ECON 4820 Strategic Competition - Spring 2016

Seminar Set 8 - Wed. 4 May

Question 1.

(1) Explain the concepts of English auction and sealed-bid second-price auction. Explain why, under a certain set of conditions, the two auctions give the seller the same profit.

(2) Consider a sealed-bid first-price auction with n bidders. With valuations independently and uniformly distributed on $[v_l, v_h]$, the optimum bid for a risk neutral bidder with valuation v is:

$$b(v) = \frac{v(n-1) + v_l}{n},$$

(i) Use the general formula (see lecture slides) to verify this result.

(ii) Check that $b(v) < v$ for all $v > v_l$. Explain why it is optimum for a bidder to shade his bid in this way.

(iii) A risk averse bidder would bid higher than a risk neutral one. Why is that?