

# CHAPTER 7

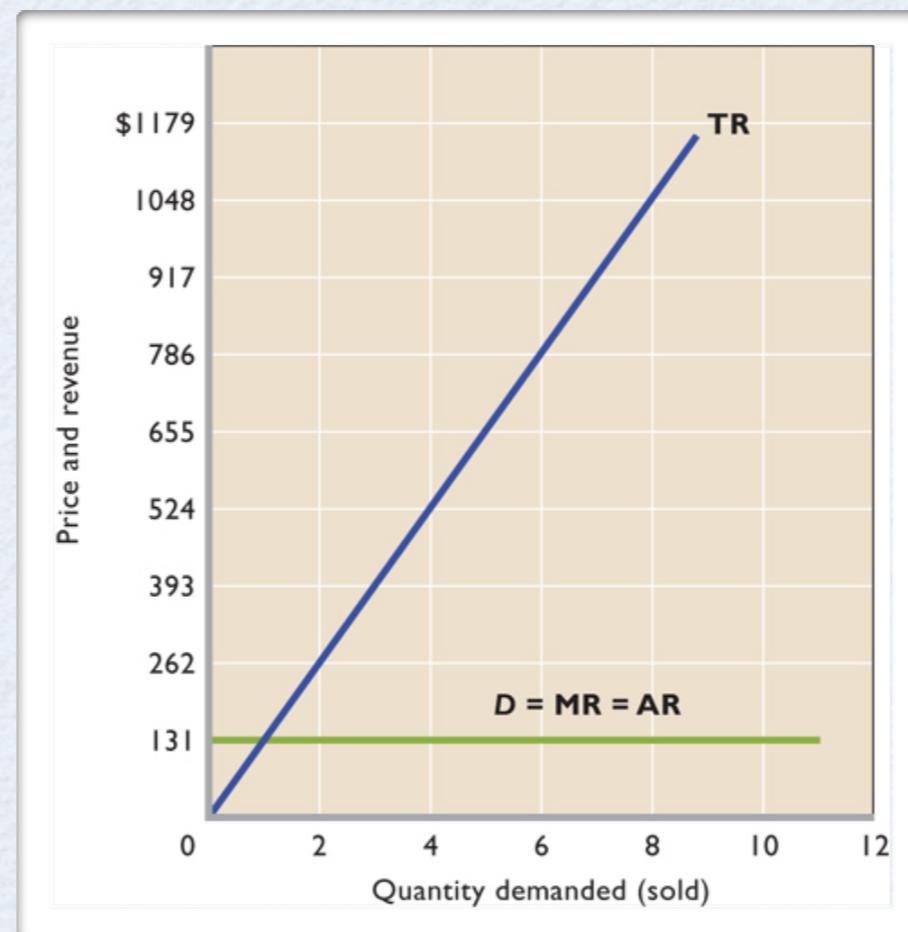
# CHAPTER 7 - PERFECT COMPETITION

## Four Market Models

- **Pure competition**
  - Large number of sellers and buyers in the market
  - Standardized product
  - Individual firms are price takers
  - Free entry and exit
- **Monopolistic competition**
  - Relatively large number of sellers, differentiated products, easy entry and exit, heavy advertising
- **Oligopoly**
  - Few sellers, standardized or differentiated product, each firm is affected by the decisions of its rivals
- **Pure monopoly**
  - One firm is the sole seller of a product or service, entry is blocked

