COMS 4995-6: Exercise Set #2

Due by Noon on Wednesday, February 5, 2020

Instructions:

- (1) You can work individually or in a pair. If you work in a pair, the two of you should submit a single write-up.
- (2) Submission instructions: We are using Gradescope for the homework submissions. Go to www.gradescope.com to either login or create a new account. Use the course code MKRKK6 to register for COMS 4995-6. Only one person needs to submit the assignment. When submitting, please remember to add your partner's name (if any) in Gradescope.
- (3) Please type your solutions if possible. We encourage you to use the LaTeX template provided on the course home page.
- (4) Write convincingly but not excessively. You should be able to fit all of your solutions into two pages, if not less.
- (5) Except where otherwise noted, you may refer to the course lecture notes and the specific supplementary readings listed on the course Web page *only*.
- (6) You can discuss the exercises verbally at a high level with other groups. And of course, you are encouraged to contact the course staff (via Piazza or office hours) for additional help.
- (7) If you discuss solution approaches with anyone outside of your group, you must list their names on the front page of your write-up.
- (8) Refer to the course Web site for the late day policy.

Exercise 8

Give at least two real-world examples of markets (not already discussed in class) that suffer from congestion, and note one or more techniques that each of these markets uses to mitigate it.

Exercise 9

Give at least one real-world example of a market (not already discussed in class) where some form of signaling is implicitly or explicitly used by participants to express special interest.

Exercise 10

One purpose of market regulation is to prevent certain kinds of market failure. For example, consider the ban on insider trading: you can't make trades on the stock market based on information about a company that's not available to the public. What kind of market failures might you expect in a market where insider trading is rampant?

[Hint: how would *you* feel about buying or selling on such a market?]

Exercise 11

Consider U.S. college admissions. Does it make more sense to think of it as a market with money, or a market without money?

- (a) Give the strongest argument that you can in favor of a market with money.
- (b) Give the strongest argument that you can in favor of a market without money.

Exercise 12

At some restaurants, it can be pretty hard to get a reservation. Look into the extent to which there is currently a market for restaurant reservations (in NYC or elsewhere) and report on your findings. Speculate on the future of such a market, and explain your reasoning.

Exercise 13

Once you start looking for them, you start seeing markets in unlikely places. One source of examples is the blog Marginal Revolution, which has occasional posts on "markets in everything." Read a few examples in this series, and summarize one that you particularly like (in your own words, of course). Or alternatively, come up with your own example in the same spirit.

Aspects you can discuss: What is being bought and sold in the market? Is it centralized or decentralized? Does it involve money, or not? Why did the market arise now? (On the last point, you could think about technology shifts, changing trends, corrections to other poorly designed markets, etc.)