Economics 205
UNIVERSITY OF VICTORIA
Managerial Economics
Spring 2014
Assignment #5

Due: Wednesday, April 2, 2014 (3 pm.) (Place In the box marked **Econ 205** near the Economics main office.)

Question 1: A vase producer has been trying to determine the optimal price for its product. The weekly demand for the firm's product was estimated to be:

$$Q_D = 972 - 25P$$

where Q_D= Quantity and P =price.
Based on estimates provided by the plant, the cost function is:

$$TC=75+0.5Q$$

where TC =total cost per week and Q = output.

A) Find the optimal price and quantity of vases. ***(2 Marks)***

B) Determine weekly profit at this price.***(2 Marks)***

C) Illustrate the pricing decision with a diagram. ***(2 Marks)***

Question 2: A firm has the following short-run demand cost schedule for a particular product:

$$Q = 72 - 8P$$
$$TC = 32 + 2Q$$

A) At what price should this firm sell its product? ***(2 Marks)***

B) If this is a monopolistically competitive firm, what do you think would start to happen in the long run? Explain.***(2 Marks)***

C) Suppose in the long run, the demand shifted to Q=55-8P. What should the firm do? Explain.

(3 Marks)

Question 3: (6 Marks)

Compare and contrast the firm's individual demand, marginal revenue and marginal cost functions within the monopolistic market structure and the monopolistically competitive market structure. Describe the defining characteristics of each market structure. Use diagrams to illustrate.

Question 4: (2 marks) Explain what motivates research and development undertaken in the oligopolistic market structure.

Question 5 (4 marks)

The following payoff matrix represents the long-run payoffs for two duopolists faced with the option of buying or leasing buildings to use for production. Determine whether any dominant strategies exist and whether or not there is a Nash equilibrium.

		Firm 1	
		Lease Building	Buy Building
Firm2	Lease	F1 = 500 F2 = 500	F1 = 750 F2 = 400
	Buy	F1 = 300 F2 = 600	F1 = 600 F2 = 200