

CHAPTER 7

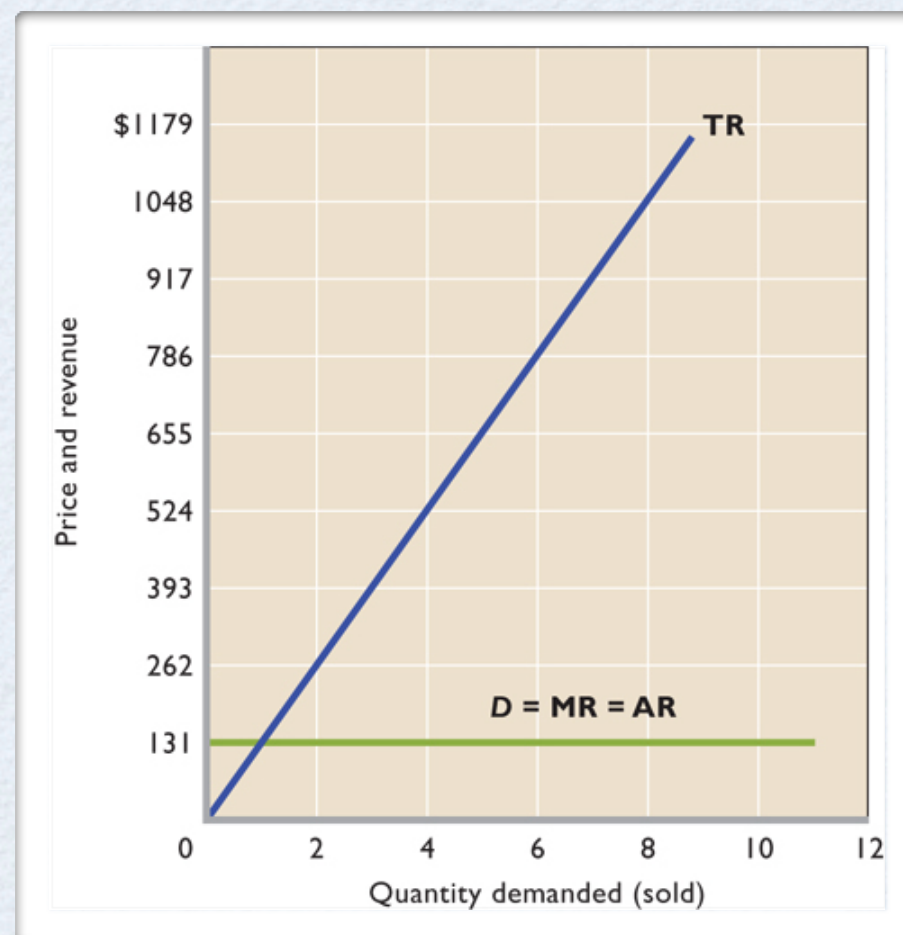
CHAPTER 7 - PERFECT COMPETITION

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

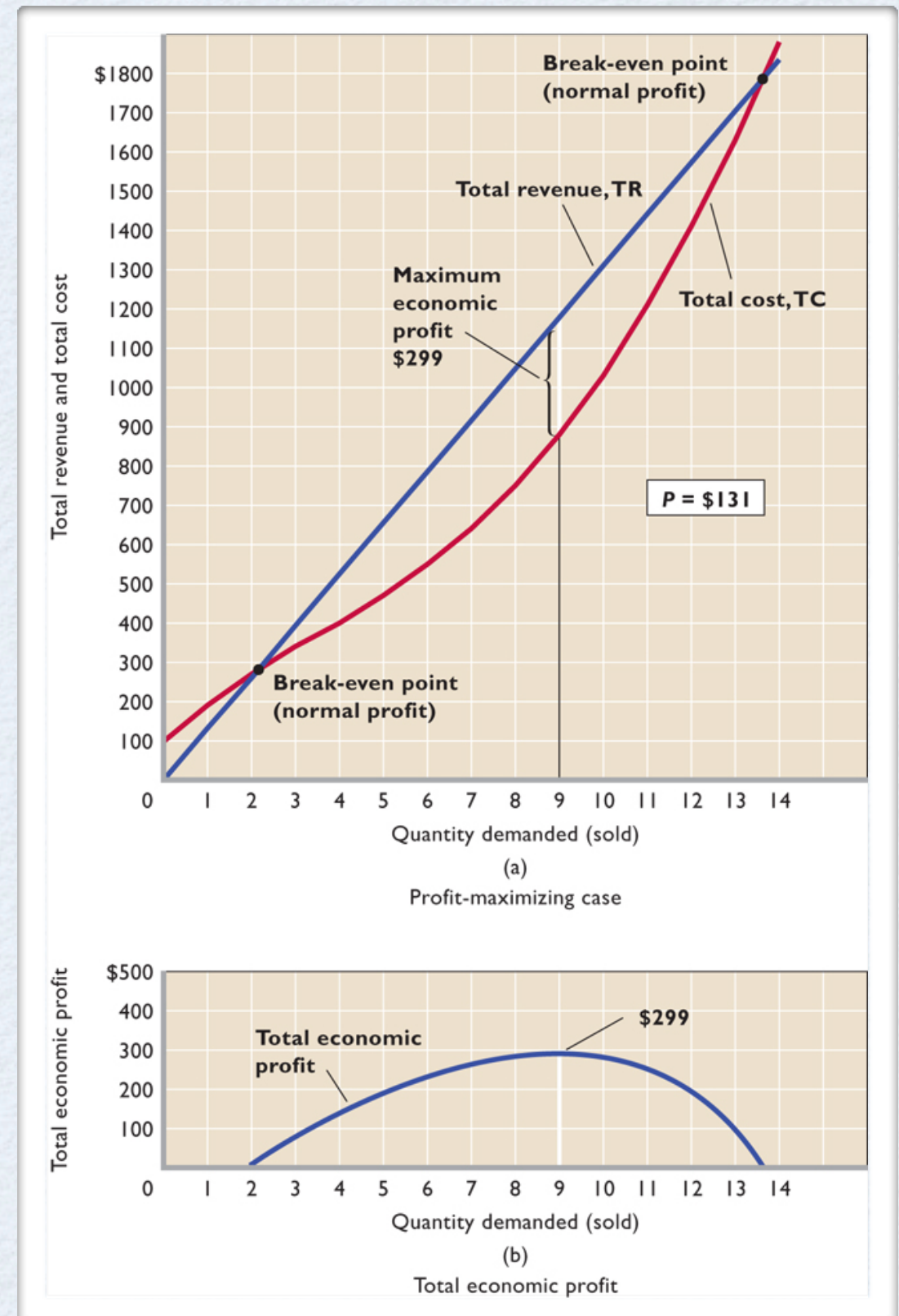
Demand by a Purely Competitive Seller

- **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