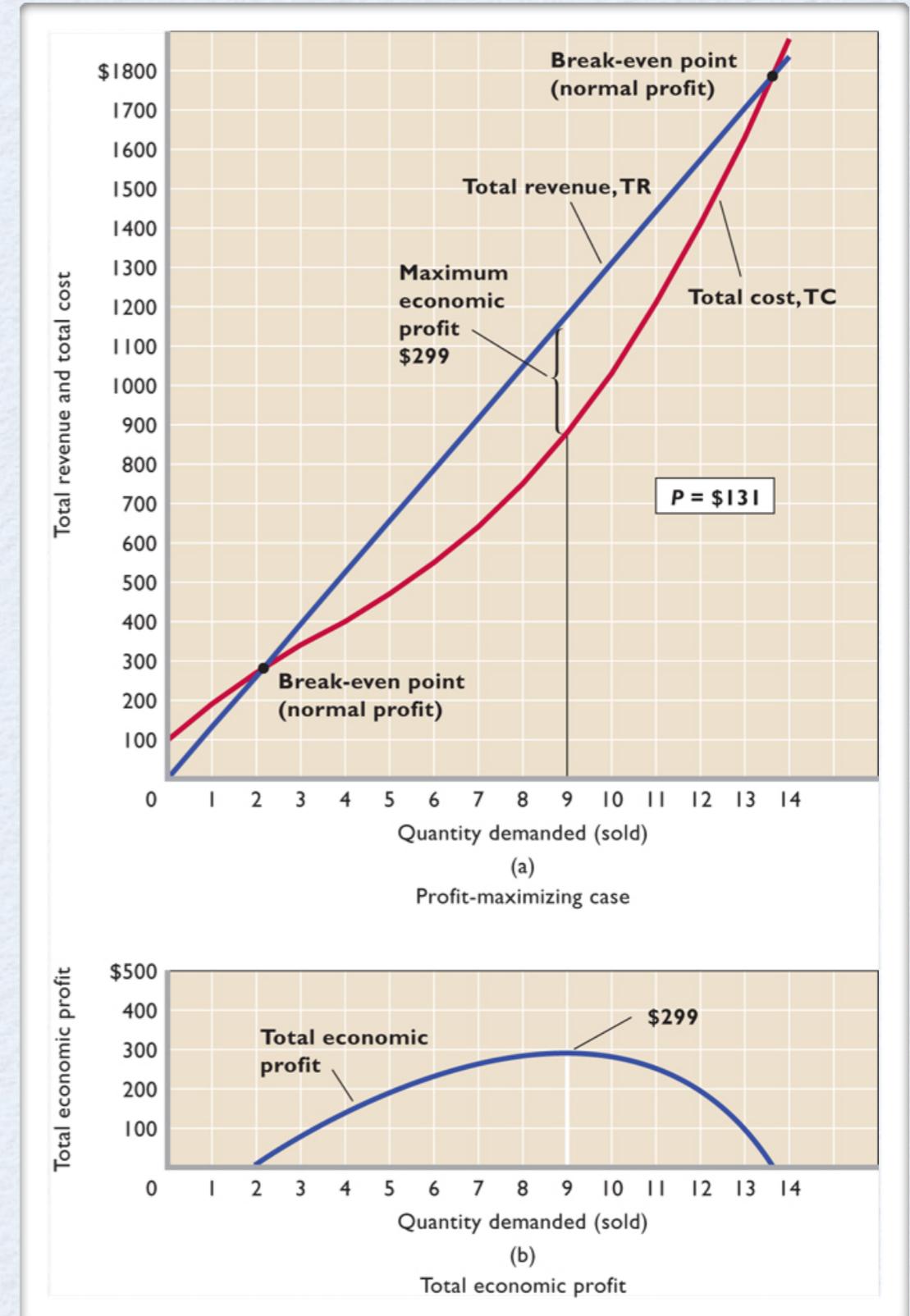
# Demand by a Purely Competitive Seller

- **Perfectly elastic demand** for the competitive **firm**. The firm cannot obtain a higher price by restricting output. And it does not need to lower its price to sell a higher volume of goods. The **market demand curve**, however is **down sloping**.
- **Average, Total and Marginal Revenues**
  - Because price is constant,  **$D = MR = AR$**  - demand curve is perfectly elastic



