

Market Structure

Market Structure

- In this section we shall explore various ways that supply and demand interact through different market structures.
- Simply by varying the assumptions, we can produce different market structures.

Market Structures

- There are four major structures studied in microeconomics:
 - Competitive markets
 - Monopolistic markets
 - Monopolistically competitive markets
 - Oligopolistic markets

Market Structures

- The importance of each structure lies in the best way to maximize profit.
- What works well under one type of structure will not work well under a different structure.
- The first structure we will study is the competitive market.

Competitive Market

Major Assumptions

- There are many buyers and many sellers.
- There is free entry and free exit.
- All products are alike.

Competitive Market

Importance of Assumptions

- Because there are many buyers and sellers, no one buyer or seller has market power, the ability to set price.
- As long as there are no entry or exit barriers (open entry), it will be difficult for sellers to increase prices to increase profit.

Competitive Market

Importance of Assumptions

- Since all products are alike, no firm can justify a higher price by claiming it has a superior product.

Competitive Market

Operational Considerations

- Firms are price takers. Only decision is how much to produce which is only limited by their capacity.
- Operational considerations are short-run decisions.

Competitive Market

Operational Considerations

- The demand curve by the firm is perceived to be flat because they can sell as much as can produce.
- Price is not affected by their production as they are such a small fraction of a much larger market.

Competitive Market

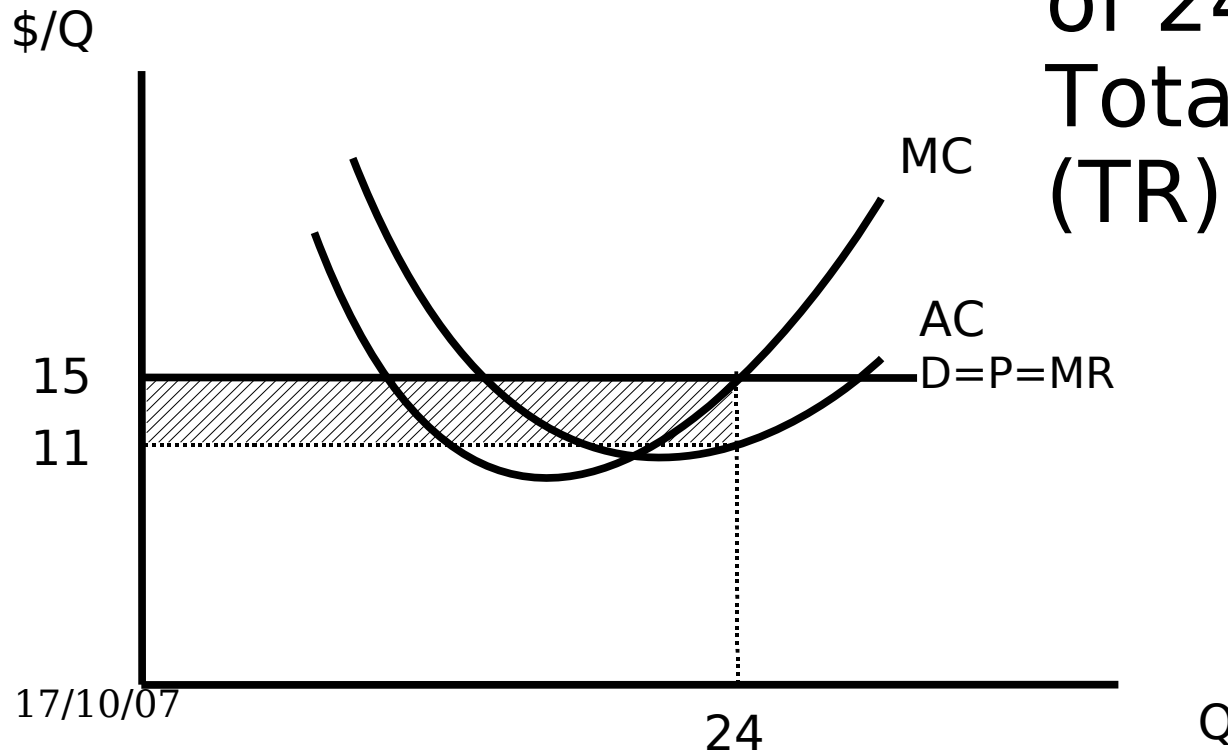
Operational Considerations

- In the short run, demand is variable.
- Consequently, both an economic loss and profit can be possible.

