## Instructions

This is an experiment in the economics of decision making. The instructions are simple. You will likely earn more money if you read them carefully and understand them fully. Your earnings will be paid to you privately, in cash, at the end of today's session.

In every round of this experiment you will be part of a group of four bidders (you and three other bidders). Each round, a single item will be offered for sale to your group, first at a fixed price and then, if no one accepts the fixed price, through an auction. Your value for the item will be shown on your computer screen. If you purchase the item, your earnings will be the difference between your value for the item and the purchase price. The selling procedure and how your value for the item is determined are described below.

## Your Value for the Item

At the beginning of each round, the computer randomly draws a value between $\$ 0$ and $\$ 10$ inclusively, which is your value for the item offered for sale. Each value between $\$ 0$ and $\$ 10$ is equally likely to be drawn. Figure 1, below, shows your screen if your value were, for example, \$6.53.


Figure-1

The computer also draws three other values, each between $\$ 0$ and $\$ 10$ (and with each value equally likely), one for each of the other three bidders in your group. Each bidder is informed only of his own value, and is not informed of the value of any other bidder in his group.

## Selling Procedure

Each round the seller first offers the item for sale at a fixed price (called the "Buy Price") of \$8.10. Figure 2 shows your screen, at the beginning of a round, if your value were $\$ 6.53$. In this screen you are offered the Buy Price of $\$ 8.10$. You may either accept or reject the Buy Price by clicking on the appropriate button. If exactly one bidder in your group accepts the Buy Price, then he wins the item, he pays $\$ 8.10$, and he earns an amount equal to his value minus $\$ 8.10$. If more than one bidder accepts the buy price, then the winner is selected at random from those who accepted. The round ends whenever one or more bidders accept the Buy Price.


Figure-2

If no bidder accepts the Buy Price, then the item is offered for sale by an auction. In the auction, the price starts at $\$ 0$ but increases by $\$ 0.05$ every 0.20 second. At any moment you may drop out of the auction by clicking on the "Drop Out" button on your screen. (Figure 3 shows, for example, your screen if the price has reached $\$ 1.25$, your value is $\$ 6.53$, and you have not yet dropped out.) If you drop out, your earnings for the current round are $\$ 0$. The auction ends as soon as three of the bidders in your group drop out. The remaining bidder wins the auction, and purchases the item at the price at which the last bidder dropped out. The winning bidder earns his value minus the purchase price.


Figure-3

## The Results

At the end of each round, you will be notified whether or not you won the item, the purchase price paid by the winner (which will be $\$ 8.10$ when Buy Price is accepted), and your earnings for the current round. Your computer screen will also display the total you have earned so far. (The total includes a $\$ 5.00$ starting balance you are given at the beginning of the experiment.) If your total earnings fall below $\$ 0$, then you will be declared "bankrupt," your participation in the experiment will end, and a new participant will take your place. In that case your total earnings for the current experiment will be $\$ 0$. If you don't go bankrupt, then you will be paid $80 \%$ of your total earnings at the end of today's session.

Your Actual Earnings
from an Experiment
$=\quad$ (Total Earnings from the Experiment) x 0.80

Figure 4, for example, shows your screen if you have purchased the item at the Buy Price of $\$ 8.10$ and your value is $\$ 6.53$. In this case, your earnings for the current round would be $-\$ 1.57$ (= $\$ 6.53-\$ 8.10)$. Your total earnings at the end of current round, including your starting balance, would be $\$ 3.43$ (= \$5.00 - \$1.57).

|  |  |
| ---: | :---: |
| The winner of this round is: | YOU |
| Your value for the item was (\$): | 6.53 |
| The fixed price was (\$): | 8.10 |
| Your decision on the fixed price was: | Acceptance |
| Your earnings from this round is (\$): | -1.57 |
| Your total earnings after this round is (\$): | 3.43 |
| End of round: | 1 |
|  | Continue to the next round |

Figure-4

Figure 5 shows your screen if, instead, everyone rejects the buy price and you win the auction that follows. Suppose your value is $\$ 6.53$ and the purchase price is $\$ 3.50$ (since the third bidder dropped out at $\$ 3.50$ ). In this case, your earnings for the current round would be $\$ 3.03$ (= $\$ 6.53-\$ 3.50$ ). Your total earnings at the end of current round, including your starting balance, would be $\$ 8.03(=\$ 5.00+\$ 3.03)$.


Figure-5

Figure 6 shows your screen if your total earnings ever fall below $\$ 0$.


Figure-6

## Some Examples

Example 1: Suppose that you and the other three bidders in your group all reject the Buy Price. Then the item is offered for sale by auction. The auction ends as soon three bidders drop out. The remaining bidder wins the auction.

Example 2: Suppose that you and one other bidder accept the Buy Price. Then you win the item with probability one-half. If you win, your earnings equal your value minus $\$ 8.10$. If you lose, your earnings are zero.

Example 3: Suppose everyone rejects the Buy Price. In the auction, the third bidder drops out when the price reaches $\$ 4.25$, and you have not yet dropped out. Then you win the auction and pay $\$ 4.25$. Your earnings equal your value minus the $\$ 4.25$ purchase price, and may be either positive (when your value exceeds \$4.25) or negative (when your value is less than \$4.25). Every other bidder in your group earns zero.

Example 4: Suppose everyone rejects the Buy Price. In the auction, you drop out at a price of $\$ 5.50$, and the third bidder drops out at a price of $\$ 6.25$. Then your earnings are zero. The last bidder remaining in the auction wins the item and pays a price of $\$ 6.25$. His earnings equal his value minus the $\$ 6.25$ purchase price.

You may not talk with any other participants during the experiment. If you have a question, please raise your hand and the lab monitor will come to answer your question.

