

Activity 5 - Market for Lemons

EC327 Game Theory

February 22, 2024

Game Description

In Top Gear Season 21 Episode 1, the three presenters, Jeremy, James, and Richard are challenged by the producers to each buy a 'hot' hatchback for less than £800.

<https://youtu.be/7RDziX3sqHI?list=PLWpVvJ8o7wzy1a760RwP9tAIR2EPx0FRu>

For the purposes of this game, suppose that there are two levels of quality in the Craigslist used car market.

- "Good" quality cars are worth £600 in resale value.
- "Lemons" are only worth £200 in scrap value.

Activity Rules

- Break into groups of 4. Pick three people to be presenters (buyers of cars) and one person to be the Craigslist dealer.
 - I will give each dealer 3 different cars to sell. They can observe the quality of the car. **But don't show the quality to the buyers!!**
 - Dealers earn profit based on the price they sell each car for minus its actual value.
 - Presenters have an £800 budget to buy a car. The winner of the challenge will be the presenter who has the highest resale value of their car which is the true value of the car + whatever budget they had left over to improve it.
1. The Craigslist dealer will auction off one car at a time. They can choose the order of the cars they auction and starting prices.
 2. The presenters will bid on the dealer's cars until either everyone has bought a car or presenters have not found any cars they would be willing to buy at prices the dealer is offering (but this means they lose the challenge). Presenters can only buy one car.
 3. Buyers will reveal the quality of the car they received and calculate who had the highest resale value.
 4. Record the prices and true quality of all cars at your table.
 5. Collect your car cards and hand them to the next table. Repeat steps 1-4 with your new car cards.