Competitive Market

Short Run Competitive Firm

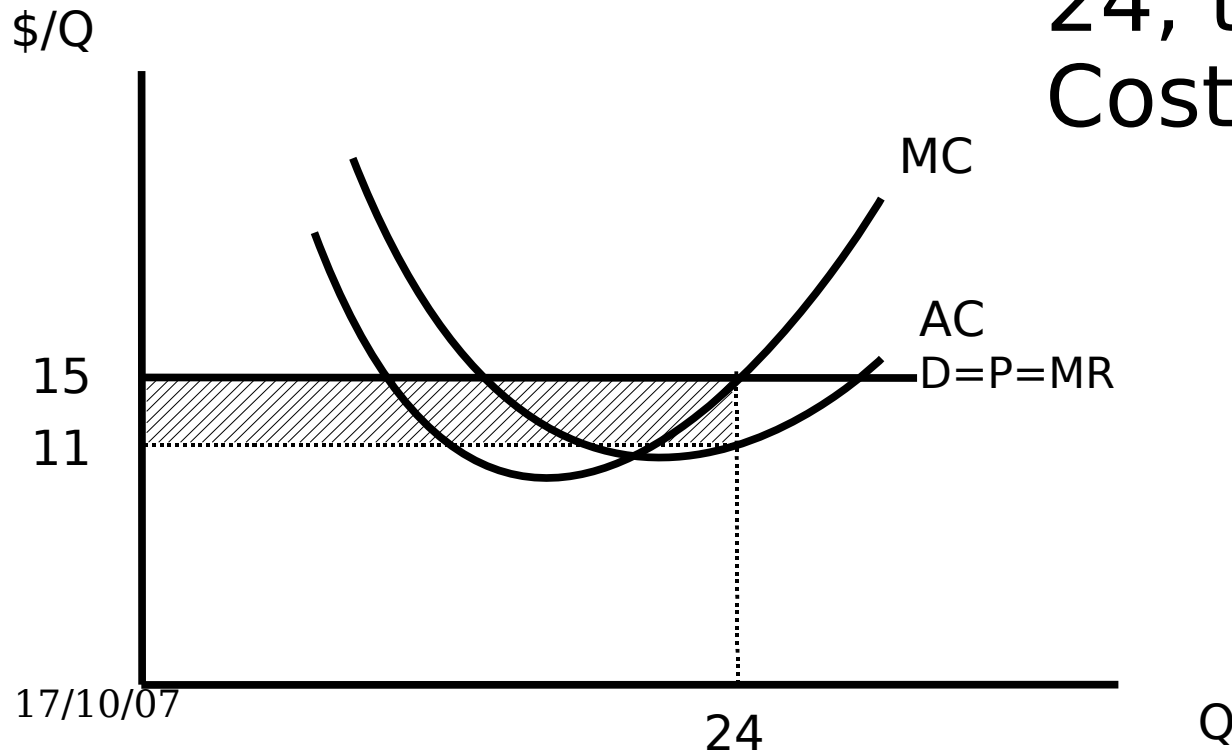
- Given a price of \$15 and quantity of 24, then the Total Revenue (TR) = \$360.



Competitive Market

Short Run Competitive Firm

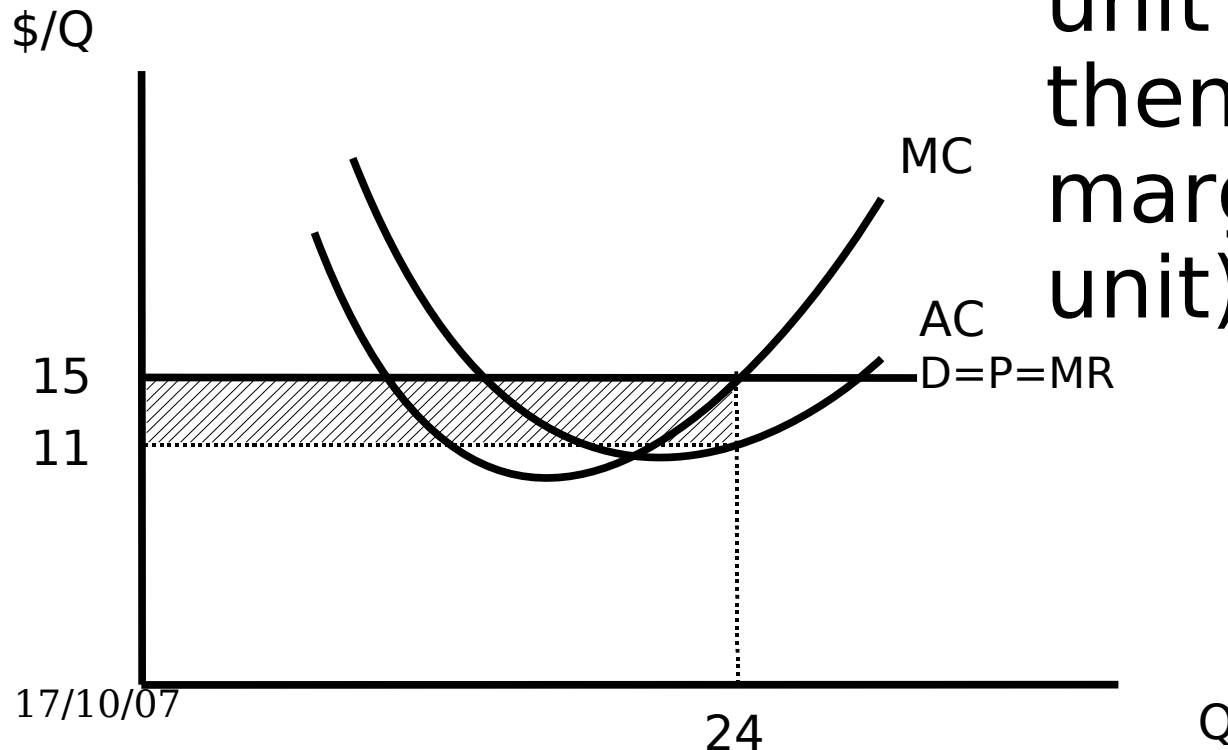
- Given a AC of \$11 and quantity of 24, then the Total Cost (TC) = \$264.