# Profit Maximization in the Short Run: TR-TC Approach

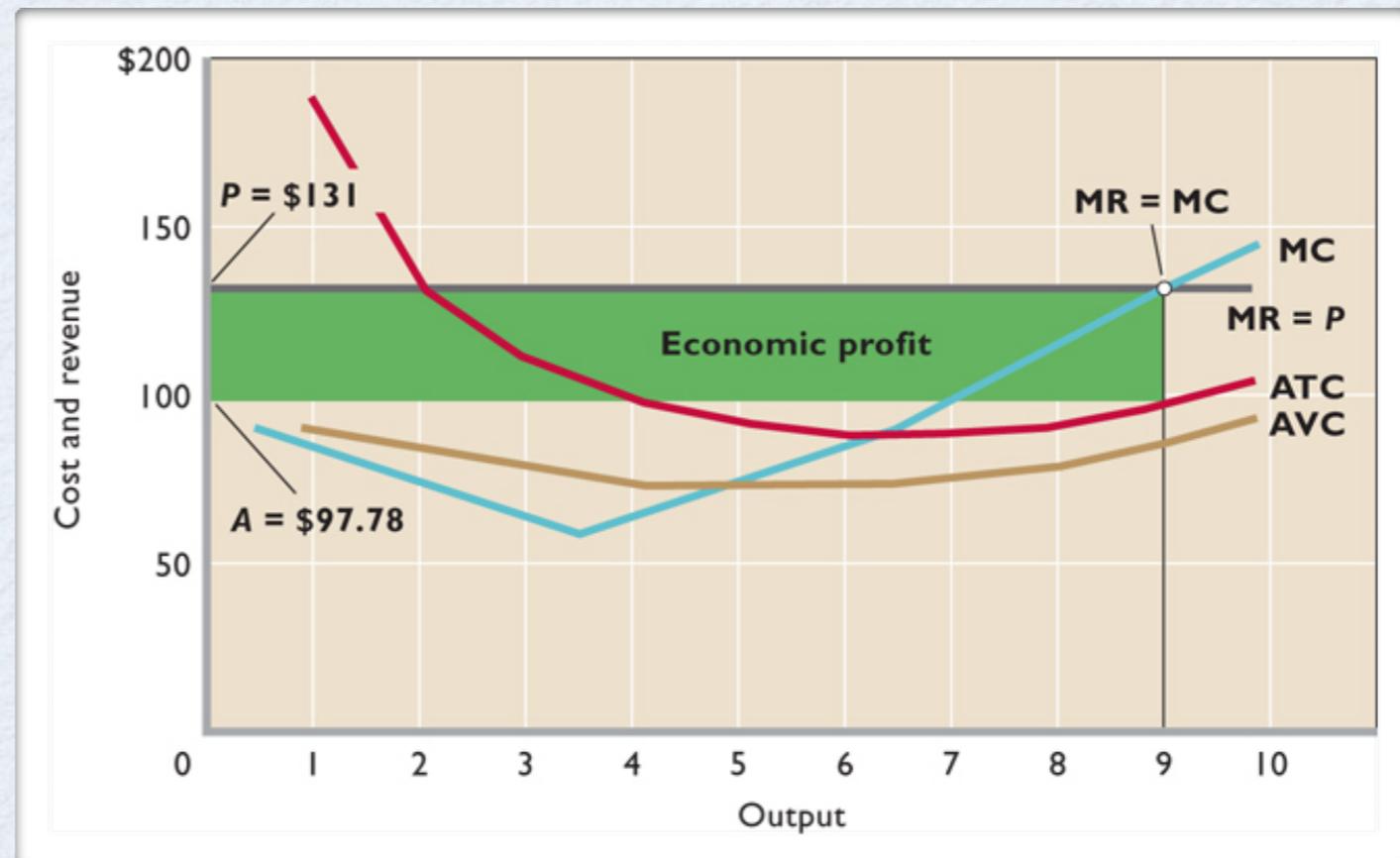
- Firms can maximize profit by adjusting output
- Plant is fixed, therefore, a firm can adjust its output by changing its variable resources (labor, materials ...)
- 2 approaches to profit maximization
  1. **TR -TC** approach
  2. MR -MC approach



