Econ 331 – Intermediate Macroeconomics - Homework N3 5.5 points

- N1. (3 points) For a specific model where the consumption function is given as C = 100 + 0.75Y, while investment is 60, with no government purchases and no net exports,
 - a) find the equilibrium level of income
 - b) find the level of savings
 - c) if, for some reason, output is at the level of 700, what will the level of unplanned inventory be?
 - d) if *I* rises to 80, what will the effect be on the equilibrium income?
 - e) what is the value of the multiplier, α , here?
 - f) draw a diagram indicating the equilibrium in (a).
- **N2**. (0.5 points) Suppose the consumption function in problem N1 changes to C = 100 + 0.9Y, while *I* remains at 60 and there is no government purchases and no net exports:
 - a) is the equilibrium level of income higher or lower than it was in problem N1(a)? Calculate the new equilibrium level, Y`, to verify this.
- N3. (2 points) Now let us suppose we have full blown economy with C, I, G, but no NX:

$$C = 50 + 0.8Y$$

 $I = 70$
 $G = 200$
 $TR = 100$
 $t = 0.2$

- a) calculate the equilibrium level of income and the multiplier in this model.
- b) calculate the budget surplus, BS.
- c) suppose t increases to 25%. What is the equilibrium income now? The new multiplier?
- d) if t = 100%, why is the multiplier 1?