Competitive Market

Short Run Competitive Firm

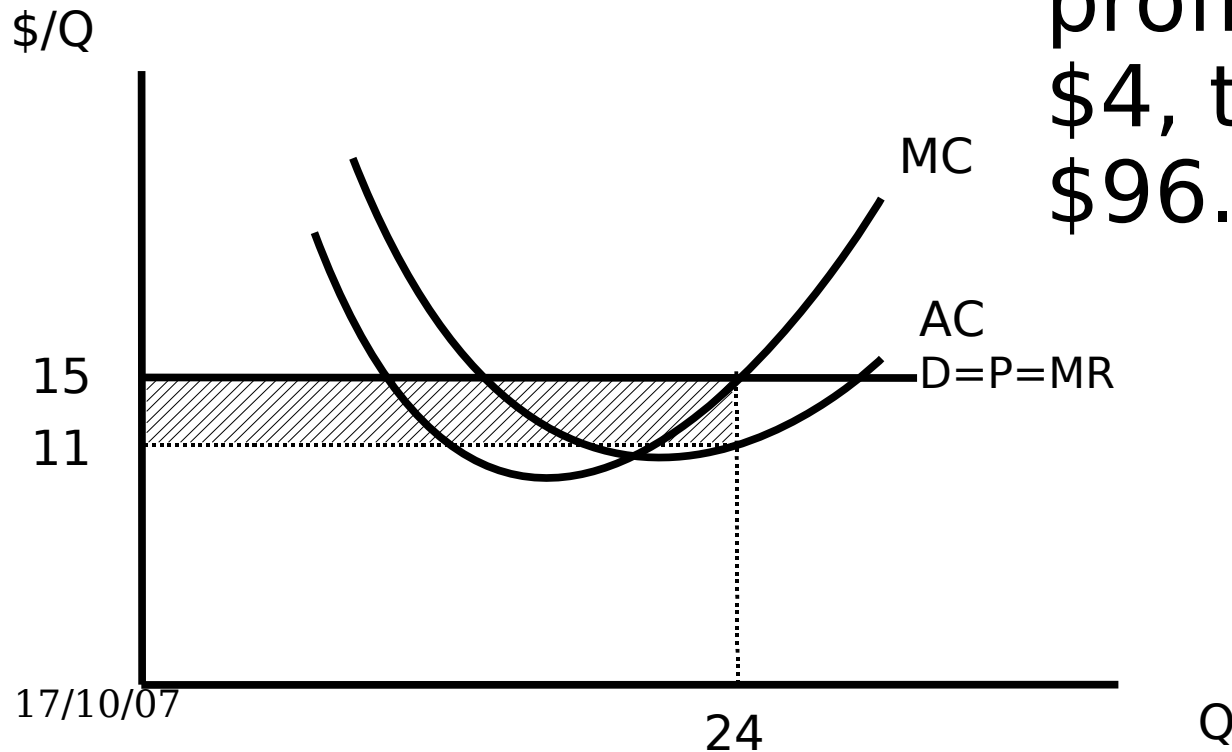
- Given a price of \$15 and a cost per unit (AC) of \$11 then the profit margin (profit per unit) is \$4.



Competitive Market

Short Run Competitive Firm

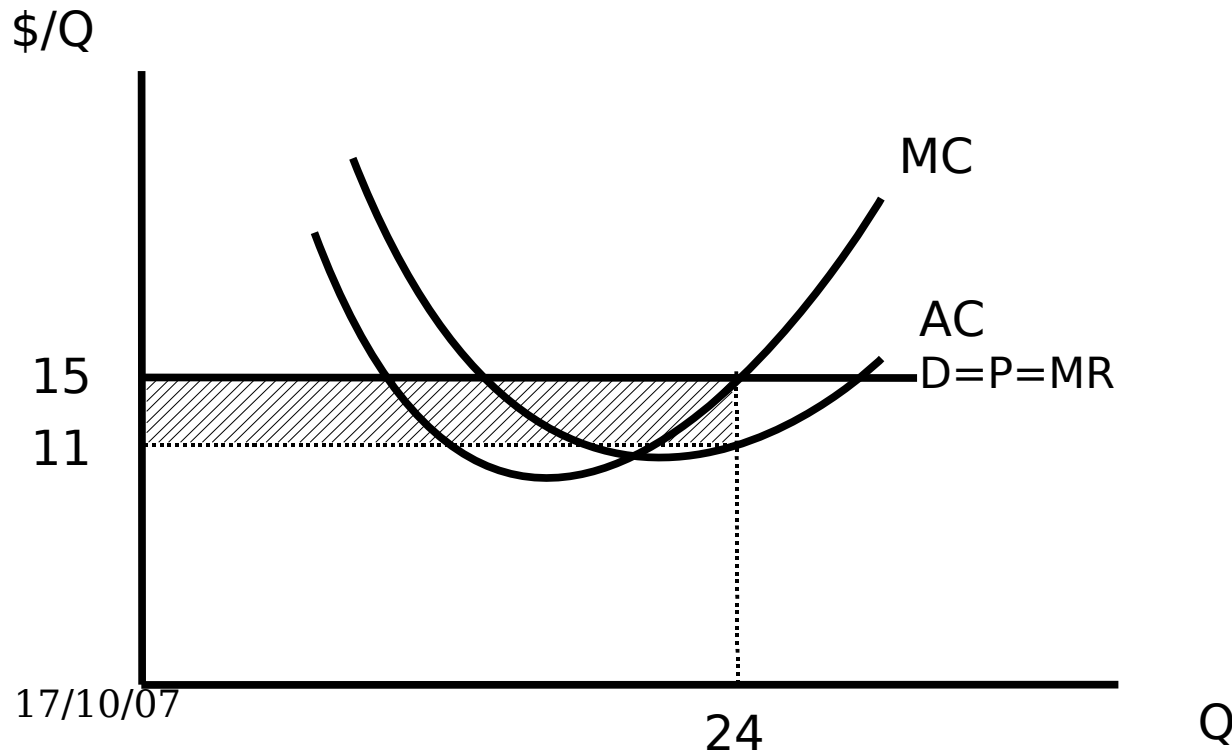
- Since 24 units are produced at a profit per unit of \$4, total profit is \$96.



