

Introduction to Law and Economics

Homework#3

Due, 12/5/2022

A defendant (D), who has a wealth of \$10,200, is currently engaged in a settlement procedure with a plaintiff (P) for a damage caused by the former. The value of damage is commonly known at \$10,000. If they fail to settle, a court litigation will ensue. If P wins, the compensation will be the damage, \$10,000. However, they have different expectation of P 's winning chance. The probability that D (P) believes that P will prevail in court is p_d (p_p). In the court procedure, both P and D will incur a litigation cost of \$200. If they settle, the cost is 0. Both P and D are risk neutral. Answer the following questions based on the divergent expectation theory (DET).

1. Find the range of settlement, and the condition on p_d and p_p so that there can be a settlement between P and D . (20%)
2. Suppose now that P is still risk neutral, while the defendant is risk averse with a utility function of $u(x) = \sqrt{x}$. What will now be the range of settlement? Has the range become greater? Why? (45%)
3. Suppose $p_p = 0.8$ and $p_d = 0.7$. Will P and D settle in question 1? Will they in question 2? What is the reason for your answer? (35%)