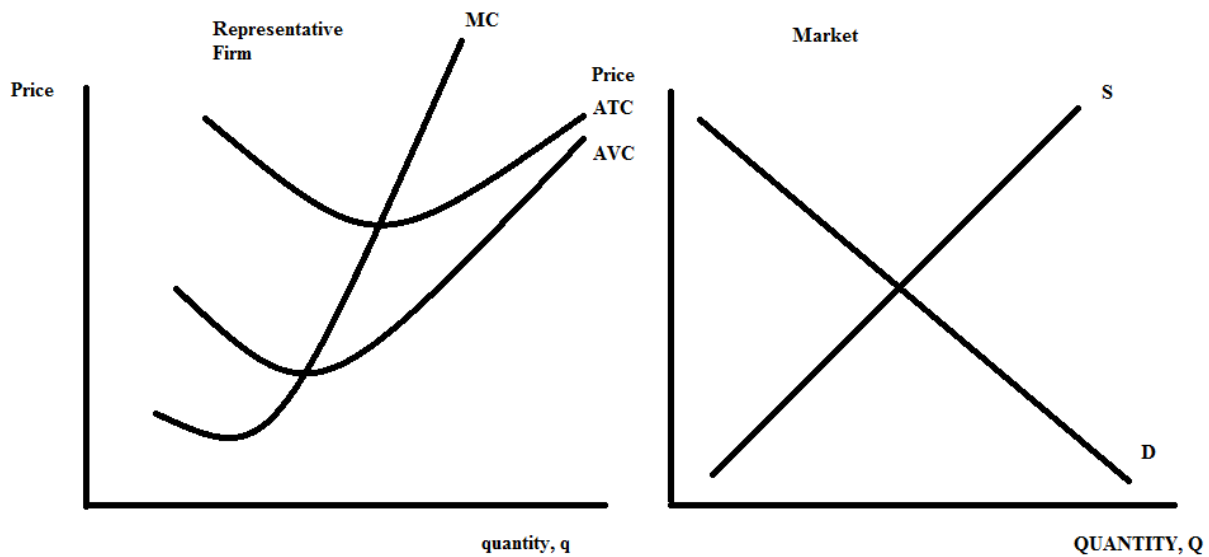


This is a ten point quiz. Answer all questions neatly and legibly. Show your work.

1. The following two graphs represent a perfectly competitive market.



a. (1 point) In the above graph label the initial equilibrium price, P_1 , and equilibrium quantity, Q_1 , in the market.

b. (1 point) In the above graph draw and label the firm's initial marginal revenue curve, MR_1 . Identify the firm's short-run profit-maximizing quantity, q_1 .

c. (1 point) In the short-run, this firm makes _____ economic profits.

d. (1 point) In the long run, there will be _____ of firms.

e. (1.5 points) Relative to the initial short-run equilibrium, in the long run:

- i. The profit maximizing quantity for the firm will _____.
- ii. The price in the market will _____.
- iii. The quantity in the market will _____.

2. Consider a monopoly that can be described by the following demand curve:

$$P = 200 - 2Q$$

You are also told that the equations for MC and TC for this monopoly are given as:

$$MC = \text{marginal cost} = 20 + 2Q$$

$$TC = \text{total cost} = 20Q + Q^2 + 100$$

a. (1 point) What is the firm's marginal revenue (MR) equation given the above information?

$$MR = \underline{\hspace{2cm}}$$

b. (1 point) Identify the profit maximizing quantity and price for this monopolist if it acts as a single price monopolist? Show your work for full credit.

$$\text{Profit-maximizing quantity} = \underline{\hspace{2cm}}$$

$$\text{Profit-maximizing price} = \underline{\hspace{2cm}}$$

c. (1 point) Calculate the value of the monopoly's profit. Show how you found your answer.

$$\text{Monopoly's profit} = \underline{\hspace{2cm}}$$

d. (1.5 points) Calculate the value of consumer surplus (CS), producer surplus (PS), and deadweight loss (DWL) for this single price monopolist. Show your work.

$$CS = \underline{\hspace{2cm}}$$

$$PS = \underline{\hspace{2cm}}$$

$$DWL = \underline{\hspace{2cm}}$$