ECO316: Applied Game Theory

Problem Set #9 Solutions

1. **Screening:** Generally, we can think of two types of travelers: leisure travelers and business travelers, where (i) business travelers are less likely to be traveling with their family and (ii) business travelers are more likely to have a third-party (their employer) paying for the travel, making them less price sensitive. As business travelers are likely not traveling with their family, a ticket returning on Thursday/Friday allows them to be with their family over the weekend, whereas a Saturday/Sunday ticket causes them to miss time with their family. By contrast, leisure travelers are happy to return on the weekend as they are more likely to already be with their family on the trip. Hence, a customer demanding a Thursday/Friday return is more likely to be a business traveler. As noted, business travelers are less price sensitive, so the airline can optimally charge a higher price than for Saturday/Sunday return tickets.

2. **Dutch Auctions:** In the sealed-bid first-price auction, agents submit a bid and if an agent makes the highest bid, they receive the item and pay a price equal to their bid. Suppose instead that we run a Dutch auction on their first-price bids. The first agent to 'claim' the good will be the one who submitted the highest bid and will pay a price equal to their bid, which is the same price as in