

**Final Exam**  
**Principles of Economics: Prof. West**  
**Spring 2009**

Name \_\_\_\_\_

Please label all graphs completely and write full explanations. The exam is worth 100 points. Points for each question are given in parentheses. Please read through the entire exam before starting.

1. (25 points) *Income Inequality*: An older edition of Mankiw's textbook provides the following information on the income distributions in Canada and Russia:

Country	Bottom Fifth	Second Fifth	Middle Fifth	Fourth Fifth	Top Fifth
Canada	7.5%	12.9%	17.2%	23.0%	39.3%
Russia	7.4%	12.6%	17.7%	24.2%	38.2%

a. (10 points) Graph the Lorenz curves for these income distributions on the same graph. Can you compare these Lorenz curves to determine which country has a more equal distribution? Explain.

b. (8 points) Explain how you would calculate and interpret the Gini coefficients associated with these distributions.

c. (7 points) Compared to Canada and Russia, is the income distribution in the United States more or less equal? Explain, making sure that you use relevant statistics in your answer.

2. (25 points) *Productivity, Wages, and Growth Policies*: You have been commissioned by the World Bank to study the determinants of the difference in incomes across countries. They ask you to focus on productivity.

a. (9 points) Use the economy production function to derive an equation for productivity. Be sure to state any assumptions you employ.

b. (8 points) How do wages relate to productivity? Use a graph of the firm's labor demand in your explanation.

c. (8 points) The World Bank asks you to help them decide whether to fund a program that liberalizes trade or a program that increases saving and investment. Using simple bullet-point lists (no need for full paragraphs), discuss the relative merits of each program. Be sure to discuss how exactly each program would affect productivity.

3. (25 points) *The Current Macroeconomy.*

a. (15 points) Use information on GDP growth, CPI, one other macroeconomic indicator, a graph of aggregate supply and aggregate demand, and explain in words what is occurring in the U.S. economy. Please place the numbers in the table below:

	2008-I	2008-II	2008-III	2008-IV
% change in GDP				
CPI				
Another indicator:				

b. (10 points) What is the Federal Reserve Bank doing in response to what you described in part (a)? Use a graph of the money market and explain in words.

**II. (25 points) Short Answer Questions**

1. (10 points) What happens to net capital outflow when the interest rate rises, and why?

2. (15 points) You have been asked to complete a study on the determinants of the gap between whites' earnings and blacks' earnings in the United States. Outline a strategy for a statistical approach, basing your approach on class discussion of the methodology used to explore the determinants of the male-female wage gap.