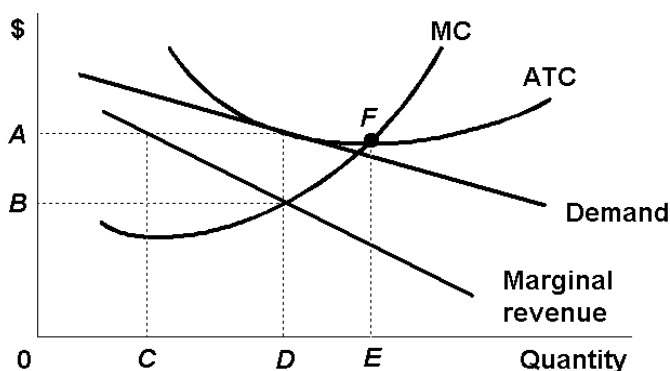


### Practice Problem 3 – Microeconomic Principles

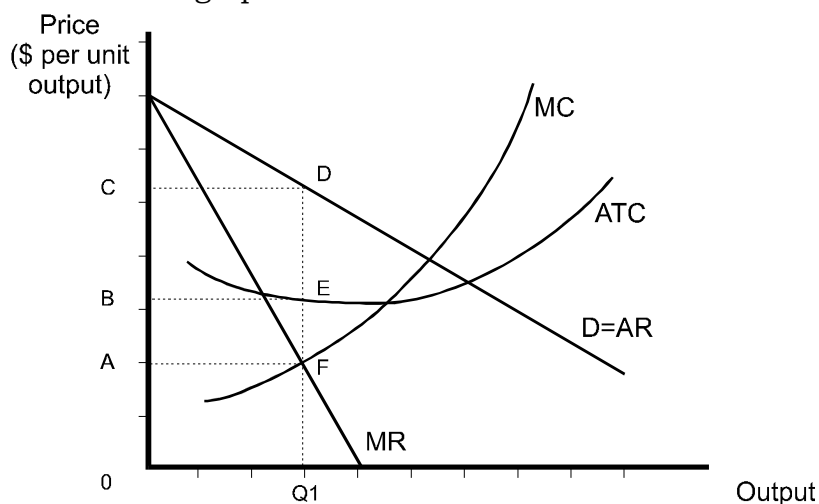
**Not required to be handed in, but will be discussed in class**

1. Some experts have argued that there are too many brands of beverages in the market. Give an argument to support this view. Give an argument against this view.

2. Refer to the diagram below. What is the long-run equilibrium price and output for this firm? Does this firm have allocative and/or productive efficiency? Explain



3. Refer to the graph below.

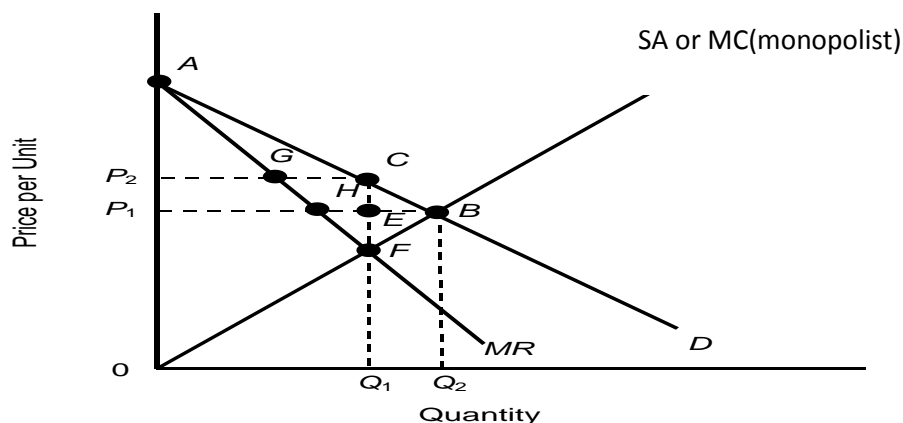


- What is the area of total revenue?
- What is the area of total profit?
- What is the area of total cost?
- Is the marginal cost curve the supply curve for the monopolist? Explain

4. Suppose your economics class is graded on a "curve" such that your grade on a quiz depends not only on your performance, but also on the performance of others in the class. You and your classmates have two choices, to study for a quiz or not. If you and your classmates study for a quiz, you will receive Bs. If you study and they do not, you will receive an A and they will fail the quiz. If you choose not to study and neither do your classmates, you will receive Cs. But if your classmates study and you do not, they receive A's and you will fail. Assume that all of your classmates make the same choice.

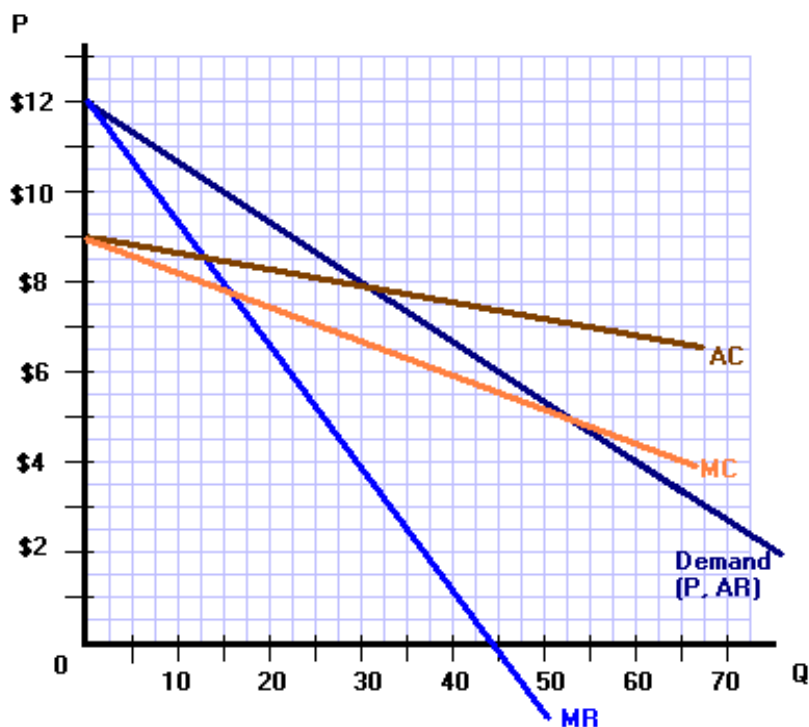
- Who are the players? What are each player's strategies?
- Construct the payoff matrix.
- What choice will you make? Explain why.

5. Refer to the graph below.



- What is the area of consumer surplus for the perfectly competitive industry?
- What is the area of producer surplus for the perfectly competitive industry?
- What is the area of consumer surplus for the monopolist?
- What is the area of producer surplus for the monopolist?

## 6. Natural Monopoly



Label on the graph at right

- Profit maximizing  $P^*$  and  $Q^*$
- Socially Optimum  $P^{so}$  and  $Q^{so}$
- “Fair Price” or Regulated  $P^f$  and  $Q^f$
- What subsidy would be required to keep the firm operating if regulators impose the efficient outcome?

7. Explain what factors firms take into consideration when hiring labor.