

Do not put your name anywhere on the assignment, other than on the back of this sheet of paper. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. 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 do double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (15 points) Explain  $c = f(k) - (n + d)k$ . Note that  $k$  has two different effects. Explain both.

2) (20 points each) Illustrate the following events on the Solow Growth Model diagram. Explain why the curve(s) moved as drawn. What happens to the long-run savings per worker and the capital-to-labor ratio? Be careful labeling your graph because you do not want to use capital letters.

A) In the USA, the savings rate has dropped a lot in the past decade.

B) The depreciation rate increases.

C) The population growth rate increases.

3) (15 points) Suppose a country starts on a graph to the left of the equilibrium on the Solow Growth Model. Explain what would cause the country to move to the right. Do you think that will be a quick or slow movement? Explain your logic.

4) (10 points) What could the government do to prevent the drop in the capital-labor ratio that the USA may be headed for? How would that reduce the problem?