AP® Microeconomics
2003 Sample Student Responses
Form B

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Write in the box the number of the question you are answering on this page as it is designated in the examination.

1. \( P \)

   \[ P = MC = AR = \text{Q} \]

   \[ Q \]

   **Perfectly Competitive**

   \[ \text{III} = \text{total area} \]

   \[ \text{III} = \text{area of } \text{Econ } P \]

b. In perfect competition, \( P = MR \). They are the same. This is because price is constant throughout, so as one more unit added, the price will remain the same and the change in TR will change in quantity. (The change in TR will also remain the same because of the constant price.)

   In a monopoly, the MR curve lies below the Revenue (Demand) curve. This is because the monopolist has to change
the price of each unit sold and all the other units. Therefore, \( MR = P \) on all previously existing units. This proves why the MR \( MR \) lies below the P curve in the monopolist's graph.

2. In perfect competition, the short-run economic profit will become normal profit in the long run. For a pure competitor, long-run economic profit is not possible because no barriers to entry exist, therefore firms will enter the business in the long run until a normal profit is reached.

For a monopolist, the short-run economic profit can remain an economic profit in the long run because there are strict barriers to entry, forbidding others from entering the business and allowing the monopolist to keep this profit.

3. The deadweight loss represents the area of loss that goes neither to the consumers nor to the producers. It is just lost completely because it is not part of consumer surplus or producer surplus. (On my graph, the area that is colored in completely represents the deadweight loss.)
1a) Perfect Competition

b) For perfect competition firms, price equals marginal cost because it is allocatively efficient. But in a monopoly firm, price also lies on the line of demand = marginal revenue. In a monopoly firm, price is above marginal cost and marginal revenue, it is not allocatively efficient.

c) In the long run, perfect competition firm, the price will be at the minimum of the average total cost curve, so that it is also productively efficient. But for monopoly, it is the same as the short run, it produces at a higher price and less output as compared to perfect competition; therefore, it gains economic profit.

d) The deadweight loss represents...