

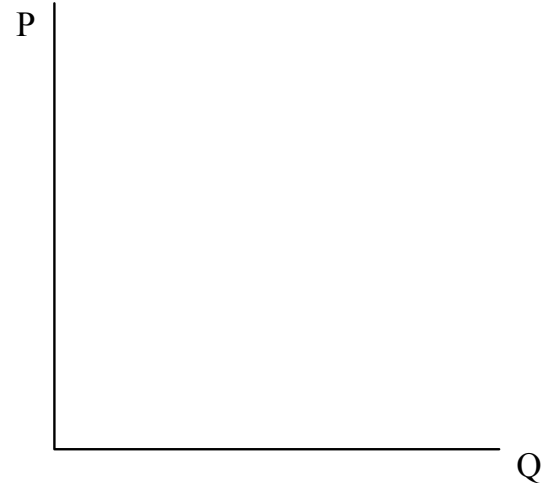
- Please read each question carefully. If you have any questions, please ask me to clarify.
- Please do not over-write. Most short answer questions can be answered in one sentence.

THIS IS THE “SECOND HALF” OF AN EXAM FROM A CUMULATIVE EXAM FROM FALL 2001. APPROXIMATELY 1 HOUR SHOULD BE SPENT ON THE QUESTIONS IN THIS PART OF THE EXAM.

14. A firm has the total cost schedule given in the table blow.

Quantity	Total Cost	Marginal Cost	Average Total Cost
0	2	---	---
1	3		
2	5		
3	9		
4	15		
5	26		

- a.[3] What is the marginal cost schedule for this firm?
 Fill out the table above and graph its MC curve.
- b.[3] What is the average total cost schedule for this firm?
 Fill out the table above and graph its ATC curve.
- c.[2] Assume that the market price for its product is \$6 per unit. Graph the Marginal Revenue curve on the same graph.
- d.[1] How many units should it produce to maximize profits?
- e.[2] What are its profits (losses) at this quantity?



f.[2] Should this firm shut down or stay in business in the short run. Why?

15. Consider the following demand schedule for HDTVs. Assume that the Marginal Cost is constant and equal to \$150.

Quantity	Price	Monopoly		Price Discriminating Monopoly	
		Total Revenue	Marginal Revenue	Total Revenue	Marginal Revenue
0	750		---		---
1	600				
2	450				
3	300				
4	150				

a.[8] Fill out the TR and MR figures for both the Monopoly and the Price Discriminating Monopoly.

b.[1] What is the profit maximizing price and quantity under a (single price) monopoly?

c.[1] Calculate the consumer surplus under a monopoly.

d.[1] Calculate the monopolist's profits.

e.[1] What is the profit maximizing quantity for a Price Discriminating Monopolist?

f.[1] Calculate the consumer surplus for a price discriminating monopolist.

g.[1] Calculate the price discriminating monopolist's profits.

16. The information in the table below depicts the total demand for premium channel digital cable TV subscriptions in a small urban market. Assume that digital cable TV operators pay no fixed costs, but that the marginal cost of providing the service is a constant \$20 per household.

Quantity	Price	Total Revenue	Marginal Revenue
0	120		
3,000	100		
6,000	80		
9,000	60		
12,000	40		
15,000	20		
18,000	0		

- a.[4] If there are many sellers in this market, what is the equilibrium price & quantity?
- b.[4] Fill in the table by calculating the total revenue and marginal revenue for each of the prices listed above.
- c.[2] If there is only one seller in this market, what is the equilibrium price & quantity?
- d.[4] Assume that there are two profit-maximizing companies operating in this market and that they are able to collude on price and quantity of subscriptions to sell. How many subscriptions will each firm sell, and at what price will they be sold if the firms decide to evenly split the market?
- e.[2] How would the equilibrium price and quantity change if these firms were NOT able to collude? You do not need to calculate a new answer, but state how price and quantity will change. Briefly explain why this happens.

17. For the following industries, determine whether the market structure is Perfect Competition, Monopoly, Oligopoly or Monopolistic Competition. ***Justify your answer!***

a.[2] broadcast television networks (not cable, but the 'free' stations)

b.[2] The market for cattle

18.[4] Draw a graph for a monopolistically competitive firm in the long run, ***on the back of this page.*** →

19.[8] Fill in the following table to the best of your ability.

	Perfect Competition	Monopoly	Oligopoly	Monopolistic Competition
Are the goods the same?		n/a		
How many sellers are there?				
Is there free entry & exit?				
How much competition is there?				

20. Two cigarette manufacturers (Firms A and B) are faced with lawsuits from states to recover the health care related expenses associated with cigarette smoking. Both cigarette firms have evidence that indicates that cigarette smoke causes lung cancer and other related illnesses. State prosecutors do not have access to the same data used by cigarette manufacturers and thus will have difficulty recovering full costs without the help of at least one cigarette firm study.

Each firm has been presented with an opportunity to lower their liability in the suit if they cooperate with attorneys representing the states.

		Firm B's Decision	
		Concede that cigarette smoking causes lung cancer.	Argue that there is no evidence that smoking causes cancer.
Firm A's Decision	Concede that cigarette smoking causes lung cancer.	A: lose \$20 billion in profit B: lose \$15 billion in profit	A: lose \$5 billion in profit B: lose \$50 billion in profit
	Argue that there is no evidence that smoking causes cancer.	A: lose \$50 billion in profit B: lose \$5 billion in profit	A: lose \$10 billion in profit B: lose \$10 billion in profit

a.[3] What is Firm A's Dominant Strategy?

b.[3] What is Firm B's Dominant Strategy?

c.[3] What is the Nash Equilibrium in this game?