ECON-C5100 Digital Markets
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Exercise Set 3 – model answers

1. Find a real example of an auction (other than the examples in the lecture slides), can be either online or offline.
On purpose quite easy if you made the effort. Interesting cases for sure! I have reduced some fraction of the points if I couldn't follow the logic or if something was missing or wrong. As a general comment the question format perhaps directed the terminology that you used in the answers too much. An English auction where prices go gradually up could be "open-cry" when there is an auctioneer present but "ascending price" auction would most likely be the appropriate term online. Relatedly, "first-price" and "second-price" auctions refer typically to sealed bid auctions, not ascending price auctions. I have not deducted points on terminology, though.

2. Ad auction with two positions.
This was quite involved exercise, but in general well answered. If you had something wrong, consult the lecture slides/video and the reading materials. If still not clear, ask me.

3. Online markets. Comparison of prices and websites.
Fun to grade exercise for sure, great effort from most! In some cases if you were super short, I couldn't really base my grading on just few words. For the price comparisons between e.g. the U.S. and Finland, shipping costs obviously matter, and for some product categories there are import fees. Also good to remember that the U.S. online prices usually don't include any sales taxes, whereas we pay 24% VAT (also for shipping and fees). There might be quality differences that are not obvious, e.g. the terms of warranties might be different and our consumer protection laws would in general be more stringent than in the U.S., all which the firms should take into account when they do pricing. Finally, the currency fx-rate fluctuations might matter in some cases. I'd guess e.g. Apple likes to set fixed prices for long time periods (this is the retail prices are sticky story), but at least in some cases Amazon could use its global scale and daily fx-rates to create arbitrage of sorts (not sure about the extent & I don't recall reading anything on this in particular, though there is plenty of research on passthrough of fx-rates).

4. The use of data by firms.
Hopefully relatively clear from lectures, though these might trick you if you haven't been following the storyline closely.