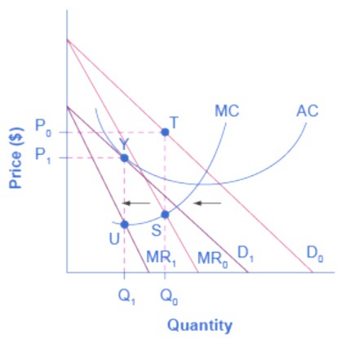
ECONOMICS 101-03   MICROECONOMICS

EXAM 3

1. The statement is False. A perfectly competitive industry is more likely to be inefficient in the short run, but will be efficient in the long run. The lack of barrier to entry means additional firms will join (or leave) a perfectly competitive industry in the short run until there are no economic profits to be earned at which point firms in the industry will be allocatively (P = (MC = (D =MR)) and productively (P = (min AC = MC)) efficient.

2. Firms in perfect competition face a horizontal demand curve which means they will be willing to sell any quantity of a homogenous good at the market determined price they cannot effect because no firm is large enough to affect the price. The demand in a perfectly competitive industry is based on consumer behavior consistent with the 'law' of demand–a willingness to buy a larger quantity when prices are low, but a smaller quantity when prices are high. In addition, consumers have 'demands' for other goods and services each of which has a negatively sloped demand curve.

3. The graph:



(P2 - AC) X Q2 >(P1 -AC) X Q1

4. Positive and negative aspects of natural monopoly for households and firms:

	Positives	Negatives
Households	• Standard quality good • P < P of larger number of smaller firms each producing a smaller Q at higher AC • Service/good available to larger number of customers if M is regulated • Price discrimination can benefit higher income consumers • Possible cross-subsidization making service/good available to larger number of households	• No choice • No way to reduce P through competition • No incentive for innovation to improve product • Misallocation of resources (lower Q produced than if Q = (D = S)

Natural Monopoly	• Potentially large economic profits • Can control of P and quality of good • Possibility for P discrimination	• Possible antitrust exposure leading to lower economic profits • Regulation which limit economic profits

5. There is a dominant strategy for each firm 20 \ 20 units of economic profit which is also a Nash equilibrium as there is no way for either firm to increase its economic profits by selecting a different (the low) price. In theory, there is a possibility for cheating, but given the data in the payoff matrix, there is no incentive for either firm to cheat as cheating would not increase their economic profits.

6. Oligopolies have the economic profits to engage in innovation. However, there are two possible motivations for an oligopoly to innovate or not. First, the oligopoly could choose to innovate to improve their product and thus increase their economic profits in the short run. In the long run, patents could protect their economic profits. Also, innovation can be a creditable threat to a competitor. Second, the oligopoly could choose not to innovate to avoid setting off an innovation war (similar to a price war) or because the oligopoly makes a determination the innovation would cost more than the economic profits would increase.

7. Excess capacity means the monopolistically competitive firm is not allocatively nor productively efficient. It is producing a smaller quantity and selling it at a higher price than would be the case if Q and P were at demand = supply (MC). However, excess capacity is consistent with the firm earning economic profits which are larger than if the firm set price = (D = S).

8. Characteristics of perfect competition and monopolistically competition:

	Perfect competition	Monopolistic competition
Number of firms	Very large (so many no one can affect P or Q	Many
Standardization of product	Identical	Similar
Barriers to entry	None	Few

Also perfect competition involves price taking by all firms while monopolistic competition has product differentiation as a factor affecting price, quantity, economic profits. Monopolistically competitive firms experience excess capacity and are not allocatively nor productively efficient in long run whereas perfectly competitive firms are both.

9. The motivation to deregulate is to make the good/service more accessible to consumers through competition reducing the price and increasing the quantity and perhaps variety of the good/service provided. Firms in the previous regulated industry can be affected by this competition, forcing inefficient (or least efficient) ones out of business which could decrease, not increase the availability and variety of the good/service. The specific impacts will (have) varied depending on the specific sector.

10. Herfindahl-Hirschman Index (HHI) = $\sum(MS_{1...n})^2$; where 1...n is firms in the industry and MS = market share. The HHI is useful because its calculation gives greater weight to firms with larger MS and thus provides a way to evaluate the effect of a proposed merger. Recent guidelines are if HHI > 1800 there may be a reduction in competition; if HHI increases by more than 100 after the proposed merger there may be a threat to competition; if HHI < 1000 there may be no threat to competition.