1. (2 points) The accounting identity for gross national income (GNI) is: \( GNI = C + I + G + TB + NFA \). Using this expression, show that in a closed economy domestic production (Q), gross national income (GNI) and gross national expenditures (GNE) are the same. Show also that domestic investment is the same as domestic savings in a closed economy.

2. (2 points) Assume all dollar units are real dollars in billions. In Year 0, Argentina thinks it can find $150 of domestic investment projects with a MPK of 10%. Argentina invests $84 in Year 0 by borrowing $84 from the rest of the world at the world real interest rate 5%. There is no further investment or borrowing after Year 0. Assume that Argentina initial wealth prior to Year 0 is zero. Assume also that G=0 always, and I=0 except in Year 0. Assume no unilateral transfers or factor income flows. The investment projects pay off in Year 1 and thereafter. The interest rate payments also take place in Year 1 and thereafter. Assume also that the domestic production without investment is $200 in all years. Should Argentina fund this project? Why might Argentina only be able to borrow $84 and not $150?

3. (2 points) Given the situation in Question 2, calculate Argentina’s external wealth in Year 0 and thereafter.

4. (2 points) Given the situation in Question 2, suppose the interest rate rises from 5% to 15% in Year 5. Can Argentina stick to the original plan? What can Argentina do to meet the rising interest rate payment?

5. (2 points) Let \( k \) denote the capital-labor ratio. Suppose Turkey and the EU have different production functions \( y = f(k) = Ak^{1/3} \), where A for Turkey is lower than A for the EU. Assume realistically that Turkey has lower capital-labor ratio than the EU. In the world of free capital mobility, which country will become lender? Why? Explain and depict an appropriate diagram.