Name: ________________________
Date: ________________________

# Problem Set FRQs

**1.** Market structures differ from one another in many respects. Consider two profit-maximizing firms that earn short-run economic profits. One is a perfectly competitive firm and the other is a monopoly.

(a) For each firm, draw a correctly labeled graph showing the following.

(i) Price

(ii) Quantity of output

(iii) Area of economic profits

(b) For each firm, explain the relationship between price and marginal revenue.

(c) For each firm, explain how the economic profits would most likely change in the long run.

(d) Label the area that represents the deadweight loss on the graph for the monopoly firm drawn in (a). Explain what this deadweight loss represents.

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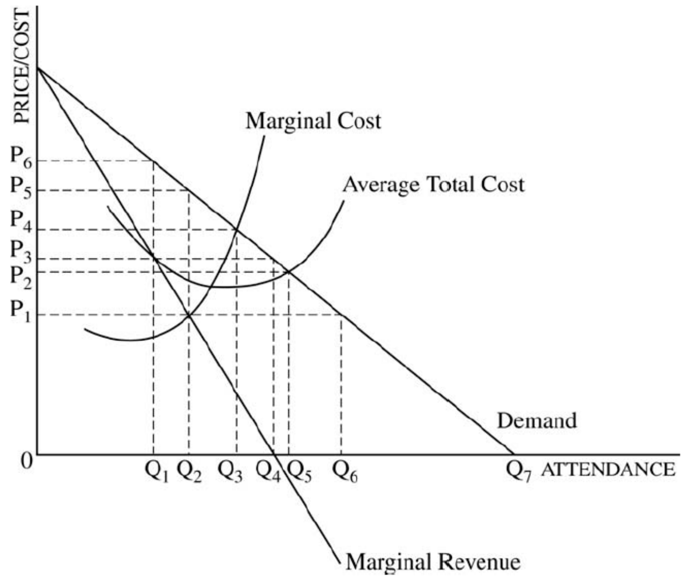


**2.** There is one art museum on the island of Watsonia. The museum's demand and cost curves are shown in the graph above. The museum currently relies on an admission charge for some of its funding. Its directors are debating about how to set the admission charge.

(a) Using the labeling of the graph above, identify the price and quantity associated with the following objectives.

(i) The museum maximizes its profit.

(ii) The museum maximizes its total revenue.

(iii) The museum maximizes the sum of consumer and producer surplus.

(iv) The museum maximizes its attendance, as long as it breaks even.

(b) When the attendance is $Q_1$, is the demand price elastic, inelastic, or unit elastic? Explain.

3. Assume that a profit-maximizing firm in a monopolistically competitive industry is in long-run equilibrium.

(a) Draw a correctly labeled graph that shows the profit-maximizing firm's price and output.

(b) Assume that the city in which this industry operates eliminates the business license fee (a fixed cost) for all firms in this industry. How does the elimination of the license fee affect each of the following for the individual firm in the short run? Explain your answers.

(i) Output

(ii) Economic profits