

Eco 362: Economic Growth  
Fall 2013  
Problem Set 1

Note: all Weil question numbers refer to the 3rd edition textbook.

Question 1: Weil Chapter 1, Q 6

Question 2: Weil Chapter 3, Q 2

Question 3: Weil Chapter 4, Q7

Question 4: Consider the Solow model where the production function is given by  $Y_t = AK_t^\alpha L_t^{1-\alpha}$ ,  $0 < \alpha < 1$

- a) Derive the equation for the evolution of  $k_t = \frac{K_t}{L_t}$
- b) Discuss the effects on the economy of a **one time, permanent** increase in the **population growth rate**. Discuss the effects graphically and in words.