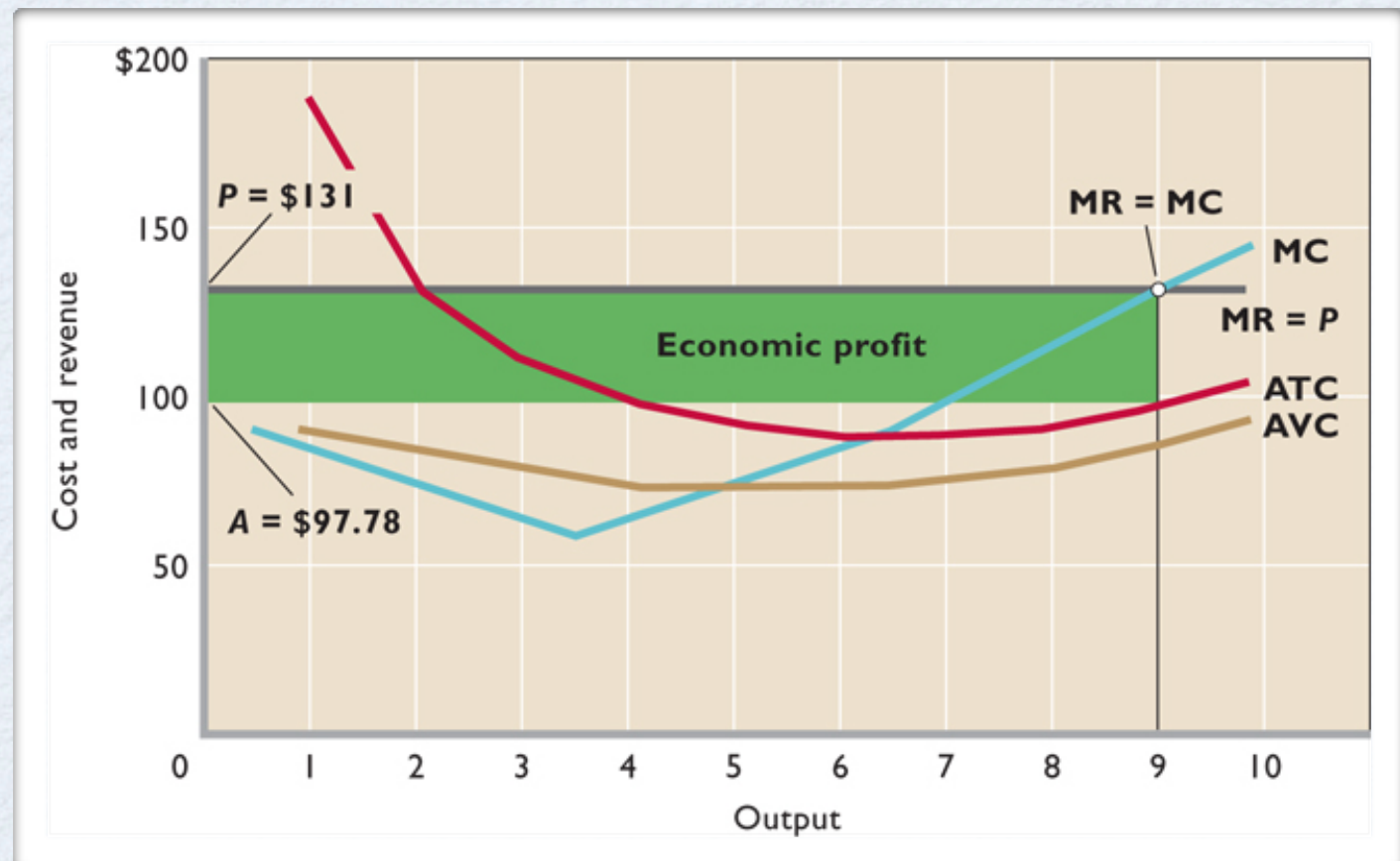
- Firms can maximize profit by adjusting output
- Plant is fixed, therefore, a firm can adjust its output by changing its variable resources (labor, materials ...)
- 2 approaches to profit maximization
 - TR -TC** approach
 - MR -MC approach



