12 Questions (1-5 on front, 6-12 on back). 40 points total. Good luck

1. <u>4 points.</u> You are given the following data for the economy of Canada. Compute the growth rate of real GDP in Canada between 2010 and 2011.

	Bacon prices	Bacon quantites	Beer prices	Beer quantities
2010	\$20/pound	10 pounds	\$40/case	20 cases
2011		12 pounds		19 cases

- 2. <u>4 points.</u> In the CPI release for March 2014, the rate of increase for all items in the CPI from March 2013 to March 2014 was 1.5 percent. The rate of increase of food and beverages was 1.7 percent with expenditure share 14.9 percent; the rate of increase of housing was 2.8 percent with expenditure share 41.45 percent; and the rate of increase of transportation was -1.2 percent with expenditure share 16.42 percent. Compute the growth rate of all times in the CPI excluding food and beverages, housing, and transportation.
- 3. <u>4 points.</u> A US company buys 10 pairs of white shoes from a foreign supplier and pays \$1 for each pair of shoes to the supplier. The company paints the shoes red and sells 7 pairs of red shoes to US consumers for \$10 for each pair and ships 3 pairs of red shoes overseas to be sold in foreign markets at \$5 for each pair. Define the accounting for these transactions for Consumption, Exports, Imports, and GDP in the National Income and Product Accounts.
- 4. <u>4 points.</u> You have been given the following information for the country of Costa Rica:

Year	Apple Prices	Apple Quantities	Banana Prices	Banana Quantities
2012	4	6	8	10
2013	5	7	9	11

Fill out the following table.

Year	Expenditures on	Expenditures on	Nominal GDP
	Apples	Bananas	
2012			
2013			

Finally, for the 2012-2013 period (a) determine the growth rate of real GDP using the "apple equivalent" method and (b) compute the inflation rate in Costa Rica using the "expenditure share" method.

5. <u>2 points.</u> Over the 1955-2010 period, on average what is the average share of aggregate expenditures attributable to private investment? What is the average share attributable to government spending? Answers will be judged as correct if within a few percentage points.

- 6. <u>4 points.</u> Dean can brew 25 kegs of beer per hour and can make 50 wedges of cheese per hour. Randy can brew 20 kegs of beer per hour and can make 55 wedges of cheese per hour. Dean and Randy each work 8 hours per day. For both Dean and Randy
 - a. Determine the price of one keg of beer in wedges of cheese.
 - b. Determine the price of one wedge of cheese in kegs of beer.
- 7. <u>1 point.</u> Who has the absolute advantage in each good? Who has the comparative advantage in each good? Why?
- 8. <u>4 points.</u> A trader named "Kenny" appears. Using the method described in class and the videos, propose a trade in which Kenny makes profits.
- 9. <u>4 points.</u> The US can make 100 units of consumption today (C_t) per hour and 110 units of future consumption (C_{t+1}) per hour. Germany can make 80 units of C_t per hour and 86 units of C_{t+1} per hour. For both the US and Germany,
 - a. Determine the price of one unit of C_t in units of C_{t+1}
 - b. Determine the price of one unit of C_{t+1} in units of C_t
- 10. <u>1 point.</u> Who has the absolute advantage in the production of each good? Who has the comparative advantage in each good? Why?
- 11. <u>4 points.</u> A trader named "Kenny" appears. Using the method described in class and the videos, propose a trade in which Kenny makes profits.
- 12. $\underline{4 \text{ points.}}$ Suppose the U.S. does not like the current pattern of trade flows and wants to export what it is currently importing. Determine the minimum tax rate that the U.S. imposes on production of either C_t or C_{t+1} such that the U.S. achieves its objective.