Competitive Market

Short Run Competitive Firm

- The ROS is $\$96/360 = 27\%$.



Competitive Market

Strategic Considerations

- In the long run, it is supply that adjusts.
- Consequently, with free exit and entry, economic profits drop to zero.
- A normal operating profit still exists.

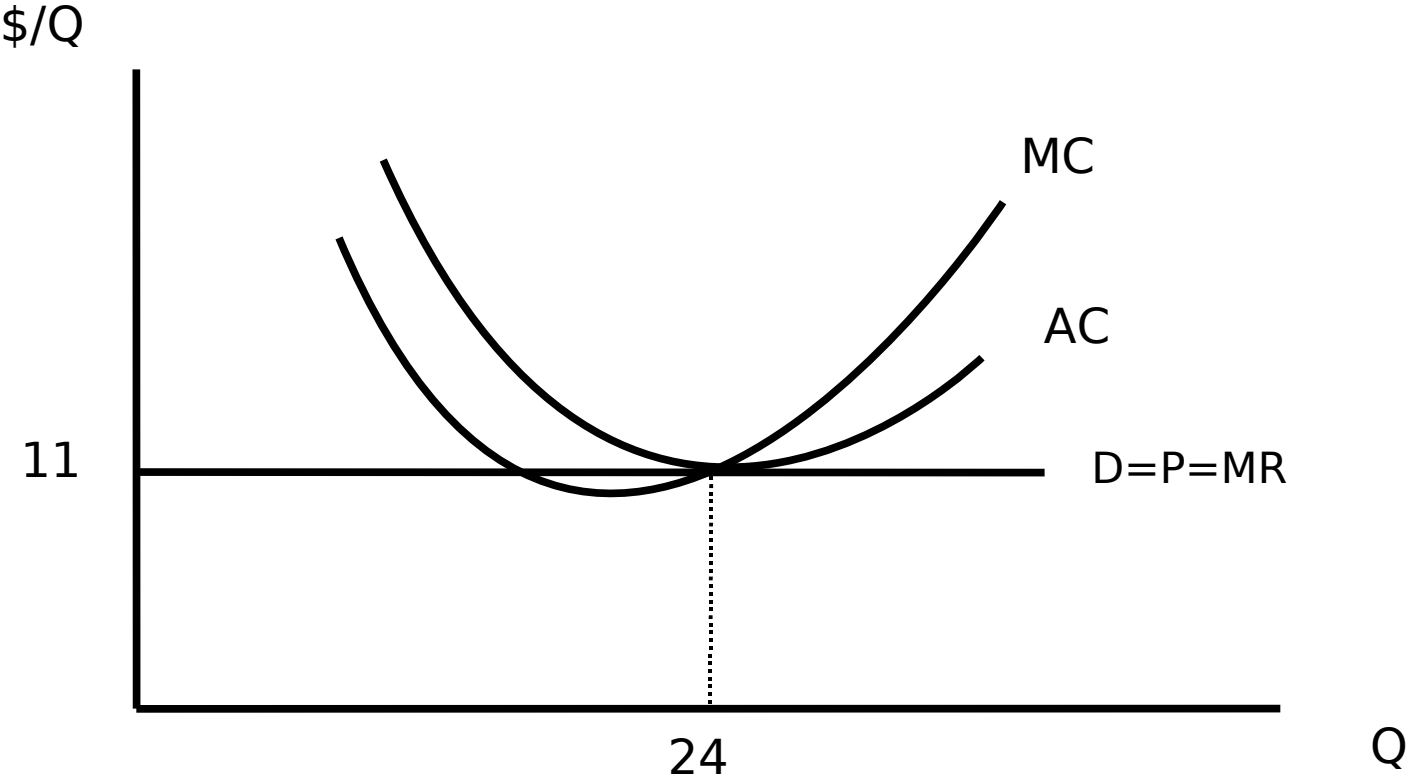
Competitive Market

Strategic Considerations

- Since capacity and product decisions are made in the long run, they are considered strategic.
- Efforts will be focused on cost reduction.

Competitive Market

Long Run Competitive Firm



Competitive Market

- Economic Efficiency
 - Productional Efficiency: goods are produced at the lowest possible cost per unit (AC). Society's resources are available for production of other goods and services.
 - Allocational Efficiency: Economic cost (MC) equals the economic value (MR). Buyer is not paying an economic profit. Savings can be used to buy something else.

Competitive Market

Economic Efficiency

- Competitive markets are considering the gold standard of economic efficiency.
- Society's welfare is maximized.
- Examples are often found in agricultural markets.

Monopolistic Market

Major Assumptions

- Many buyers, one seller.
- Ability to block entry.
- Only one product. No close substitutes.

Monopolistic Market

Importance of Assumptions

- The more inelastic the demand, the higher the potential profit.
- Because there is only one firm and customers can only buy that product, the firm is a price setter which means it has market power.

Monopolistic Market

Importance of Assumptions

- Because there is only one firm and customers can only buy that product, the firm is a price setter which means it has market power.

Monopolistic Market

Importance of Assumptions/Entry Barriers

- To ensure that there is only one firm supplying customers, effective entry barriers must exist or else other firms will enter the market.

Monopolistic Market

Importance of Assumptions/Entry Barriers

- Entry Barriers can be structural or strategic.
 - Structural barriers exist when the firm has natural cost, marketing, or governmental benefits.
 - Strategic barriers exist because of strategies initiated by the firm such as aggressive pricing or business practices.