Profit Maximization in the Short Run: MR-MC Approach

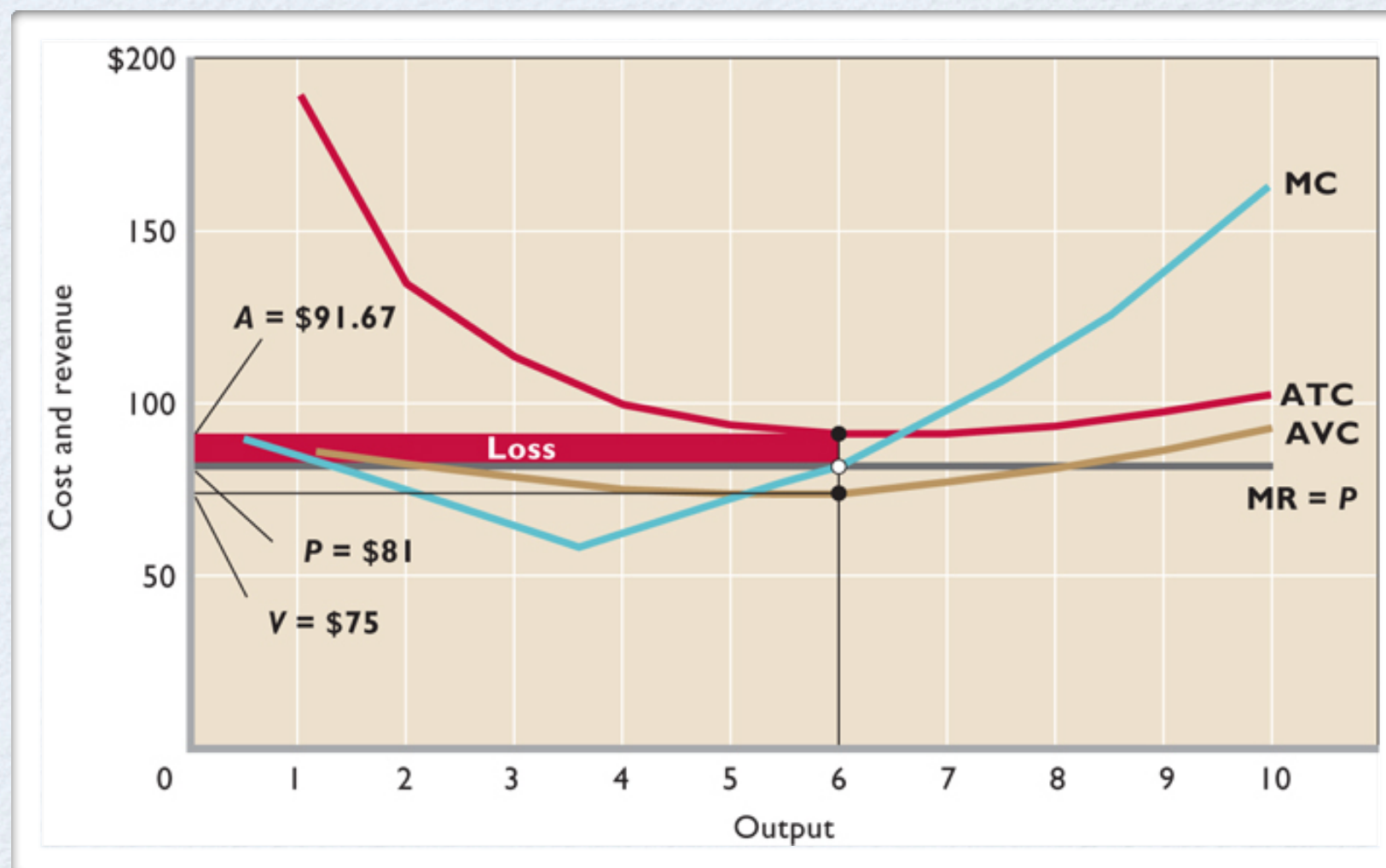
- The firm will maximize profit (or minimize loss) where **MR = MC**
- *Assumptions:*
 - *Applies only if producing is preferable to shutting down ($MR < AVC$)*
 - *The rule applies to all firms*
