

**Exercise 7: Monopoly**

1. A monopolist faces the demand curve  $P = 12 - Q$ , where  $P$  is measured in dollars per unit and  $Q$  in thousands of units. The monopolist has a constant average cost of \$6 per unit.
  - (a) Draw the average and marginal revenue curves and the average and marginal cost curves. What are the monopolist's profit-maximizing price and quantity? What is the resulting profit? Calculate the firm's degree of monopoly power using the Lerner index.
  - (b) A government regulatory agency sets a price ceiling of \$8 per unit. What quantity will be produced, and what will the firm's profit be? What happens to the degree of monopoly power?
2. From the Interactive Excel file: 07Monopoly.xls, answer the following questions
  - 1.1 When the vertical intercept "a" = 22, what are the price and quantity that maximized profits? And what is the profit level?
  - 1.2 If the firm produces at the quantity level that generates the lowest average total cost at  $Q_1 = 4.9$  unit instead, what will be the price, profit level? Does the monopolist have a higher profit? Why or why not?
  - 1.3 Which quantity and price generate a normal profit for the monopolist? Can you find any other quantity that generate a higher profit level (Change the value of  $Q_1$ )? Why or why not?
  - 1.4 Adjust the value of "a" and see if it is possible to find a case where the quantity that maximizes profit is also a quantity that minimizes the average total cost? If so, what is that quantity and its corresponding price and profit level?
  - 1.5 What should be the value of a that causes the monopolist to shutdown? Why? And what are the corresponding price and quantity?
3. Do you agree that both electric generation and distribution services are natural monopolistic services? In your opinion, should the government privatize the Electric Generator Authority of Thailand (EGAT) without an independent regulator? Support your argument with reasons and graph(s).
4. Why the third class trains have no table? Why economy class airplane customers need to wait for the first class to board the plane or leave the plane first? Why the value pack products have so unattractive packaging design?
5. Identify the pricing policy(ies) used by the producers in each case. Give reasons and important conditions to support your arguments.
  - (a) A kindergarten school announced the following tuition fees:
 

Initial payment	3,000 Baht
Tuition fee	20,000 Baht/semester
English teachers	7,000 Baht/semester
  - (b) Yamaha (Thailand) sets repairing service charges for the stereo sets bought from abroad twice as high as the ones bought in Thailand.
  - (c) The KFC Restaurant gives away free coupons by distributing them in many magazines. Customers who present the coupon at the time of their purchase can get special discounts as specified in the coupon.
  - (d) Internet service fee from Internet Thailand Co. Ltd. stated that
 

Application fee	300 Baht
Connection during 8:00 – 21:00	34 Baht/hour
Connection during 21:01 – 7:59	15 Baht/hour

- (e) The customer who purchases up to 1,000 Baht in one day may use the receipt to buy products from the store at 5 percent discount.
- (f) Monday special offer at See Fa Restaurant : Order 2 dishes + one dessert costs only 64 Baht.
- (g) The price for genuine HP Laser printer cartridges is a lot more expensive than the imitated or recycled ones.
- (h) MS Office Suit (Words+Excel+Access+PowerPoint) is cheaper than the combined purchase price of each individual computer software package.
- (i) Just Talk from TA Orange offers many pre-paid cellular phone services ranging from 300 Baht, 500 Baht, and 1,000 Baht.