ECONOMICS 112*

Assignment #1

2011/2012

Due Dates and Notes:

- ***DUE:*** By ***Friday February 3, 2:00 PM.*** Completed assignments should be placed in the slot marked for your section in the white assignment collection box on the 2nd floor of Dunning Hall. Late assignments will not be accepted.
- Use the ***Cover Page*** when submitting assignments.
- ***Group Work:*** Maximum ***four*** per group, all students must be registered in the ***same section of the same course***. Names must be in ***alphabetical order*** on the cover page.
- Graded work will be available for pick-up beginning on the afternoon of Friday February 17 in the Econ Distribution Center, Dunning Hall Room 334. You will require your ***student card***.
- This assignment covers material from Chapters 1, 2, 33 (pp 842-55), 3, 19 of the text.

True, False, or Uncertain [48 marks - 6 marks each]

Explain why each of the following statements is True, False, or Uncertain according to economic principles. **Use diagrams where appropriate.** Unsupported answers will receive no marks. It is the explanation that is important.

112-A1-1. It is often argued that developing countries should not bother installing old fashioned wired communication networks, because the cost of installing wired systems is high relative to using wireless systems. By this logic, a country like Canada should switch to wireless as well.

112-A1-2. In an economy that produces only guns and butter, if the economy is currently producing only butter, then the opportunity cost of guns is zero.

112-A1-3. Suppose that Ontario can produce 1 ton of wheat or 3 tons of corn per unit of resources and Manitoba can produce 4 tons of wheat or 4 tons of corn per unit of resources. Manitoba has an absolute advantage in the production of wheat, but Ontario has a comparative advantage in wheat production.

112-A1-4. The data in 112A1-3 tells us that trading wheat from Manitoba to Ontario at a price of 2 tons of corn per ton of wheat will make both provinces better off.

112-A1-5. An increase in consumer incomes will result in an increase in the price of any consumer good.

A4-6. A decrease in posted (nominal) interest rates necessarily means a decrease in real interest rates.

A4-7. On June 3, 2011 the Canadian dollar exchange rate with the Euro was 1.4316, while on January 20, 2012, the rate was 1.3105. The Canadian dollar appreciated between June 2011 and January 2012.

A4-8. Suppose an economy has a labour force of 10 and 2 unemployed workers. If one of the unemployed workers becomes discouraged and leaves the labour force, the unemployment rate decreases and the unemployment problem is reduced.

Problems [52 marks - marks for each part as shown]

112-A1-9. Using supply and demand diagrams, separately analyze the effects that each of the following events would have on the North American market for natural gas (a major heating and power generation fuel). Note the direction of any change in price and/or quantity traded (equilibrium quantity).

(a) Ontario and several other jurisdictions switch their coal-fired power plants to more clean burning natural gas power plants. [3]

(b) A major hurricane in the Gulf of Mexico shuts down gas production there for several weeks. [3]

(c) A technological change allows drillers to extract previously unavailable gas from shale deposits. [3]

(d) A sudden and expected to be protracted January thaw causes both buyers and sellers of natural gas to expect the price to decline in the future. [3]

(e) Both event (a) and event (c) take place simultaneously. [4]

(f) Two of the events above result in an increase in the price of gas. Suppose that you observed an increase in the price, but were unsure which of the events had taken place. What additional market information would you need to be sure? [4]

A4-10. Below are data describing the Canadian economy in 2006 and 2011 from the *Statistics Canada* website (www.statcan.gc.ca). In the table, *nomY* is nominal GDP in billions of that year's dollars, *Y* is real GDP in billions of 2002 dollars, *L* is the labour force, *E* is employment, and *Pop* is the population, all in millions. (Express percentages to one decimal place and dollar figures to the nearest dollar.)

Year	***nomY***	***Y***	***L***	***E***	***Pop***
2006	1,450	1,283	17.6	16.5	32.6
2011	1,721	1,360	18.7	17.3	34.6

(a) Calculate the five-year growth rate in both nominal and real GDP. What accounts for any difference? Explain [4]

(b) Calculate the unemployment rate for each year. [4]

(c) Calculate real GDP per worker and real GDP per capita for both years. [4]

(d) Calculate the growth rate in employment and in real GDP per worker. Can you see a simple relationship between these two numbers and the growth rate in real GDP? [4]

A4-11. Suppose that average consumption baskets (bundles) for 2010 and 2011 are as shown in the table below:

	Number of iPads	Pizza Slices
2010 {quantity, price}	{2 iPads, $700/iPad}	{200 slices, $3/slice}
2011 {quantity, price}	{3 iPads, $600/iPad}	{150 slices, $6/slice}

(a) What is the percentage change in the price of each good? Calculate the consumer price index (CPI) for 2010 and 2011 using 2010 as the base year. What is the inflation rate in the CPI? [7]

(b) Would all consumers be equally affected by the change in the reported cost of living? Explain. [5]

(c) What does the change in quantities in 2011 tell you about whether the CPI overstates or understates the effect of price changes on the cost of living? [4]