# Profit Maximization in the Short Run: MR-MC Approach

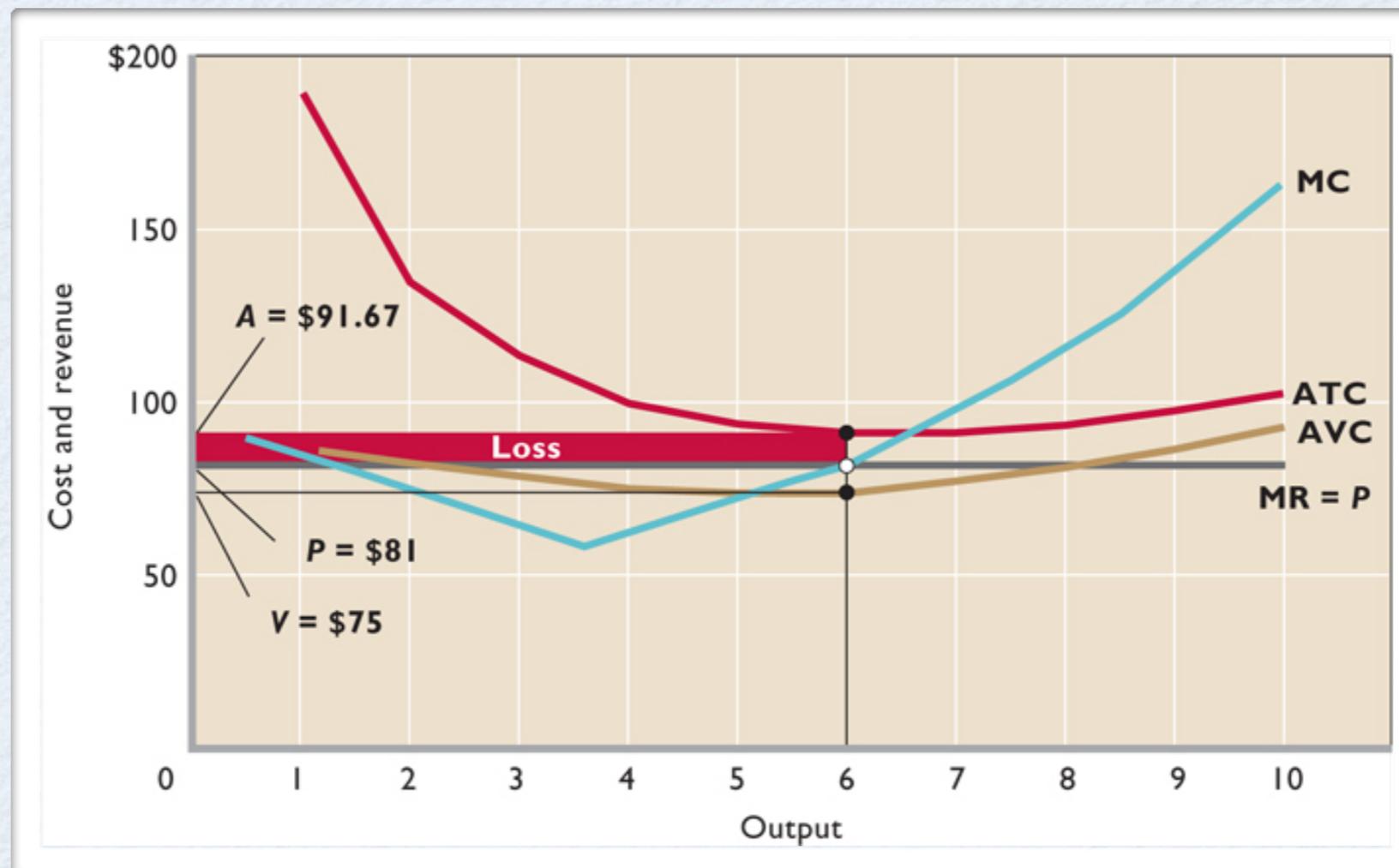
- The firm will maximize profit (or minimize loss) where **MR = MC**
- *Assumptions:*
  - *Applies only if producing is preferable to shutting down ( $MR < AVC$ )*
  - *The rule applies to all firms*
  - *The rule can be stated as  $P = MC$  when applied to a purely competitive firm*
- **Profit maximizing case:**

$$\begin{aligned} TR - TC &= \\ (P * Q) - (ATC * Q) &= \\ (P - ATC) * Q & \end{aligned}$$



