Recitation 1

NOT FOR DISTRIBUTION BEYOND THE CLASS
Week 1 (8/28-9/3): Core Principles of Economics

Recap of this week's most important concepts:

- Scarcity, trade-offs, incentives,
- Willingness to pay, willingness to accept, economic surplus, optimization
- Opportunity cost
  - Definition and formula (monetary value + forgone net benefit from next best alternative).
  - Ignore sunk costs! (or take them into account everywhere)
  - How to calculate opportunity cost, with 2 or more possible options (i.e. know how to identify *next best* alternative if more than one alternative)
  - Interpretation of opportunity cost: action should be taken if its benefit exceeds its opportunity cost.
- Rational principle: do something as long as marginal benefit exceeds marginal cost, up to the point where they are equal.

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1. Malcolm has just arrived in New York City for a well earned holiday but is given only three options of what to do by his wife Lucy. He can go see Hamilton ("boring!" thinks Malcolm) where he will have to pay $200 for a ticket, but if it was up to him he would only go if it was free. Alternatively he can go shopping with Lucy, where he knows he'll end up spending $200 but because Malcolm loves high-end fashion, he'll value his purchases at $500. Finally, he can stay in his hotel if he promises to work on his memoir (which doesn't come at any financial cost to him). He chooses this last option. What is the opportunity cost of his decision?

   a. $0
   b. $100
   c. $300
   d. $400

e. $500

2. Brittany bought a sweater from an online retailer for $40. She was disappointed when the package arrived last week because the sweater turned out to be too small for her. She could return the sweater and receive a refund, less a $10 shipping fee. Another option is to sell the sweater to her friend Jessica, who offered to purchase it for $25. What is the opportunity cost of selling the sweater to Jessica?

   a. $10
   b. $15
   c. $25
   d. $30
   e. $40

3. Lucy was planning on going to New York City for the weekend to see a Broadway show. She bought a $130 non-refundable train ticket, as well as a $40 ticket to the show, which she is able to resell for half of the face value. However, she just found out that the outdoor club is going on a hiking trip the same weekend as the show. The hiking trip costs $50, all-inclusive, and she values it at $100. What is her opportunity cost of going to New York?

   a. $220
   b. $90
   c. $70
   d. $170

The next questions are for your own practice.

4. Minshen just spent $5 on a refundable movie ticket before his friend gave him a free ticket to the Philadelphia Orchestra concert. Going to the movies or to the concert are his only options. Going to the movies is worth $7 to Minshen, while going to the Philadelphia orchestra concert is worth $10. The opportunity cost of going to the Philadelphia Orchestra concert is

   a. $0
   b. $2
   c. $5
   d. $7

e. $10

f. $12

5. Mary bought a refundable movie ticket for Saturday night, which cost her $10. But she just received an invitation to an Among Us Game Night from her college house, scheduled at the same time as the movie. If she stays in her dorm and plays the Among Us game online, she will order pizza, which will cost her $20. If instead she goes to the movies, she will buy popcorn for $5. She loves Among Us and values the game night at $40. What is Mary's opportunity cost of going to the movies?

   a. $15
   b. $25
   c. $35
   d. $45

6. Carolyn needs to provide care for her ailing parents. She can either quit her job and move in to their house to take care full time, or put them in a nursing home and keep her current job, which pays $130,000. The nursing home would cost her $60,000. She knows her parents would not like the nursing home and she values the benefit of not sending them there at $50,000. Is it a rational decision to quit her job and take care of her parents, and why?

   a. No, because the benefit of that decision is $50,000 and its opportunity cost is $60,000.
   b. No, because the benefit of that decision is $50,000 and its opportunity cost is $70,000.
   c. No, because the benefit of that decision is $50,000 and its opportunity cost $130,000.
   d. No, because the benefit of that decision is $50,000 and its opportunity cost $190,000.