Wilf Csaplar Jr. Economics 302 Homework #6 Due 03/16

Do not write your name on the assignment. Write your name only on the back of this sheet of paper and staple your answers on the front of this sheet of paper. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to follow these directions will cost you 1 point on the assignment and failure to type it will cost you 10 points.

1) (15 points) Explain $sf(k) = (n+d)k$. After you define, s, $f(k)$, and $sf(k)$, you can treat it as one variable.

2) (20 points) Draw the per-worker saving function and the steady-state investment curve. Illustrate an increase in the growth rate of labor. Explain why the curve(s) move. What happens to the long-run capital-labor ratio? Explain your logic.

3) (15 points) Is $k^* = k_G$? Explain your logic.

4) (20 points) Endogenous growth theory implies that the capital-labor ratios of different countries should converge over time. Why does it conclude this? Why does it not happen?

5) (15 points each) Since 2.5% growth for 50 years results in 244% growth and 2.0% growth for 50 years results in 169% growth. It is important that we get the growth rate back up to 2.5%.
A) How can we get the savings rate to increase? Explain how you proposal would work.
B) How can we get the per-worker production function to increase? Explain how you proposal would work.