

ECO4010 Tutorial 12

1. Consider the following simultaneous game of incomplete information where player i 's type is t_i , which follows uniform distribution on $[0, x]$ for $x > 0$.

	<i>Opera</i>	<i>Fight</i>
<i>Opera</i>	$2 + t_1, 1$	$0, 0$
<i>Fight</i>	$0, 0$	$1, 2 + t_2$

Construct a Bayesian Nash equilibrium. Hint: assume threshold values that divide the types into the two actions.

2. Find the symmetric equilibrium in 2-bidder “losers-pay” auction, where the highest bidder wins the object and the loser must pay his bid. The winner pays nothing. Using the general bidding strategies, find the seller’s expected revenue in the 2-bidder, $U[0, 1]$ case.
3. (Optional) There are N bidders with their valuation v_i i.i.d. distributed on $F(\cdot)$, $v_i \in [\underline{v}, \bar{v}]$. Find the symmetric equilibrium in an all-pay auction directly.