 - *The rule can be stated as $P = MC$ when applied to a purely competitive firm*
- **Profit maximizing case:**

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



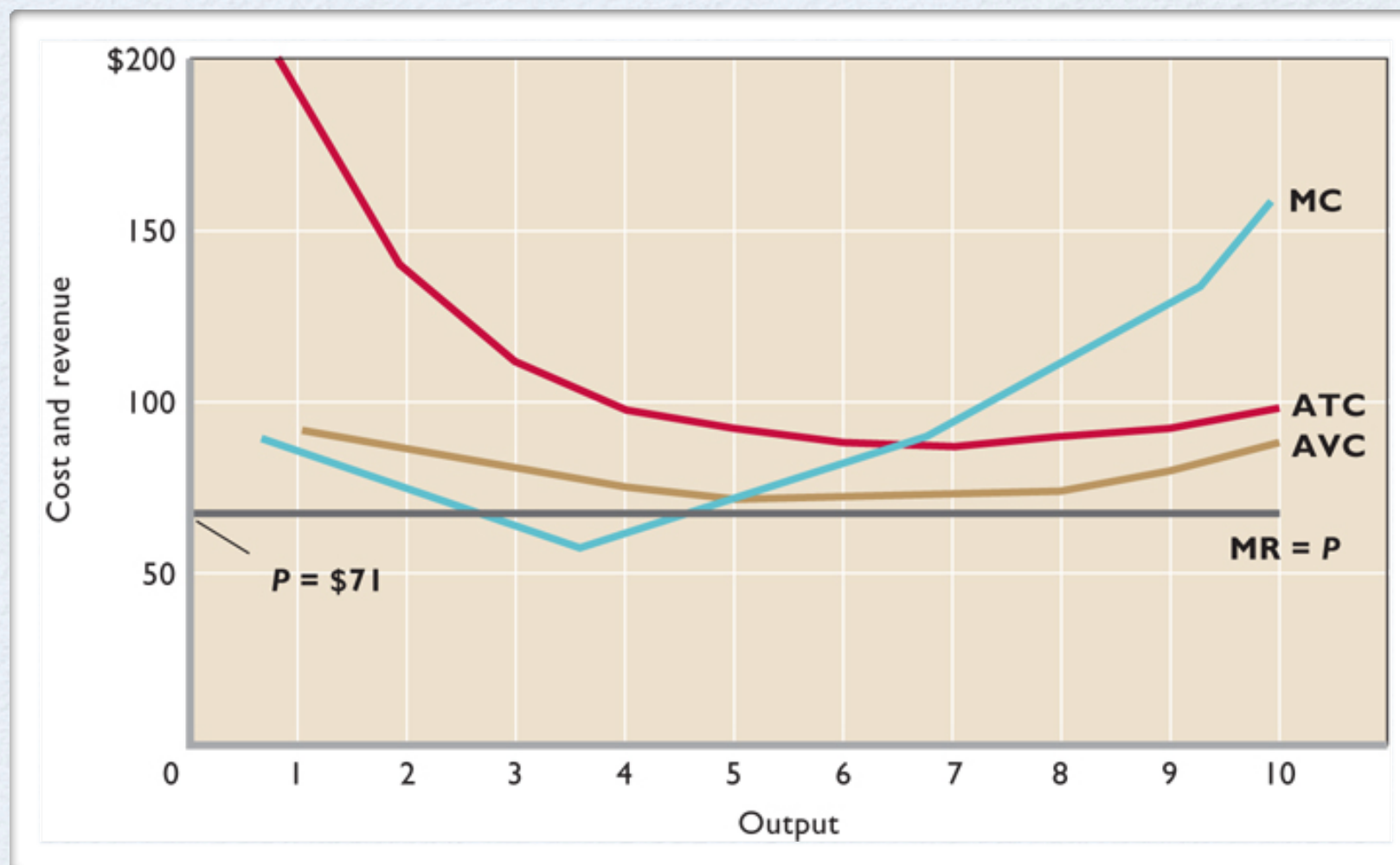
Loss Minimization in the Short Run: MR-MC Approach

