NAME _____

Lab Report–Experiment 4

Record of Market Transactions

After the experiment, the market manager will inform you of the numbers of suppliers, addicts, and casual demanders who participated. Record this information in Table L4.1.

Table L4.1: Participating Suppliers and Demanders

Participant Type	Number
Suppliers	
Addicted Demanders	
Non-addicted Demanders	

In Tables L4.2 and L4.3, record the prices and Buyer Values for each sale of drugs that was not confiscated. In Table L4.4, record sales of drugs by the police as well as by dealers. In the case of sales by police, record the Sellers' Cost as 0 and the Sellers' Profits as equal to the price.

Session 1–No Prohibition

Competitive Equilibrium with No Interference

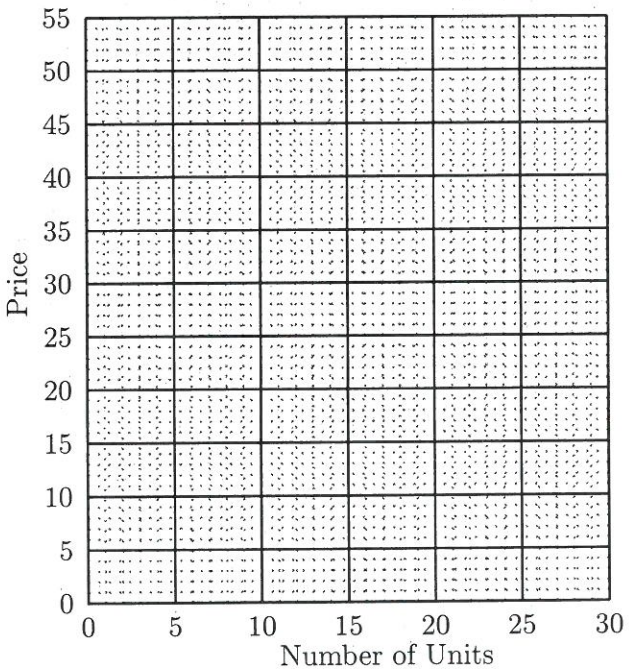
Before you draw the demand curve for this market, think carefully about an addict's reservation price for drugs, which is the most that he would pay for a unit of drugs. Remember that an addict who gets no drugs suffers a *loss* of $20 and an addict who gets drugs will gain $30.

■ What is the most that an addict would be willing to pay for a unit of drugs?_____

■ What is the most that a casual user would be willing to pay for a unit of drugs?_____

■ On Figure L4.1, draw the supply curve and the demand curve that apply under the market conditions of Session 1.

Figure L4.1: No Prohibition–Session 1



■ In Session 1, the competitive equilibrium price is _____ and the competitive equilibrium quantity sold is _____.

■ In competitive equilibrium for Session 1, would addicts have to pay higher prices than casual users? _____.

Experimental Results in Session 1

■ On Figure L4.1, plot the time path of transactions in Session 1.

■ In the last round of Session 1, the average price paid by addicts was _____ and the average price paid by casual users was _____.