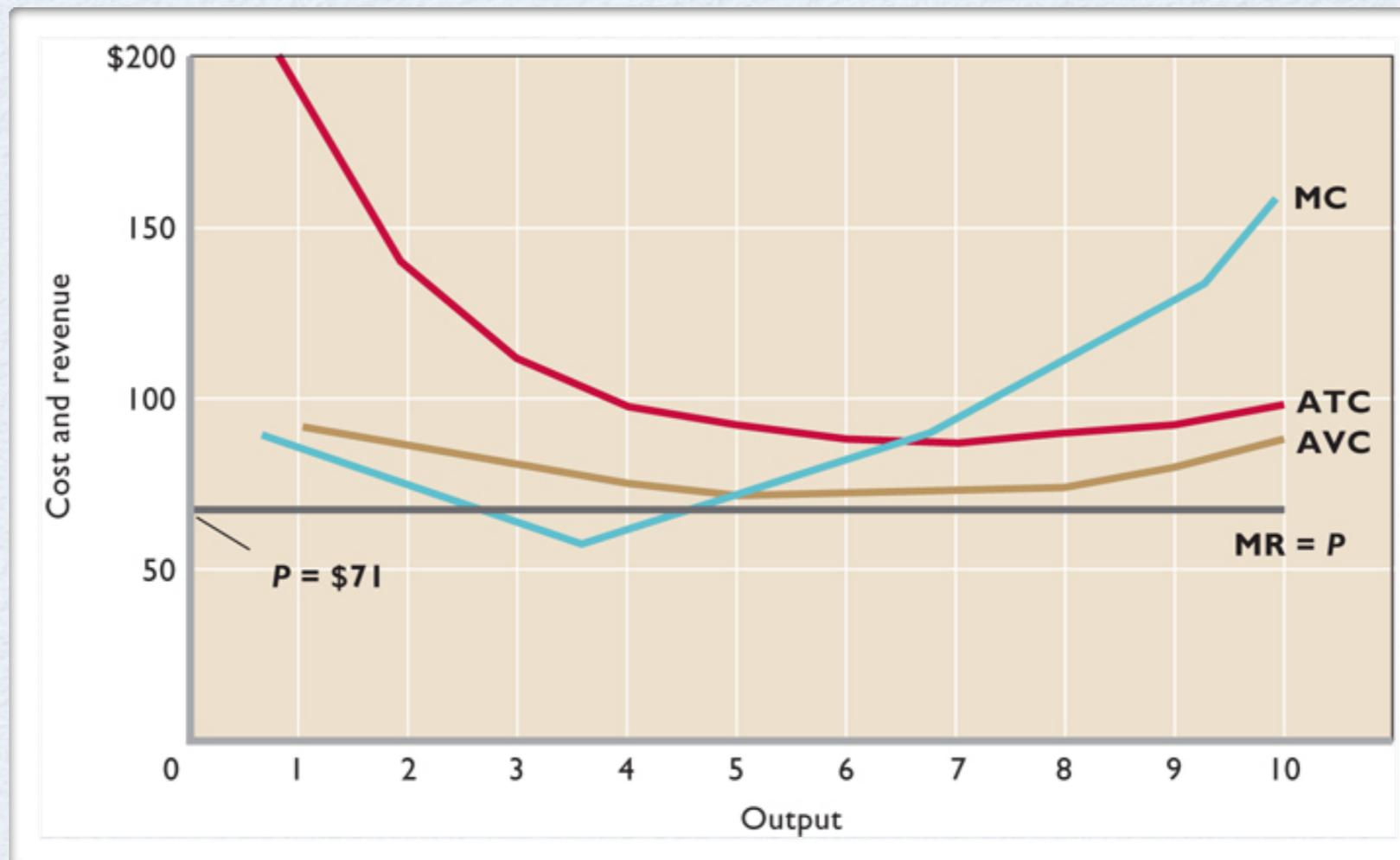
# Loss Minimization in the Short Run: MR-MC Approach

- The firm can still cover its *AVC* and part of its *AFC*. It **should not** shut down yet.



