

ECO 120: Global Macroeconomics
Prof James Murray - Spring 2014
In-class Exercise: Exam 1

Name: _____

Directions: Work in groups of up to four people and answer the following questions. All papers will be collected, but only one member's paper will be randomly selected and graded and all members of the group will receive the same grade.

By signing below, you agree that the following work represents the efforts of everyone in the group, and you are willing to accept as your own grade for the group project the grade earned from this representation of your group's work. Every member must agree to these terms to earn a non-zero grade for this assignment.

_____ Signature Group Member 1	_____ Print Name	_____ Date
_____ Signature Group Member 2	_____ Print Name	_____ Date
_____ Signature Group Member 3	_____ Print Name	_____ Date
_____ Signature Group Member 4	_____ Print Name	_____ Date

1. Suppose the country of Happyland has the following production possibilities for toys and ice cream when using all resources efficiently:

Toys	0	5	10	15	20
Ice Cream	100	90	70	40	0

- (a) (5 points) Graph the production possibilities frontier. Label the portions of the figure that represent efficient levels of production, inefficient levels of production, and impossible levels of production.
- (b) (5 points) What is the marginal opportunity cost of producing the 40th ice cream?
- (c) (5 points) What happens to the opportunity cost of ice cream as Happyland decides to produce more ice cream?
- (d) (5 points) Suppose a new dietary supplement is invented for dairy cows which increases their ability to produce milk. Can this new invention lead to an increase in production of toys? Describe and illustrate the effect on the production possibilities frontier.

2. (5 points) In the aftermath of the most recent recession, the federal government provided low interest loans and other aid to automobile producers. Describe and illustrate what should happen to the price of automobiles and the quantities sold when the government eliminates these programs.

3. (5 points) High rains and flooding in Illinois and Iowa in 2009 destroyed farmland suitable for growing pumpkins. What do you think happened to the price of canned pumpkin and the quantities sold? Provide appropriate graphs to illustrate your answer.

4. (10 points) Suppose the price of high definition televisions decreases while the quantity sold increases. What might cause this to happen? Provide a real world example and illustrate the impact with appropriate graphs.

5. (10 points) Suppose financial investors expect the U.K. pound sterling to appreciate against the U.S. dollar over the next year. Describe and illustrate the impact on *today's* value of the U.S. currency relative the U.K. pound sterling.
6. (10 points) Suppose there is an increase in the average level of income for American consumers, and that Japan is a major trading partner. Describe and illustrate the impact on value of the U.S. currency relative the Japanese Yen.
7. (10 points) Suppose there is a general movement of manufacturing from the United States to India, which includes raw materials such as steel, textiles, rubber and plastics, etc. Suppose that as a consequence, the United States demand for imports from India increases. Describe and illustrate the impact on value of the U.S. currency relative to the Indian Rupee.

8. Suppose an economy produces only televisions and computers, and the prices and quantities that prevailed for the last two years were given by:

	2008	
	Price	Quantity
Televisions	\$450	100
Computers	\$950	150

	2009	
	Price	Quantity
Televisions	\$500	120
Computers	\$1000	180

- (a) (10 points) Compute the growth rate of real GDP using 2009 as a base year.
- (b) (5 points) Which grew by a larger amount, nominal GDP or real GDP? Explain why.
- (c) (10 points) What was the inflation rate from 2008 to 2009?
- (d) (5 points) Describe two problems using real GDP as a measure of standard of living.