

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

- 1) (20 points) Draw the S/I diagram for a small open economy with balanced CA and KFA. Illustrate the effects of a government spending increase. Explain why the curve(s) moved as drawn. Use this to explain the term “twin deficits”.
- 2) (5 points) Suppose that an economy was growing at 5%, the capital stock was growing at 6%, and labor was growing at 2%. Calculate the growth rate of total factor productivity. Show all work.
- 3) (20 points) Draw the Solow Growth Model diagram. Illustrate the effects of an increase in the growth rate of the population. Explain why the curve(s) moved as drawn. What happens to the equilibrium GDP per capita and equilibrium capital-labor ratio? Briefly explain how you can tell that.
- 4) (20 points) Draw the Solow Growth Model diagram. Have the economy start to the left of the equilibrium. Explain why the economy will automatically move to the equilibrium.
- 5) (15 points) Use the Endogenous Growth Model equation to figure out the long-term effects of the huge government deficit and debt which the USA currently has. Assume Ricardian Equivalence does not hold.
- 6) (20 points) What can the government do to increase  $\Delta A/A$  in the Endogenous Growth Model? Give two actions the government can take. Explain how those actions will increase  $\Delta A/A$ .