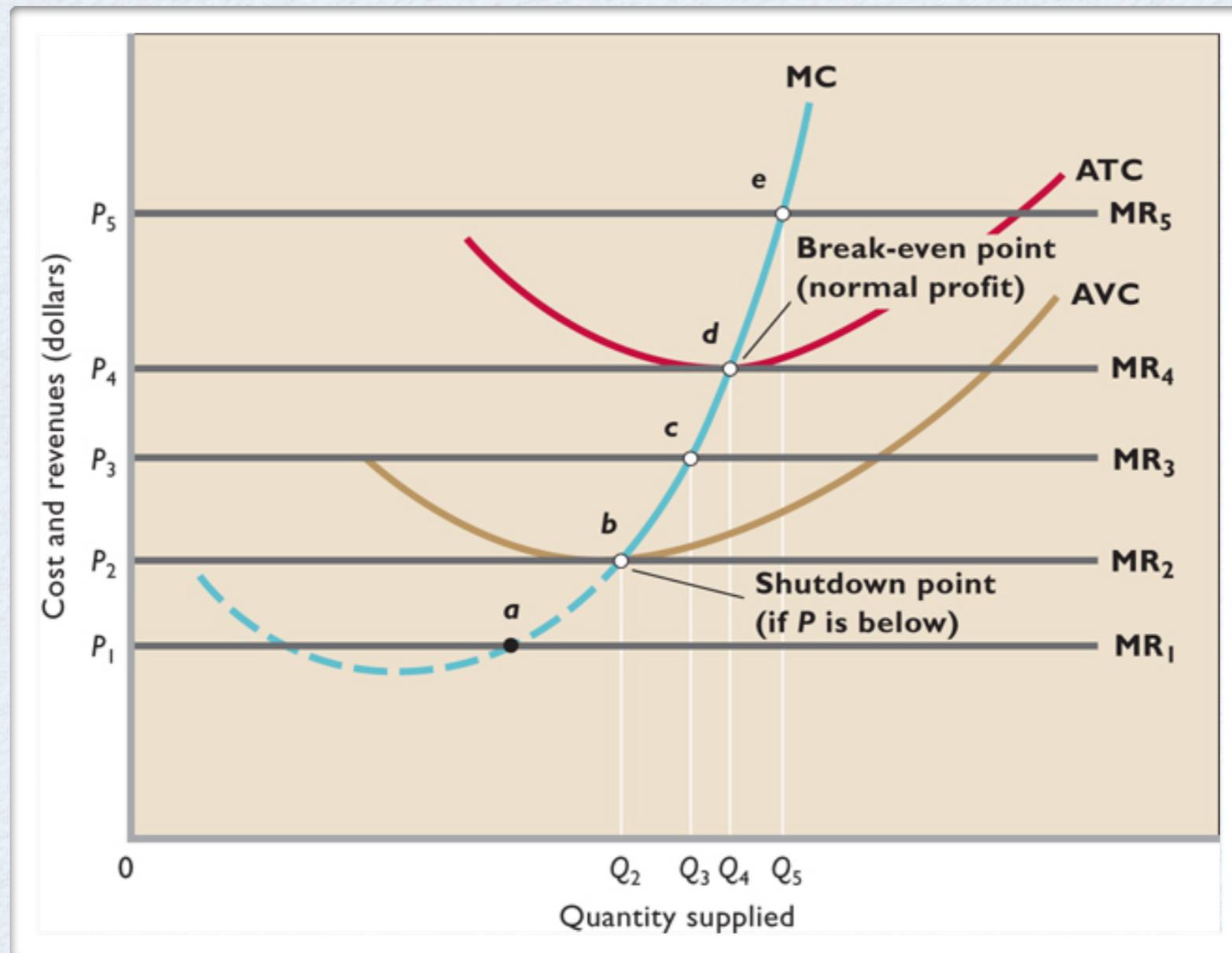
# Shut down in the Short Run: MR-MC Approach

