

Problem Set 4: Due in Class, Wednesday March 5

1. Suppose the growth rate of GDP is equal to $(1/3)$ times the growth rate of the capital stock plus $(2/3)$ times the growth rate of the labor force plus the growth rate of TFP. What is the effect on the growth rate of per capita GDP of each of the following:

- a) An increase in the growth rate of the capital stock from 1% per year to 2% per year.
- b) An increase in the growth rate of the labor force from 1% per year to 2% per year.
- c) An increase in the growth rate of TFP from 1% per year to 2% per year.
- d) Which of the above has the largest effect on the growth rate of per capita GDP?

2. Stiglitz-Walsh, Chapter 9, p. 211, Problem 5.

3. Stiglitz-Walsh, Chapter 9, p. 211, Problem 6.

4. Stiglitz-Walsh, Chapter 10, p. 242, Problem 6.

5. Stiglitz-Walsh, Chapter 11, p. 266, Problem 5.

6. Stiglitz-Walsh, Chapter 11, p. 266, Problem 6.

7. Stiglitz-Walsh, Chapter 13, p. 319-320, Problem 2 (note – this is not the review question 2 but problem 2).

8. Stiglitz-Walsh, Chapter 13, p. 320, Problem 4.

9. Stiglitz-Walsh, Chapter 13, p. 320, Problem 6.