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



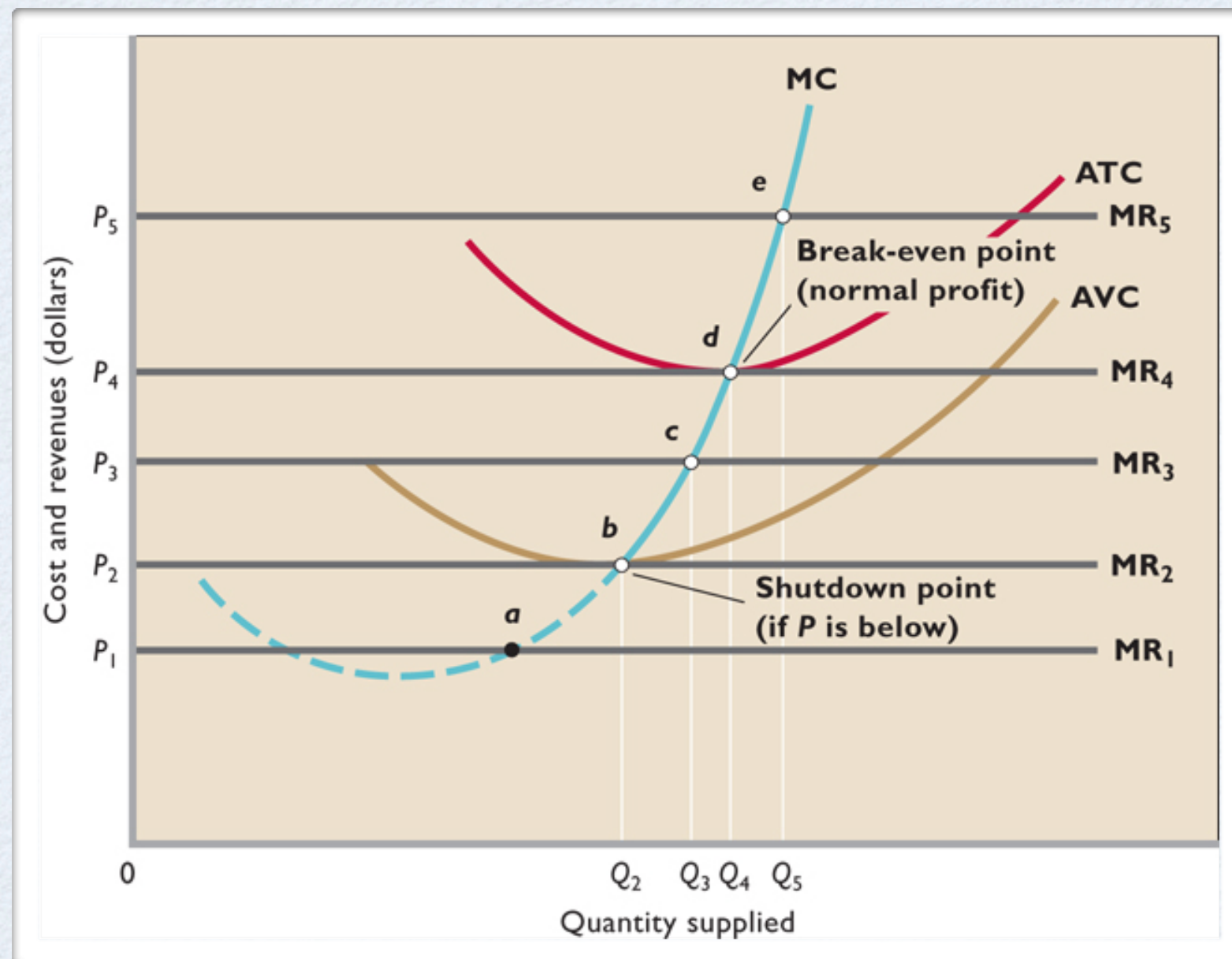
Shut down in the Short Run: MR-MC Approach