Monopolistic Market

Importance of Assumptions/Entry Barriers

- Structural entry barriers can be:
 - Control of key resources
 - Economies of scale and/or scope

Monopolistic Market

Importance of Assumptions/Entry Barriers

- Strategic entry barriers raise costs of entry to new firms through aggressive business practices.
 - Limit pricing
 - Predatory pricing
 - Excess capacity

Monopolistic Market

- Operational Considerations
 - Monopolies have two operating decisions: price and output.
 - Typically, monopolies reduce output to increase price. That is how they maximize profit.
 - Examples are found in computer software, power generation, cable TV.

Monopolistic Market

Operational Considerations

- Monopolies face the market demand curve.
- Consequently, to increase sales, they must cut price.

Monopolistic Market

Operational Considerations

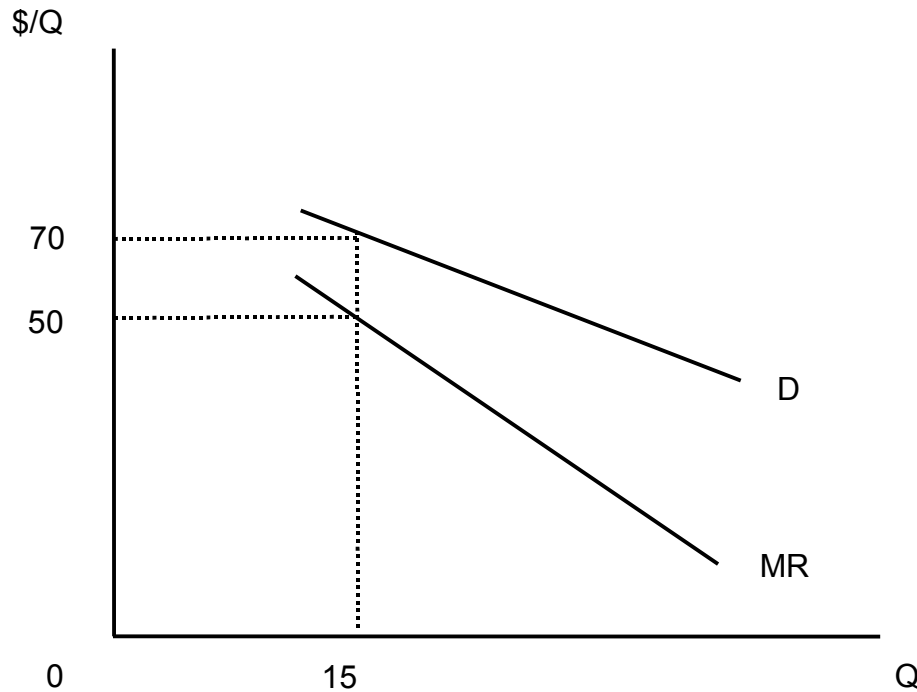
- However, they must cut price for all customers which causes the increase in revenue per unit, marginal revenue (MR), to be less than price (P).

Monopolistic Market

Operational Considerations

- Since $P > MR$ and $MR = MC$ at the optimum quantity, then $P > MC$.
- The profit margin ($P - MC$) is an economic profit.

