Liberty High School

Macroeconomics

Mr. Lopez

Chapter Six

Study Guide

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_\_

Part 1 – Key terms

1. Price ceiling:
2. Price Floor:
3. Tax Incidence:
4. Tax Wedge:

Part 2 Problems and short answers

1. Use the following supply and demand schedule for bicycles to answer the questions that follow.

|  |  |  |
| --- | --- | --- |
| **Price** | **Quantity Demanded** | **Quantity Supplied** |
| $300 | 60 | 30 |
| 400 | 55 | 40 |
| 500 | 50 | 50 |
| 600 | 45 | 60 |
| 700 | 40 | 70 |
| 800 | 35 | 80 |

1. In response to lobbying by the Bicycle Riders Association, Congress places a price ceiling of $700 on bicycles. What effect will this have on the market for bicycles? Why?
2. In response to lobbying by the Bicycle Riders Association, Congress places a price ceiling of $400 on bicycles. Use the information provided above to plot the supply and demand curve on the graph below. Impose the price ceiling. What is the effect of a $400 price ceiling on bicycles?



1. Does a price ceiling of $400 make all bicycle buyers better off? Why or why not?
2. Assuming that the government decides to include with this $400 price ceiling a $100.00 government payment to the supplier (subsidy). Why or why not would this correct the situation?
3. Suppose instead, in response to lobbying by The Bicycle Manufacturers Association, Congress imposes a price floor of $700.00. Use the information in the Supply and demand schedule above to plot the supply and demand curve in the graph below. Impose the $700 price floor. What is the result of this $700 price floor?



7. Use the supply and demand schedule for bicycles in question 6 above for this question as well.

a. Plot the supply and demand curves for bicycles in the graph below. On the graph impose a tax of $300.00 to be paid by the sellers. After the tax, what has happened to the price paid by the buyers, the price received by the sellers, and the quantity sold when compared to the free market equilibrium?



b. Plot the supply and demand curve for bicycles on the graph below. On the graph plot a $300.00 tax to be paid by the buyers. After the tax, what has happened to the price paid by the buyers, the price received by the sellers, and the quantity sold when compared to the free market equilibrium?



c. Compare your answers to questions a and b above. What conclusion can you draw from this comparison?

d. Who bears the greater burden from this tax, the buyers or sellers? Why?

8. What is the impact on the price and quantity in a market if a price ceiling is set above the equilibrium price? Why?

9. What is the impact on the price and quantity in a market if a price ceiling is set below the equilibrium price? Why?

10. What are some of the problems caused by a binding price ceiling?

11. Is the impact of a binding price ceiling greater in the short run or in the long run? Why?

12. What is the impact on the price and quantity in a market if a price floor is set below the equilibrium price? Why?

13. What is the impact on price and quantity in a market if a price floor is set above the equilibrium price?

14. When we use the model of supply and demand to analyze a tax that is collected from the sellers, which way do we shift the supply curve? Why?

15. If we use a supply and demand curve to analyze a tax that is collected from the buyers, which way do we shift the demand curve? Why?

16. Why is a tax collected from the buyers equivalent to a tax collected from the sellers?

17. Suppose a gas guzzler tax is placed on luxury automobiles. Who will likely bear the greater burden of the tax, the buyers of luxury autos or the sellers? Why?

Part 3 – True or False

18. \_\_\_\_\_\_\_ If the equilibrium price of gasoline is $3.00 per gallon and the government places a price ceiling on gasoline of $4.00 per gallon, the result will be a shortage of gasoline.

19.\_\_\_\_\_\_\_ A price ceiling set below the equilibrium price causes a surplus.

20.\_\_\_\_\_\_\_A price floor set above the equilibrium price is a binding constraint.

21.\_\_\_\_\_\_\_The shortage in housing caused by a binding rent control is likely more severe in the long run when compared to the short run.

22.\_\_\_\_\_\_\_The minimum wage helps all teenagers because they receive higher wages than they would otherwise.

23.\_\_\_\_\_\_\_A 10% increase in the minimum wage causes a 10% reduction in teenager unemployment.

24.\_\_\_\_\_\_\_ A price ceiling that is not a binding constraint today could cause a shortage in the future if demand were to increase and raise the equilibrium price above the fixed price ceiling.

25.\_\_\_\_\_\_\_\_A price floor in a market always creates a surplus in the market.

26.\_\_\_\_\_\_\_\_A $10.00 tax on baseball gloves will always raise the price that buyers pay for baseball gloves by $10.00.

27.\_\_\_\_\_\_\_\_The ultimate burden of a tax lands most heavily on the side of the market that is less elastic.

28.\_\_\_\_\_\_\_\_If medicine is a necessity, the burden of a tax on medicine will likely land more heavily on the buyers of medicine.

29.\_\_\_\_\_\_\_\_When we use the model of supply and demand to analyze a tax collected from the buyers, we shift the demand curve upward by the size of the tax.

30.\_\_\_\_\_\_\_\_A tax collected from buyers has an equivalent impact to a same size tax collected from sellers.

31.\_\_\_\_\_\_\_A tax creates a tax wedge between buyer and seller. This causes the price paid by the buyer to rise, the price received by the seller to fall, and a decrease in the quantity sold.

32.\_\_\_\_\_\_\_The government can choose to place the burden of a tax on the buyers in a market by collecting the tax from the buyers rather than the sellers.

Part 4 – Additional Critical Thinking

33. Suppose that the government needs to raise tax revenue. A politician suggests that the government place a tax on food because everyone must eat and thus, a food tax would surely raise a great deal of revenue. However, because the poor spend a large proportion of their income on food, the tax should be collected only from the sellers of food (grocery stores) and not from the buyers of food. The politician argues that this type of tax would place the burden of the tax on corporate grocery store chains and not poor customers.

a. Can the government legislate that the burden of a food tax fall only on the sellers of food? Why or why not?

b. Do you think the burden of a food tax will tend to fall on the sellers of food or the buyers of food? Why?

34. In planning to spend Christmas in San Antonio, Texas I discovered that this city places a 16.5% tax on hotel stays. This tax, while significant is not unusual for an area considered a tourist destination.

a. Why might imposing or increasing a tax on hotel rooms face less public opposition than imposing or increasing a sales tax?

 b. Why might a hotel owner oppose imposing or increasing a hotel tax?