

Name \_\_\_\_\_

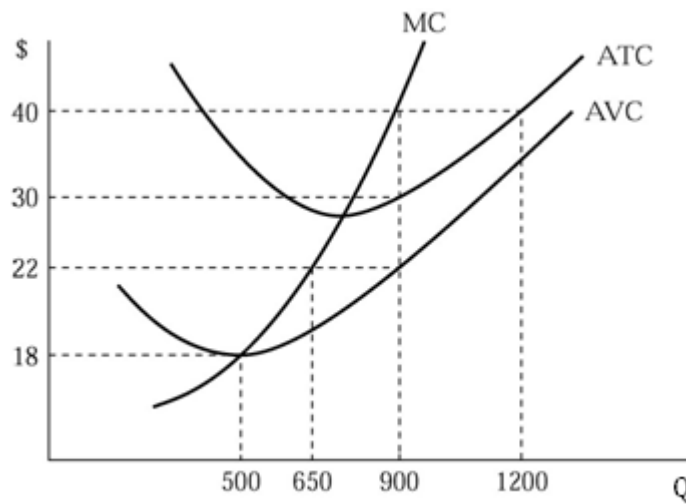
**Directions:** Answer all of the following questions on your own paper and turn them in at the **start of class on Thursday, Feb 27<sup>th</sup>**. You may discuss the questions with your classmates. However, you must turn in your own set of answers that reflect your work.

1. (6 points) Consider the following table of Candy's short-run costs of producing cakes.

Number of Cakes	<i>VC</i>	<i>MC</i>	<i>AVC</i>	<i>FC</i>	<i>TC</i>	<i>ATC</i>
0		--	--	50		--
1		30				
2						50
3			25			
4					155	

- a. Using information about the relationship between the cost curves, fill in the blank cells of the table above.
  - b. If Candy produces one cake, what is Candy's variable cost of production?
  - c. If Candy produces three cakes, what is her marginal cost of production?
2. (1 points) Explain the difference between economic costs and accounting costs. Can a firm's accounting profits ever be smaller than the firm's economic profits? Briefly explain.
3. (3 point) Consider a firm in a perfectly competitive market.
- a. What is the difference between the short-run and the long-run for the firm?
  - b. Why might it make sense for an unprofitable firm to operate in the short-run? Would it ever make sense for an unprofitable firm to continue operating in the long-run? Briefly explain.

4. (6 points) Consider the graph of a firm's short-run cost structure in a perfectly competitive market.



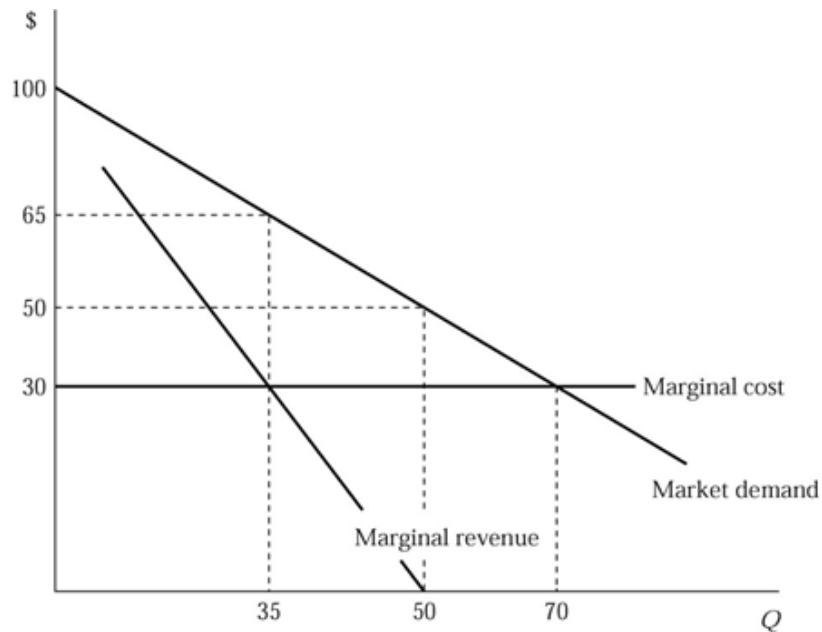
- If the market price is \$40, what is the firm's profit maximizing level of output?
- Calculate the firm's economic profit at the point identified in (a).
- Do you expect the firm to continue earning these profits in the long-run? Explain.
- What is the lowest the market price can fall before this firm decides to shut-down its short-run production? Explain briefly.

5. Consider the monopoly described in the following table. (8 points)

Quantity	Price	Total Revenue	Marginal Revenue	Total Cost	Marginal Cost
0	320	0	---	140	---
2	305	610	305	158	9
4	290	1,160	275	168	5
6	275	1,650	245	188	10
8	260	2,080	215	228	20
10	245	2,450	185	296	34
12	230	2,760	155	392	48
14	215	3,010	125	522	65
16	200	3,200	95	712	95
18	185	3,330	65	962	125
20	170	3,400	35	1,302	170
22	155	3,410	5	1,762	225
24	140	3,360	-25	2,322	280

- Calculate the fixed cost for the firm.
- What are the profit-maximizing price and quantity?
- How much is the monopolist making in profits at the profit-maximizing price and quantity?
- What quantity maximizes total revenue? Why is this not the profit-maximizing quantity? Be sure to discuss the monopolist's profit maximizing condition in your answer.
- What would the equilibrium price and quantity have been if the market were perfectly competitive?

6. Consider the following graph of a monopolist's demand curve, marginal revenue curve, and its marginal cost curve. (6 points)



- What is the monopolist's profit-maximizing price and quantity?
- Calculate consumer surplus under the monopolist's profit-maximizing price and quantity.
- Briefly explain why a monopoly necessarily reduces consumer surplus compared to perfect competition.
- What does the deadweight loss from a monopoly measure? Calculate the deadweight loss from this monopoly.