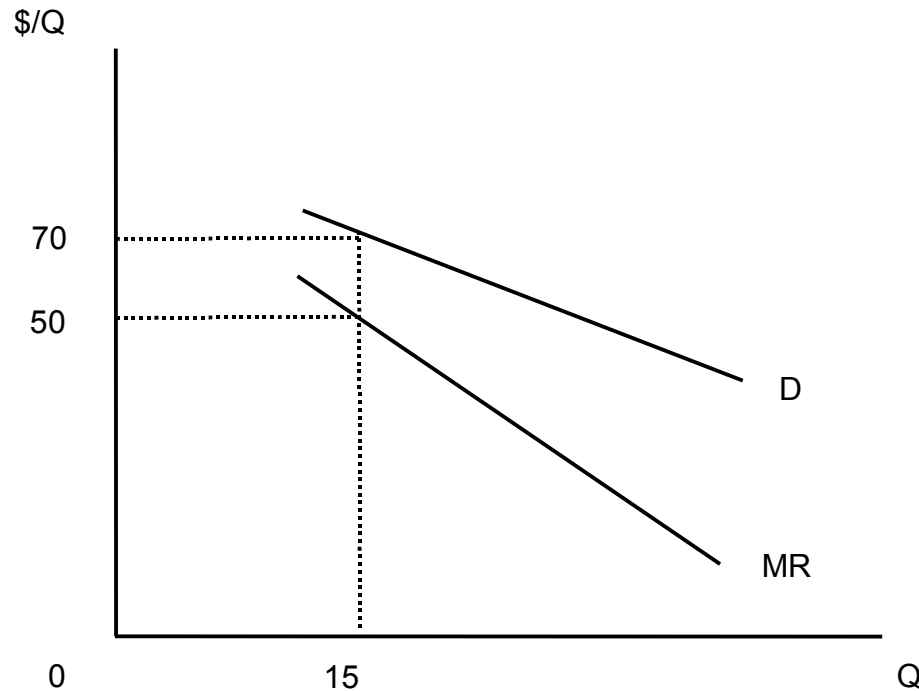
Monopolistic Market



Q	P	TR	MR
5	90	450	-
10	80	800	70
15	70	1050	50
20	60	1200	30
25	50	1250	10

Monopolistic Market

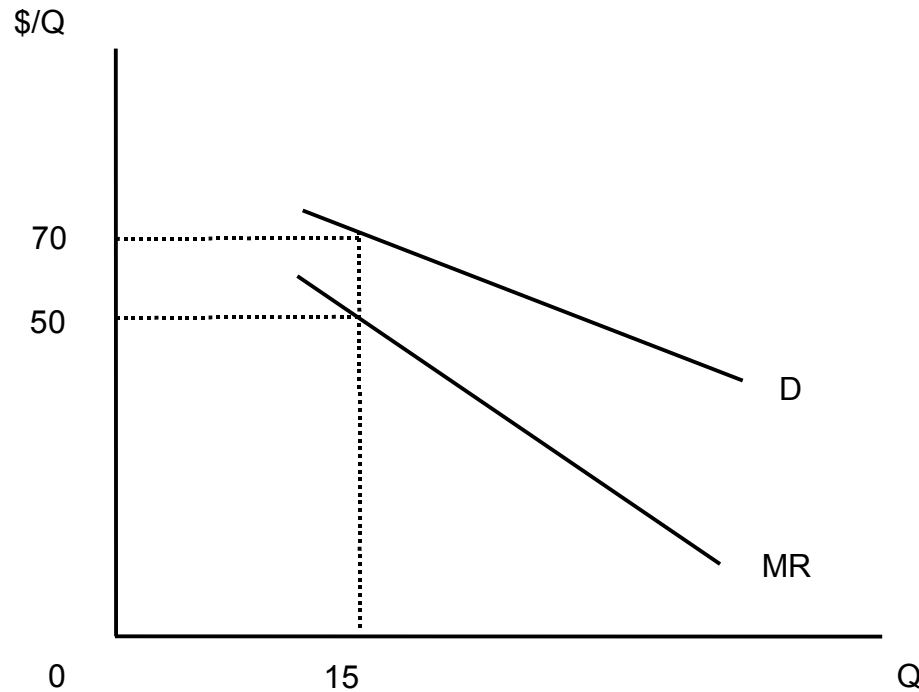
Operational Considerations



- Monopolies face the market demand curve.
- To increase sales, they must cut price.

Monopolistic Market

Operational Considerations



- But they must cut price for all customers causing the increase in revenue per unit, marginal revenue (MR), to be less than price.

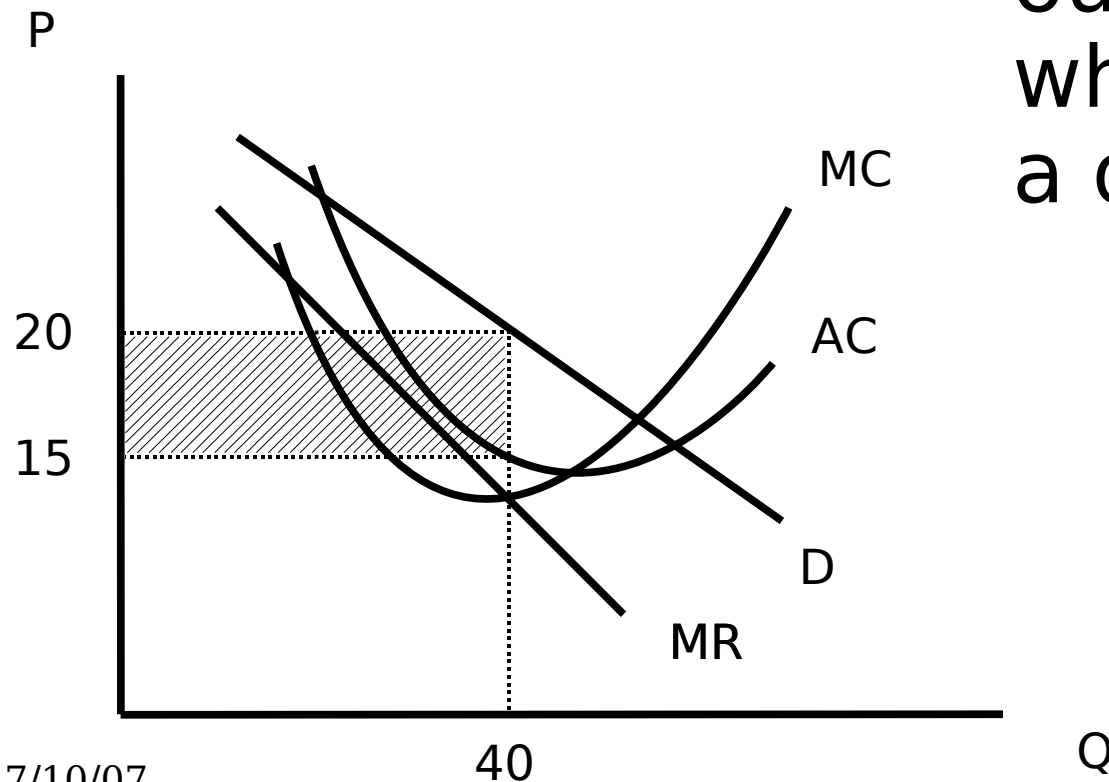
Monopolistic Market

Operational Considerations

- The more inelastic the demand, the higher the potential profit.