Session 2–Confiscation

Competitive Equilibrium with Confiscation

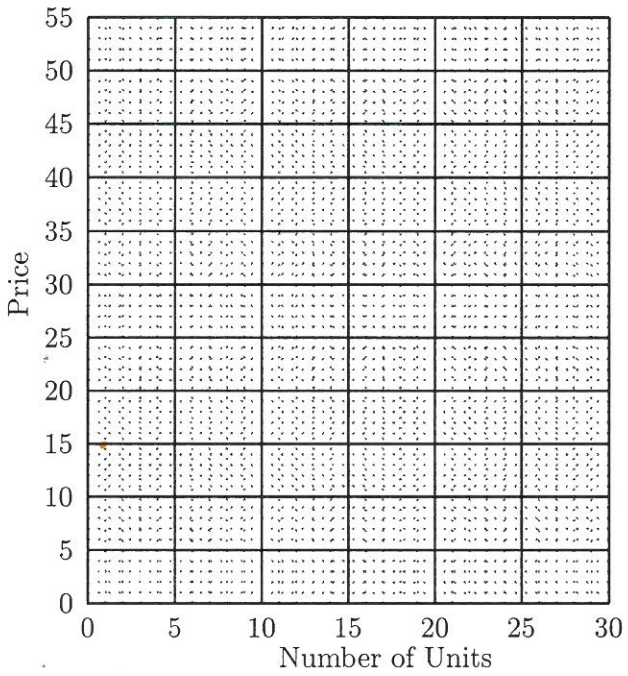
■ In this session, all Buyer Values are the same as in Session 1, where drugs were legal. Even though some purchases are nullified by confiscation, there is no penalty for buyers. All the buyer has to do is find another seller and make a new agreement. Therefore each buyer's willingness to pay for drugs is the same as when drugs were legal. What does this imply about the relationship between the demand curve when there is no prohibition and the demand curve when there is prohibition?

_____

■ When the sale of drugs is prohibited, the cost to a seller of getting a unit of drugs to market increases because in order to sell a unit of drugs to a buyer, a seller has to produce two units, one of which will be confiscated. Not only does the seller have to pay the cost of producing the confiscated unit, even though it doesn't get to market, but she also has to pay a fine. What is the lowest per-unit price at which a supplier will be willing to sell two units of drugs, knowing that one unit will be confiscated and that she will have to pay a $5 fine for dealing in drugs? _____

■ On Figure L4.2, draw the demand curve that applies in Session 2. On the same figure, draw the supply curve to show the amount of drugs that would reach the market at each possible price in Session 2.

Figure L4.2: Prohibition with Confiscation–Session 2



■ In competitive equilibrium for Session 2, the price is _____ and the number of units that reach consumers is _____.

■ In competitive equilibrium for Session 2, the total number of units produced (including the units that were confiscated) is _____

■ How does the government's effort to prohibit drugs change the total number of units consumed by casual users in competitive equilibrium?

_____

■ How does the government's effort to prohibit drugs change the total

number of units consumed by addicts in competitive equilibrium?

_____

■ How does the government's effort to prohibit drugs change the total amount of money spent on drugs by all consumers in competitive equilibrium?

_____

Experimental Results in Session 2

■ On Figure L4.2, plot the time path of transactions in Session 2.

■ What was the average price in the last round of Session 2? _____

■ How many units were sold to consumers in the last round of Session 2?

_____

■ In the last round of Session 2, how many units were produced in total (including those that were destroyed by the police)? _____

■ How many units were consumed by addicts? _____

■ How many units were consumed by casual users? _____

■ How much money in total did consumers spend on the prohibited substance in the last round of Session 1? _____ the last round of Session 2? _____

Session 3–Confiscation and Resale

Equilibrium with Confiscation and Resale

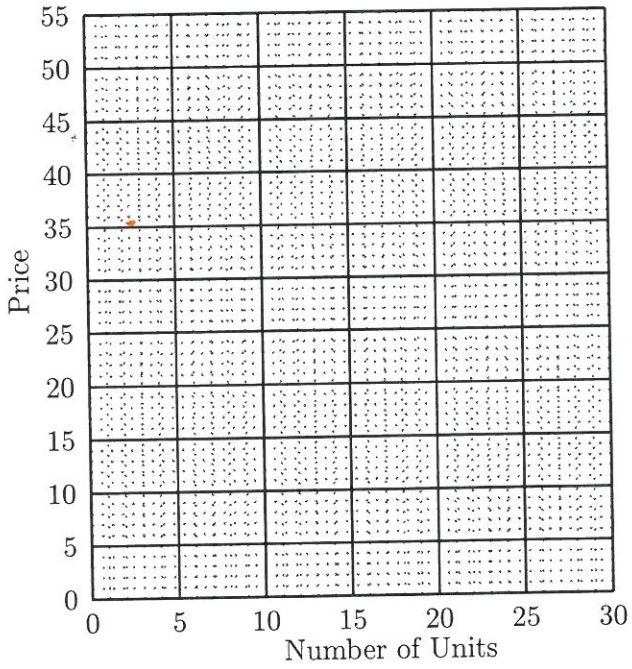
In Session 3, as in Session 2, since drug buyers are not penalized, the Buyer Values and reservation prices of demanders are the same as when there was no prohibition. In this session, as in Session 2, a supplier must produce two units of drugs in order to be able to sell one unit to a buyer. One of the two units will be confiscated and the supplier will be fined $5. The main