- A firm should shut down as its price is not enough to cover its TFC
- When  $P \leq AVC$  the firm should shut down

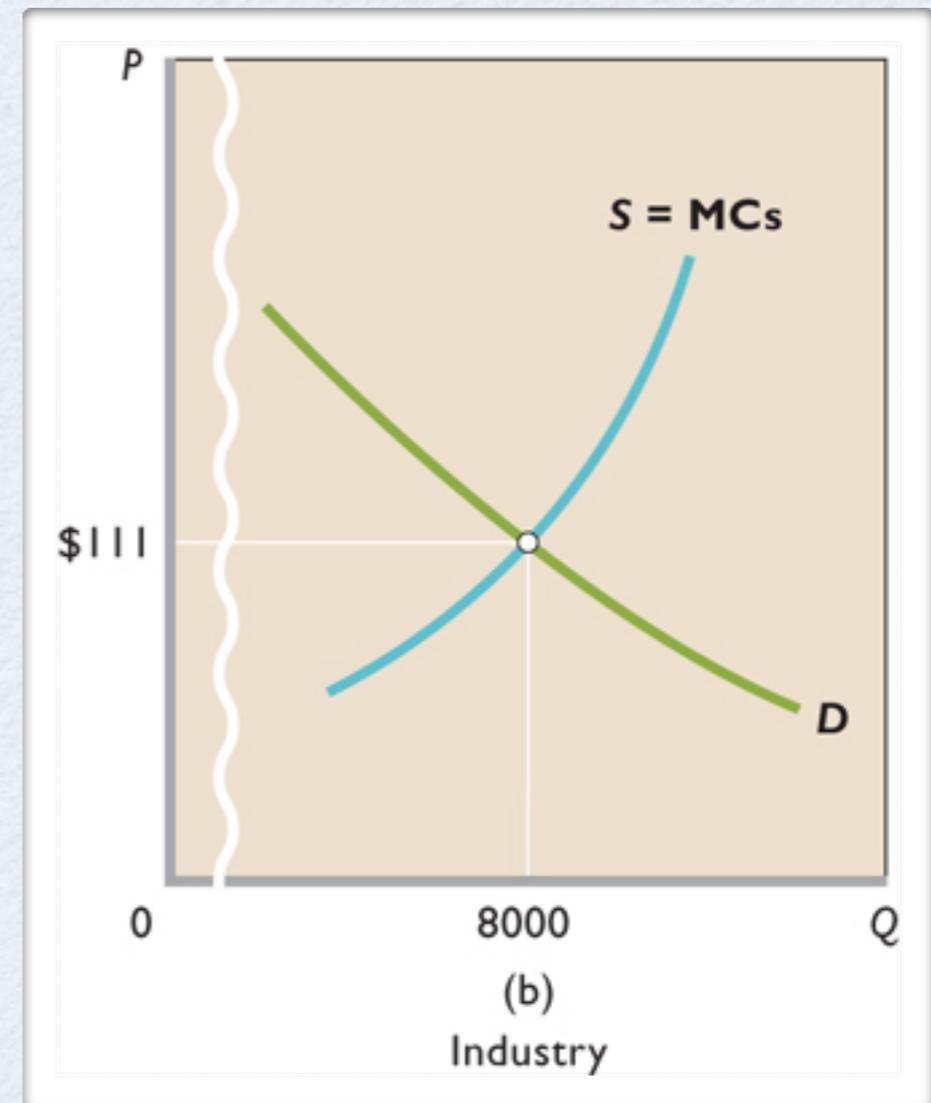
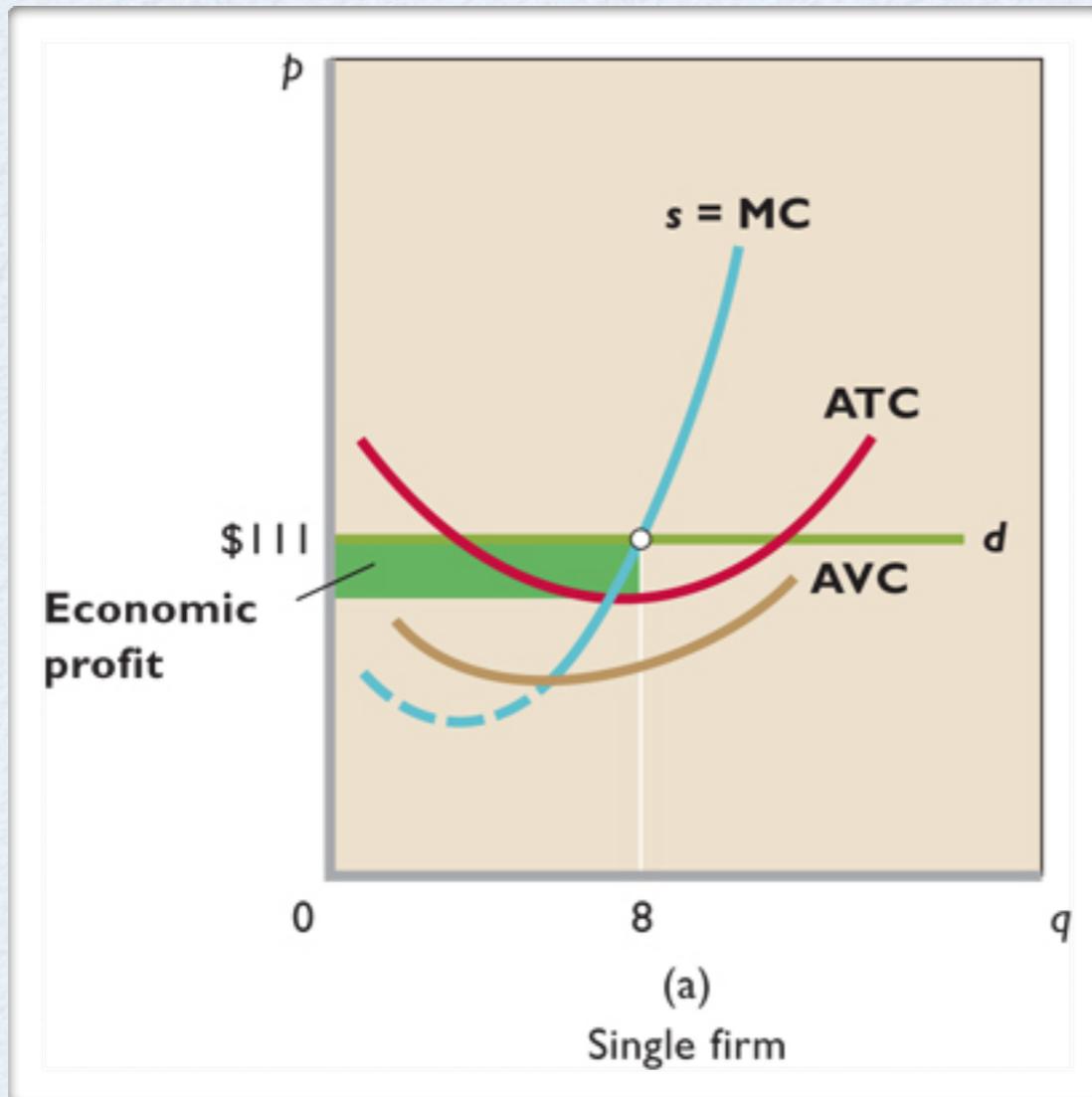


# Marginal Cost and Short Run Supply

- The MC curve, above the AVC curve, is the firm's supply curve



# Short Run Individual Firm vs Market Equilibrium



# Pure Competition and Efficiency

- **Productive efficiency:  $P = \text{Minimum ATC}$**  - requires that goods be produced in the least cost way
- **Allocative efficiency:  $P = MC$**  - requires that resources be divided among firms and industries so they yield the mix of products and services that is most wanted by society -  $P > MC$  = under allocation of resources,  $P < MC$  = overallocation of resources
- **In a purely competitive market there is productive and allocative efficiency**

