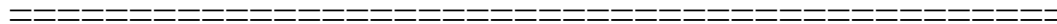


## In-Class Auctions

- Ascending oral auction (English auction)
- Descending auction (Dutch auction; clock auction)
- First-price sealed-bid auction
- Second-price sealed-bid auction



In each auction ...

- The item being auctioned is a floppy disk.
- Each person receives a card indicating his/her *redemption value* for the disk.
- The person who wins the disk being auctioned ...
  - will pay me (the auctioneer) the amount he/she has bid (except in the 2<sup>nd</sup> price auction)
  - will be paid his/her redemption value by me when I buy the disk back
  - will therefore earn the amount by which his redemption value exceeds his bid

## The Auction Results: The Data

Note that in each auction the set of values is identical, except for a constant increment added to or subtracted from each. This enables us to compare the four auctions as if they were conducted in exactly the same setting.

- An unusual result in the English auction: the high-value person “left money on the table.” He or she had a value of \$44 and allowed the item to go for \$41.25. Normally, we would see the high-value person outbid the second-high-value person at \$42, and thereby obtain the item for \$42, the second highest value.
- For any given value, the person with that value in the second-price auction almost always bid more than the corresponding person in the first-price auction (after taking account of the \$10 increment between values in the two auctions). This was true in 17 out of 19 cases.
- In the first-price auction **every** bid was **below** the bidder’s value, although most were within one dollar of the bidder’s value. But in the second-price auction 10 out of 19 bids were **equal** to the bidder’s value, and another four bids were **above** the bidder’s value.

## Pennies Auctions

We also held two auctions for a half-liter of pennies, the first a sealed-bid auction and the second an English outcry auction. (The sealed bids weren't opened until after the completion of the English auction.)

The bottle of pennies contained 700 pennies, so the bidder who won the bottle was paid \$7.00 in each auction.

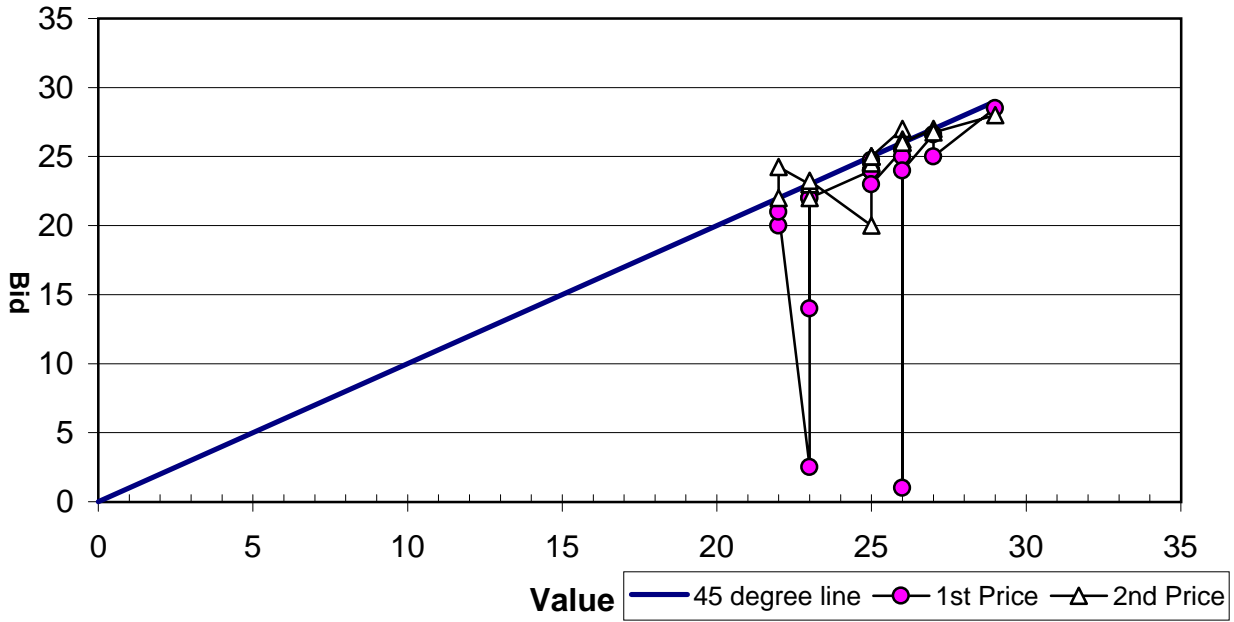
In the English auction, the winning bid was exactly \$7.00 – somewhat unexpected, since no one knew how many pennies the bottle contained.

The bids in the (first-price) sealed-bid auction are shown in a graph on a following page. Five of the bids were substantially above the bottle's \$7.00 value. The high bid was \$11.83.

## In-Class Auction Results: Econ 431 Spring 2001

<u>English Auction</u>			<u>Dutch Auction</u>			<u>1st Price Sealed Bid</u>			<u>2nd Price Sealed Bid</u>			
<u>Values</u>	<u>Won</u>	<u>Bid</u>	<u>Values</u>	<u>Won</u>	<u>Bid</u>	<u>Values</u>	<u>Won</u>	<u>Bid</u>	<u>Values</u>	<u>Won</u>	<u>Bid</u>	<u>Paid</u>
\$44			\$34	*	33.50	\$29	*	28.50	\$39	*	38	37
42	*	41.25	32			27		26.60	37		37	
42			32			27		25	37		36.75	
41			31			26		25.50	36		37	
41			31			26		25	36		36.25	
41			31			26		24	36		36	
41			31			26		1	36		36	
40			30			25		24.75	35		30	
40			30			25		24	35		34.50	
40			30			25		24	35		35	
40			30			25		24	35		35	
40			30			25		24	35		35	
40			30			25		23	35		35	
38			28			23		22	33		33	
38			28			23		22	33		33	
38			28			23		14	33		32	
38			28			23		2.50	33		33.25	
37			27			22		21	32		32	
37			27			22		20	32		34.25	

### In-Class Sealed Bid Auctions



# Bottle Of Pennies Sealed Bid Auction

