Week 1: January 25th
ECON 301: Intermediate Microeconomics
Prof. Marek Weretka

TA Contact Information
Email: lpjacobs@wisc.edu
Website: ssc.wisc.edu/~lpjacobs/micro301
Office Hours: Tuesdays 10 am-12 pm, 7485 Social Sciences
Discussion Sections (all on Fridays):
- 8:50-9:40 am, 5231 Social Sciences (DISC 310)
- 11-11:50 am, 6203 Social Sciences (DISC 316)
- 12:05-12:55 pm, 6240 Social Sciences (DISC 317)
- 11:20-2:10 pm, 6228 Social Sciences (DISC 315)

Problems for Discussion:

Exercise 1:
It’s January in Madison. The only two goods that matter right now in Madison are hot chocolate (H), which costs $2 per cup, and pairs of gloves (G), which are $20 a pair. You found $100 in the pocket of your old coat and this is your only income.

- (a) What is the equation representing your budget constraint?
- (b) If you were to only consume hot chocolate, how many cups could you buy? What if you purchased only pairs of gloves?
- (c) Show the budget set graphically, with hot chocolate on the horizontal axis and pairs of gloves on the vertical axis.
- (d) A blizzard prevents a shipment of cocoa from entering the city, and hot chocolate rises to $4 per cup. What does the new budget set look like graphically?
- (e) The roads are clear and the price of hot chocolate goes back down to $2 per cup. More good news: You found $10 while shoveling snow! What does your new budget set look like?

Exercise 2:
With ounces of steak (S) on the horizontal axis and potatoes (P) on the vertical axis, graphically show indifferences curves representing the following preferences for Hank:

- (a) Hank must consume exactly 4 ounces of steak per 1 potato. (Assume anything left over of either steak or potatoes can just be given to the dog.)
• (b) Hank likes steak and potatoes and prefers to have a good balance of both, but he won’t turn down a large helping of either of them.

• (c) Hank does not like potatoes at all; the fewer the better for him. But he does like steak.

• (d) Hank neither likes nor dislikes potatoes, but he prefers more steak to less steak.

• (e) Hank is always happy to trade 2 ounces of steak for an extra potato. How is this different from part (a)?

Exercise 3:
For each of the scenarios in question 2, determine whether the preferences are (i) (strictly) convex and (ii) (strictly) monotonic.