve our economic well-being.

40. Is it true that you cannot have too much of a good thing? Conversely, is it possible to over produce unambiguously good things such as food, clothing, and shelter? Why or why not?

41. On the graph below, demonstrate your answer to question 40 above with a supply and demand graph for food by showing the impact on economic well-being of producing quantities in excess of the equilibrium quantity.