Monopolistic Market SR & LR Monopolistic Firm

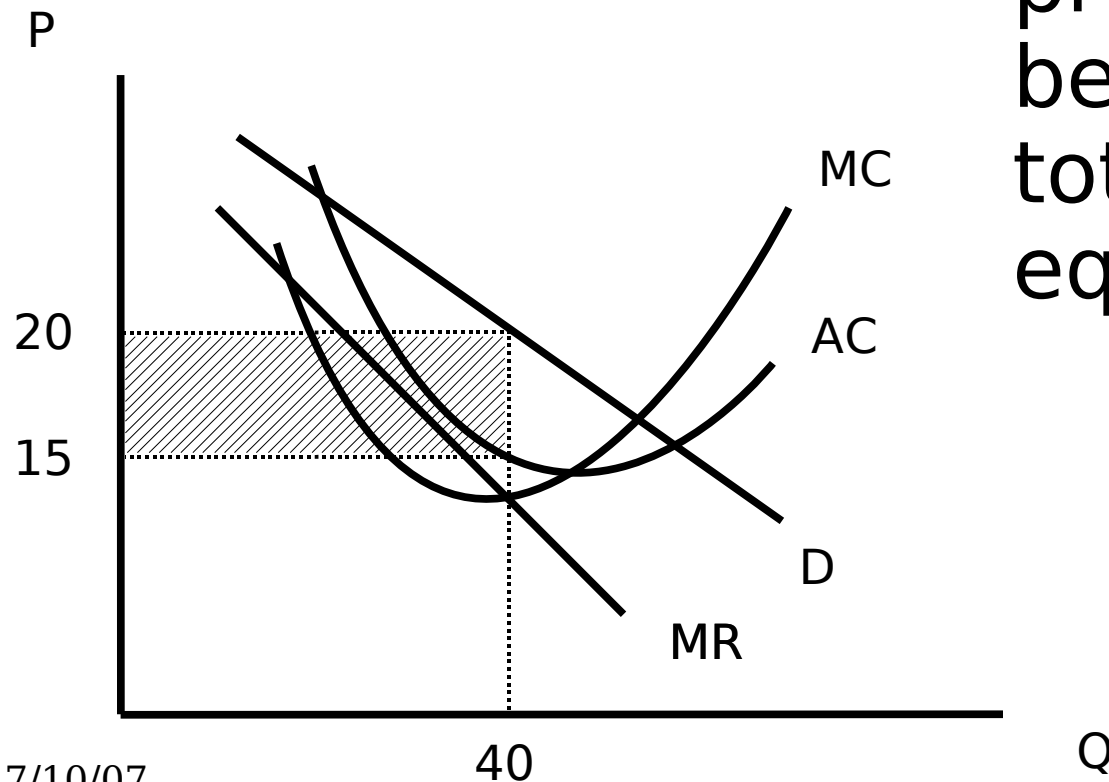
- Profit maximizing output occurs where $MR = MC$ at a quantity of 40.



Monopolistic Market

SR & LR Monopolistic Firm

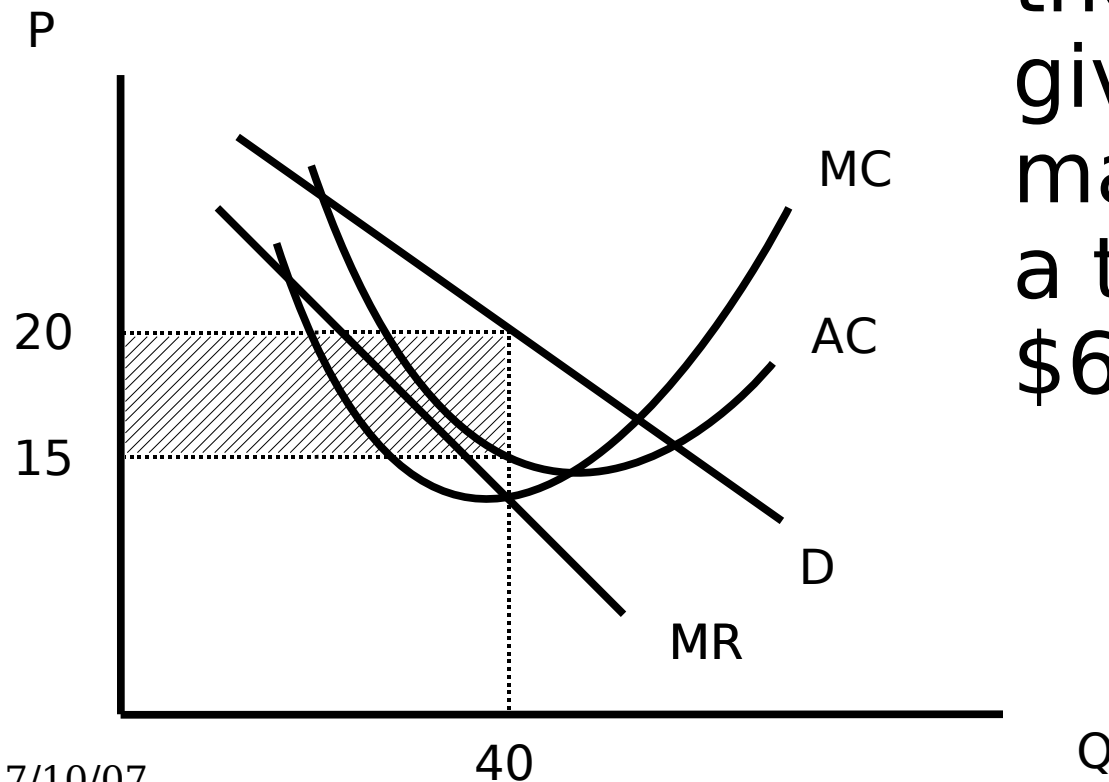
- At that quantity, a price of \$20 can be supported and total revenue equals \$800.