difference between this market session and that in Session 2 is that both of the units of drugs that a supplier produces will eventually find their way to a buyer.

■ In Session 3, a supplier can make a profit selling drugs only if the price is higher than _____. If the price is higher than this, the total number of units of drugs that will be available to consumers is _____.

■ On Figure L4.3, draw the supply curve and demand curve for Session 3.

Figure L4.3: Prohibition with Confiscation and Resale–Session 3



■ The horizontal segment of the supply curve in Session 3 is (higher than, lower than, the same height as) _____ the horizontal segment of the supply curve in Session 2.

■ In Session 3, what is the competitive equilibrium price for drugs? _____

■ In Session 3, what is the competitive equilibrium quantity sold to consumers? _____

■ In Session 3, what is the equilibrium total number of units produced (including the units destroyed)? _____

■ Compare the competitive equilibrium price and quantity consumed when the police resell confiscated drugs with the case where there is no intervention by the government. Explain why prohibition reduces drug consumption even when the police resell all confiscated drugs.

_____

_____

_____

Experimental Results in Session 3

■ On Figure L4.3, plot the time path of transactions in Session 3.

■ In Session 3, what was the average price in the last round?_____

■ In Session 3, how many units were sold to consumers? (Remember to include sales by the police as well as by dealers.) _____

■ In Session 3, how many units were produced in total? _____

■ In Session 3, how many units were consumed by addicts?_____

■ In Session 3, how many units were consumed by casual users?_____

_____

Food for Thought

■ The government's intervention in the drug market shifted the supply curve upward. If the supply curve shifts upward and the demand curve stays stationary, what do you expect will happen to the price of drugs and to the quantity sold?

_____

■ In the experiment we conducted, does the prohibition cause addicts to reduce their consumption?_____Does the prohibition cause addicts to spend more or less money on the prohibited substance? _____

■ Suppose that the government prohibits the drug trade because it hopes to discourage addicts from stealing the money needed to buy drugs. Does the policy of prohibition achieve this objective? Explain.

_____

_____

_____

■ What argument(s) would you make in favor of a prohibition on addictive drugs, knowing that any such prohibition will be imperfectly enforced?

_____

_____

_____

■ If the government could find policies that shifted the demand curve for the prohibited substance downward, how would this affect prices and quantities?

_____

■ Suppose the government were considering two alternative policies toward addictive drugs. One policy would shift the demand curve down by some amount and the other would shift the supply curve upward by about the same amount. Which policy do you think would be preferable? Explain.

■ Suggest some policies that would shift the demand curve downwards?

■ For a market with the same Seller Costs and Buyer Values as those in this experiment, suppose that the government decided to legalize trade, but in order to discourage consumption, it put a sales tax on each unit sold. Assuming that the suppliers always complied in paying the tax, how large would the tax have to be in order for the equilibrium price and quantity to be the same as the equilibrium price and quantity for Session 2?

■ If there were no police enforcement of the tax, some suppliers would probably provide the material illegally, without paying the tax. But if the same police effort that is currently devoted to confiscating illegal sales were devoted to punishing suppliers who did not pay their tax, how much tax

evasion do you think there would be? Explain.

■ Are there any commodities that are currently legally sold that you think should be prohibited? Explain why.

■ Discuss some commodity (other than drugs) which the government currently makes it illegal to sell. Explain why you think prohibition of this market is either a good idea or a bad idea.