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

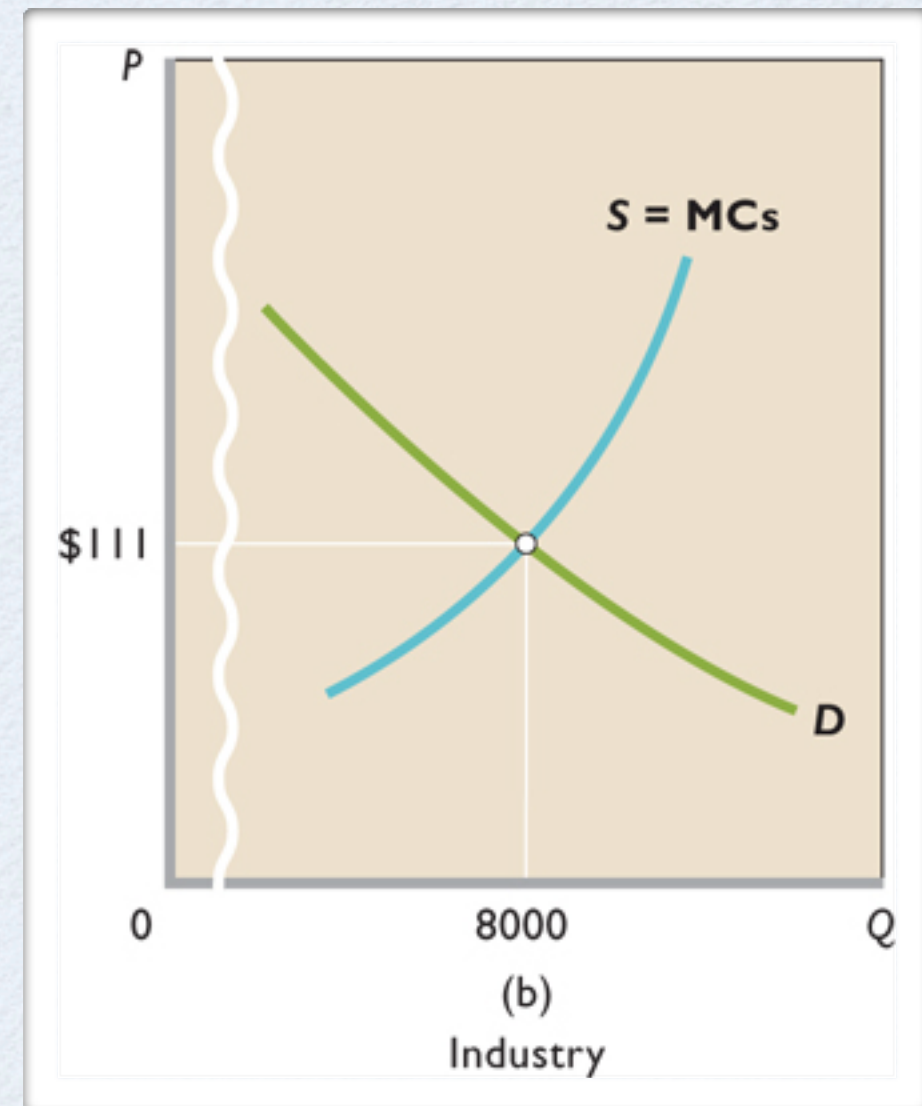
