Tutorial 1

-Jacob Hazen

Details about Tutorials

- Recorded

- Going over practice problems
  - Might select only a few to go over bc of time constraint

- May include graded quizzes

- Will be posting these power points at:
  - https://jacobhazen1.github.io/ECON1001E/

Tutorial Expectations

- Layout:
  - Don't be afraid to use your mic!
    - (I'd rather you use your mic)
    - Please mute yourself if you are not using it
  - Camera
    - Up to you
- Might Do:
  - Breakout rooms
  - Groups to work on problems

Office Hours

- 11:35 - 12:35PM Monday **Or** Wednesday
  - POLL

About me

I am a Graduate Student in the Collaborative Master's program in Economics and Data Science at Carleton University. My research interest involves the overlap of Economics, Data Science, and Computer Science— specifically addressing complex real-world resource allocation problems with computational optimization.

Question 1

- What is the opportunity cost of seeing a movie?
  - What is opportunity cost?

What is opportunity cost?

- Scenario: 2 Options
  - You go to Uni for 4 years
    - Make no money(unrealistic/but lets just assume this)
  - Work full time at McDonalds
    - Make $10/hr

What is opportunity cost?

- **Go to Uni:**
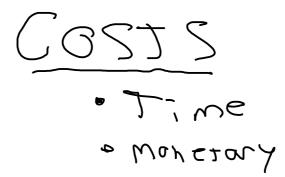 - Opportunity Cost: Missing out on $10/hr over that 4 years

- **Don't go to Uni:**
  - Opportunity Cost: Won't be earning that additional salary which a higher academic degree will get you.

- Pick a scenario which **minimizes your opportunity cost** (but it isn't always that simple)

Question 1

- What is the opportunity cost of seeing a movie?

  – Opportunity Cost = Cost of admission + the value of time going to the theatre

  The time value depends on what else you might do with that time; if it's staying home and watching TV, the time value may be small, but if it's working an extra three hours at your job, the time value is the money you could have earned.

Question 3

- Question: You were planning to spend Saturday working at your part-time job, but a friend asks you to go skiing.

  – What is the true cost of going skiing?

  – Now suppose that you had been planning to spend the day studying at the library. What is the cost of going skiing in this case? Explain

  2 ⎡ Library
    ⎣ Skiing

Question 3

COSTS
- Time
- Monetary

- Let's think of this:
  - The cost of skiing?
    - Time(You could be working(i.e making money)
    - Money, ticket, rental,etc

Question 3

- What is the cost of going skiing instead of going to library?
    - Cost of Skiing:
        - Time
        - Money
        - Low grade in course

Question 4

- Question: Robinson can gather 3 coconuts in an hour. If he spent that hour fishing, he would be able to catch 6 fish. What is Robinson's opportunity cost of gathering 1 coconut?

$$3 \cdot coco = 6 \cdot fish$$

$$1 \, coco = \frac{6}{3}$$

$$1 \, coco = 2 \, fish$$

Question 4

- Break down:
  - 2 Options
    - 3 coconuts in an hour
    - 6 Fishes in an hour
- Answer:
  - Opportunity Cost of gathering 1 coconut is 2 fish (i.e 3/6 = 2)

  6/3

Question 5

- Question: What is the effect of introducing the following <u>unemployment benefit</u> on the effort put into looking for work for a person that has become unemployed: <u>a fixed income of $800 a month for 9 months after being laid off?</u>

COST before UEB $\longrightarrow$ NOT making money

COST after UEB $\longrightarrow$

Question 5

- Break down:
  - What is unemployment benefit?
    - Benefit paid to people who have recently lost their job via no fault of their own (laid off, the business closed, etc.)
    - Percentage of their income

Question 5 - Answer

- Answer:
  - Less incentive to find a job!!!
    - Bc they are getting paid to do nothing!

Question 7 - Question

–

A farmer can choose to plant corn or soybeans. Soybeans have a yield of 2 tons per acre while corn has a yield of 4 tons per acre. Why would the farmer choose to plant soybeans?

Question 7 - Answer

What if Soybeans sell for $3 and corn sells for $1?

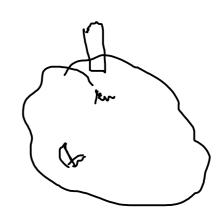- Farmer chooses **profit**

  - **Profit** is key in economics (Maximize Profits)

FirmS ⟶ Profits!

Question 8 - Question

It is more likely that the government can help resolve environmental problems than market forces on their own. Do you agree?

Question 8 - Breakdown

- What is an externality

  - Scenario:

    - Environment: Pond
    - 2 Businesses: Fishery and metal
      - Fishery uses pond to fish
      - Metal uses pond to dump toxic stuff
  - Fishery did not agree to this -> Govt. Steps in

Question 8 - Answer

The market alone cannot achieve an efficient outcome when externalities exist.

Question 9 to 11 - Question

- True or false: normative statements are testable.

- Positive or normative: The price of beer rises when the government implements a new tax on beer.

- Positive or normative: The government should increase the tax on alcoholic drinks.

Question 9 to 11 - Break down

- What is positive/normative economics?
  - Normative:
    - **How things should be**
    - More Theoretical
  - Positive:
    - **How things actually are**
    - More Empirical

Question 9 to 11 - Answer

- True or false: normative statements are testable.

  - False

Question 9 to 11 - Answer

- True or false: normative statements are testable.
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- Positive or normative: The price of beer rises when the government implements a new tax on beer.

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- Positive or normative: The government should increase the tax on alcoholic drinks.

Question 9 to 11 - Answer

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- Positive or normative: The price of beer rises when the government implements a new tax on beer.

  – Positive

- Positive or normative: The government **should** increase the tax on alcoholic drinks.

  – Normative, **"Should"**