

Week 1 practice problem solutions  
Elements of Microeconomics (discussion section 1)  
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### Question 1: Tradeoffs and Opportunity Cost

You are trying to decide whether to go on a beach trip during spring break. What costs would you need to consider in making this decision?

**Answer:**

- Direct cost of the vacation: transportation, food, renting a house ...
- Money you could make if you worked your part-time job instead
- Studying you could get done: preparation for finals, work on semester projects, etc.

The opportunity cost is whatever benefit you would get from your second best option, which could be a combination of the things above.

### Question 2: Thinking on the Margin

Speculate on whether or not you think the marginal cost or benefit of the specified item is large or small:

1. The marginal benefit of your first glass of water for the day **high**
2. The marginal benefit of your seventeenth glass of water for the day **low**
3. The cost of streaming an additional movie when you already have netflix **zero** ...
4. The cost of streaming an additional movie on a streaming service you don't already own **high**
5. The marginal benefit of your first hour of studying for your upcoming econ 102 exam **high**
6. The marginal cost of your 30th hour studying in a row **high**
7. For an airline, the cost of flying one additional passenger on a flight that is not fully booked **low**
8. For an airline, the cost of flying one additional passenger when the current flight is fully booked **high**

### **Question 3: More on Trade-offs**

What is the source of trade-offs? Can you give an example from your own life?

Answer: Scarcity is the source of tradeoffs. For this example, I will use the tradeoff between study time and sleep time. For the purposes of this example, you may assume that is all I do. If I have 24 hours in a day, I can choose to spend all of them studying, all of them sleeping, or some mix between the two. If I wanted to study more, I would need to sleep less. And vice versa. This tradeoff exists because my time is scarce. If I had more time, I could actually do both more studying and more sleeping.