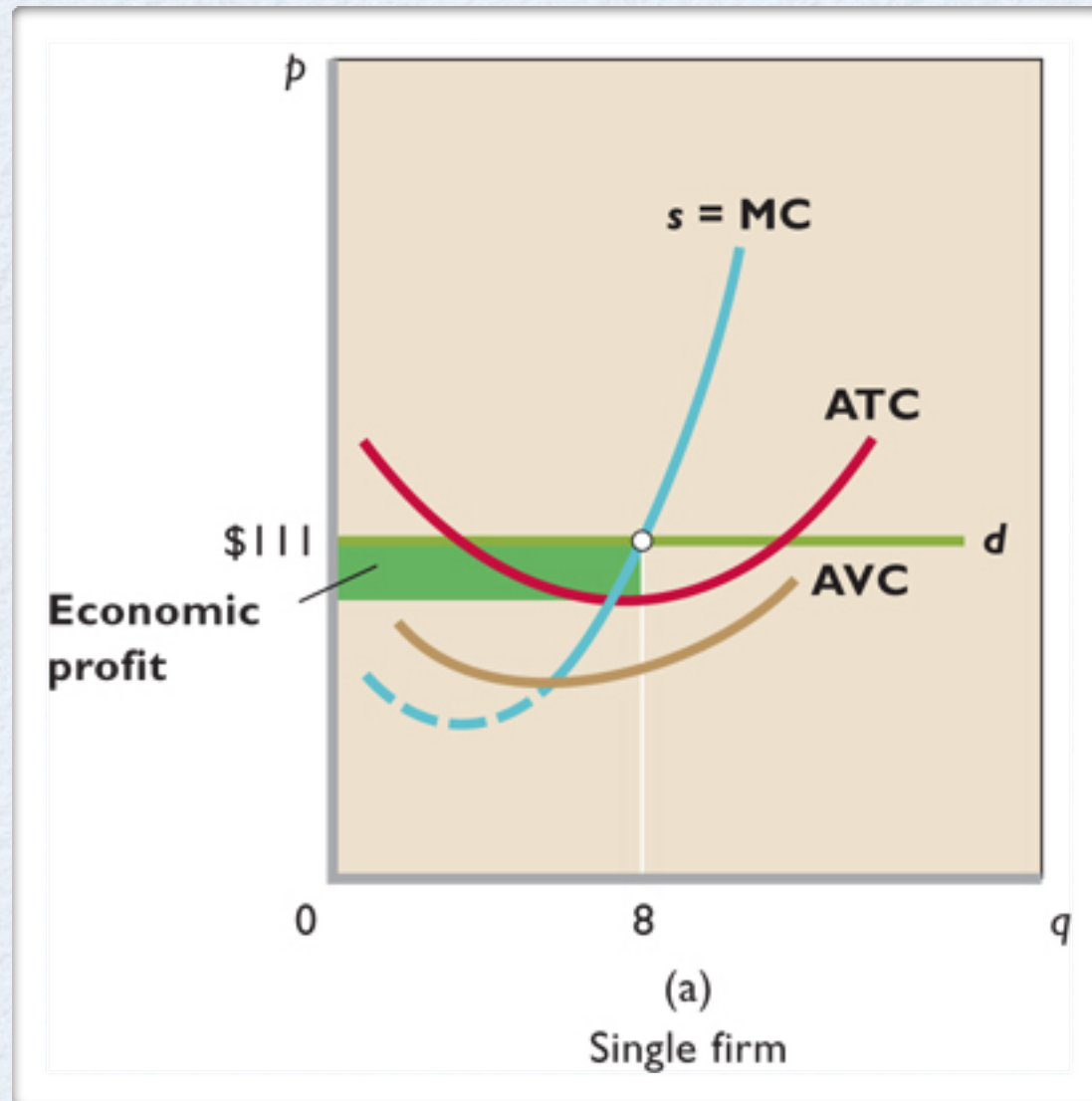


Marginal Cost and Short Run Supply

- 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

