CS395T
Agent-Based Electronic Commerce
Fall 2003

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Week 2b, 9/4/03

Logistics

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- Presentation dates to be assigned soon

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- Any questions?

Some Terms/Concepts

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- Surplus: auction's vs. bidder's
- Social welfare, efficiency
- Entry costs
- Linkage principle, higher prices in English with affiliation

Still More Terms

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  - Simultaneous vs. sequential auctions
- Budget constraints
- Jump bids
- Revelation principle

Auction Efficiency (from Milgrom)

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- So if bidder 2 has value of $75, she can win by bidding $62.
- That's an inefficient outcome

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Hint: Expected kth highest of n random draws from a uniform distribution $[0, 1]$ is $\frac{n+1-k}{n+1}$.

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- So expected payment in 2nd price auction is $(\frac{n-1}{n})(\frac{v_i^n}{\overline{v}^{n-1}})$
- In an all pay auction, win in exactly same cases, but always pay, so make the same expected payment — that's the bid.