Introduction to Law and Economics

Homework#1

Due, 10/17/2022

1. In the slide "Introduction to Law and Economics", from Page 4 to 6, there is an example on illegal parking. Suppose the social welfare is the sum of the driver's expected benefit minus the social cost. Find the Pareto-optimum level of enforcement which maximizes social welfare. (30%)

2. There are two persons, A and B, in the society, and two goods, x and y. The utility that each person receives under various combinations of x and y, is in the table below.

		x = 0	x = 1
y	0	0	6
	1	3	9
	2	5	10
	3	6	11

$u_A(x, y)$

		x = 0	x = 1
y	0	0	3
	1	7	10
	2	10	12
	3	12	13

$u_B(x, y)$

There are now 1 unit of x and 3 units of y in the society to be distributed among A and B. What are the Pareto-optimal distributions? (10%)

3. Consider the consumption with positive externality example on page 8 of the Coase Theorem slide. (i) If the consumer has the right to decide the consumption level, how much will it be? (ii) What if the beneficiary (i.e., society) has the right ? (iii) What is the socially optimal level of consumption? (iv) If the govenment intends to correct the social inefficiency by imposing tax/subsidy, how can it do, and what will be

the result? (v) If, as the Coase Theorem has assumed, parties in the whole society can bargain frictionlessly under perfect information, what will happen? Show your answers under both when either the consumer and when beneficiary has the right, by constructing a table showing the bargaining process similar to one in page 22 of the slide. (30%)

4. Suppose the bargaining cost for the beneficiary is \$0.2, will the results in (v) of the previous question change? Suppose bargaining cost for the beneficiary is \$0.8, what will happen to your answers for (v)? What makes the difference and why? Does the assignment of legal rights matter when there is bargaining cost? (30%)