Professor Zetland Microeconomics Homework (10 points) 17 Nov 2015

Name and Student ID: _____

Due 24 Nov 2015. Turn in these (or other) pages stapled.
(Staples can be bought in class for cookies.)

1. Bob and Nob go to a club. Nob enjoys Heineken and Grolsch equally, i.e., $U_n = h + g$.

   (a) (1 point) Draw Nob's indifference curves for utilities equal to 3, 4 and 5 "utils" from consuming combinations of these beers. (Assume 1 util = €1.)

   (b) (1 point) Use Nob's marginal utility from Heineken to draw his demand curve. Label all important parts of the plot.

   (c) (1 point) Grolsch is on sale, €1 per cup. Heineken is €2 per cup. How much of each beer does Nob drink if he has €5? *Also* show this on Nob's indifference curves (above).

   (d) (1 point) Bob has to drive both of them home later that night, and he knows that Nob has a drinking problem. Nob forgot his wallet, so he asks Bob for some money. Bob is talking to a cute girl who's there with some friends. Should Bob leave the conversation to get change (so he can give Nob less than €50) or should he trust that Nob will be responsible with €50? Explain Bob's choice.

2. (a) (1 point) You like to drink and eat while you watch football at Pub Jupiter, but you can only afford to spend €12.

   Draw your "budget constraint" for Jupiter (vertical axis) and bitteballen (horizontal axis) when they cost €3 (each) and €3 (per serving), respectively.

   (b) (3 points) You like Jupiter more than bitteballen but always together, i.e, $U(j, b) = j^{\frac{3}{4}} b^{\frac{1}{4}}$. Use the Lagrangian method to calculate your utility maximizing consumption on a normal night at the pub. Show all your steps, double check you can afford your final consumption, AND calculate your utility.

(c) (2 points) Your team is leading in the league and the pub celebrates by lowering the price of bitteballen to €1. What's your new consumption bundle and utility? Explain how AND why your consumptions of Jupiter and bitteballen change (if at all). Show the point of consumption on the original budget constraint (part (a) above) as well as consumption on the new budget constraint (draw it).