Monopolistic Market

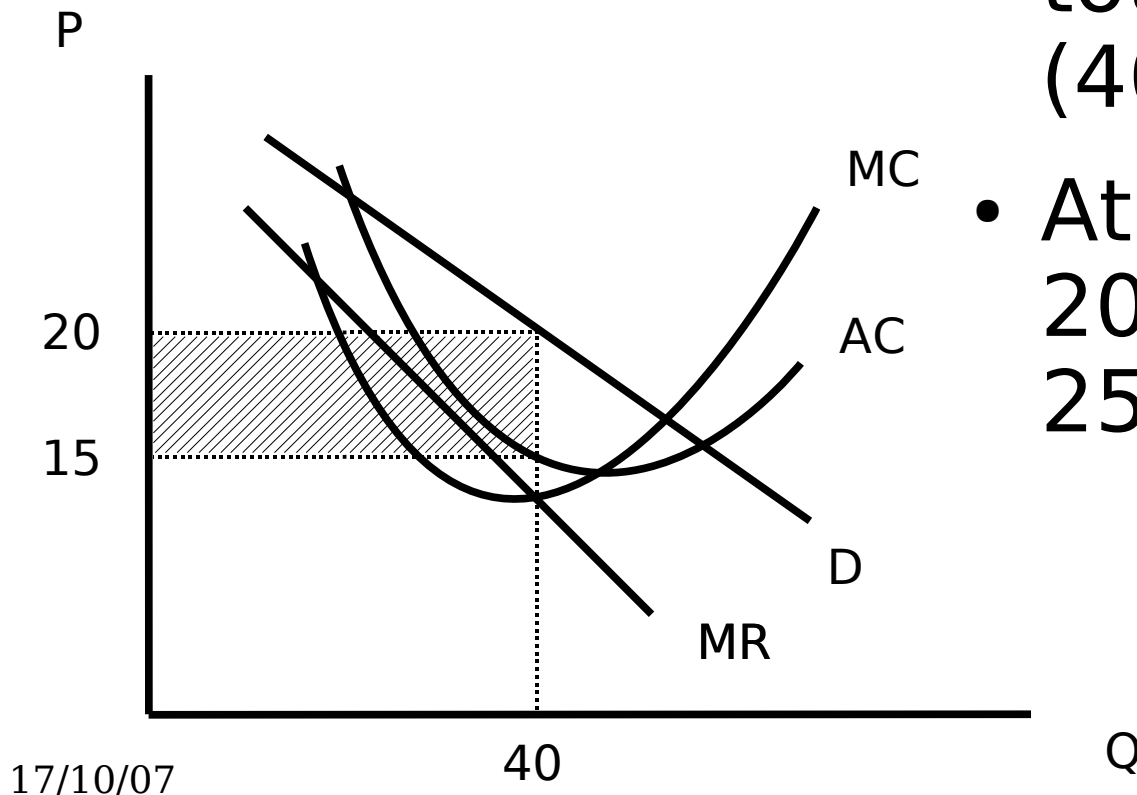
SR & LR Monopolistic Firm

- At that quantity the AC is \$15 giving a profit margin of \$5 and a total cost of \$600.



Monopolistic Market

SR & LR Monopolistic Firm



- Consequently, the total profit is \$200 ($40 * \5).
- At a quantity of 20, the ROS = 25% ($200/800$)

Monopolistic Markets

Strategic Considerations

- With the presence of entry barriers, economic profit can be maintained in the long run.
- Therefore, the strategic decision making focuses on the maintenance of entry barriers.

Monopolistic Market

Economic Efficiency

- Monopolies do not attain production efficiency as they restrict production to control price.
- Monopolies do not attain allocational efficiency as economic profit is being taken from consumers who spend that money on something else.

Monopolistic Market

Economic Efficiency

- Monopolies also incur “X-inefficiency”, a failure in the process to continuously improve cost performance.

Monopolistic Market

Economic Efficiency

- Economic policy toward monopoly has regarded it as undesirable due to society's welfare loss from monopoly's economic inefficiencies.

Monopolistic Market

Economic Efficiency

- Governments have three basic policy options when intervening against monopolies:
 - Prevention
 - Nationalization
 - Regulation

Monopolistic Market

Economic Efficiency

- Prevention policies utilize anti-trust laws in policing markets.
 - These laws are administered by the Dept. of Justice.
 - Laws often outlaw specific business practices that are used to establish monopolies.

Monopolistic Market

Economic Efficiency

- Industry concentration ratios are used to evaluate which firms and markets will be subjected to legal scrutiny.
- Difficulties arise in determining the definition of a market and in determining the existence of monopoly profits.

Monopolistic Market

Economic Efficiency

- Nationalization of firms is not permitted under US law.
 - Profits are returned to gov't.
 - Management becomes very political.

Monopolistic Market

Economic Efficiency

- Regulation
 - Governments often have regulatory commissions to set pricing policies for monopolistic industries. Example: electric power generation, cable TV.
 - Governments may attempt to confiscate monopoly profits or use tax incentives to force competitive levels of output.

Monopolistic Market

Economic Efficiency

- Regulatory commissions face difficulties in establishing price as they must determine the true cost structure.
 - Pricing can be based on different costs such as marginal cost or average costs.
 - Marginal cost is not ordinarily calculated in financial accounting. Therefore, estimates must be used.

Monopolistic Market

Economic Efficiency

- Regulatory commissions face the problem of regulatory capture.
- Regulators upon retirement find lucrative consulting jobs with the regulated.

Monopolistic Market

Economic Efficiency/Non-Intervention

- There are several reasons why governments may not intervene in monopolistic markets:
 - Market size is not large enough to support more than one firm.
 - Monopolies help to stabilize employment and business conditions.

Monopolistic Market

Economic Efficiency/Non-Intervention

- Reward for innovation.
- Government is incompetent and/or corrupt.

The End