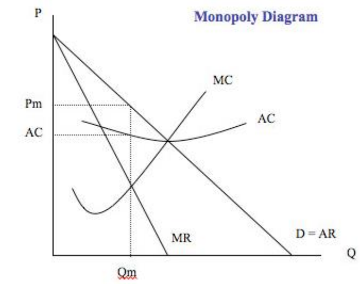
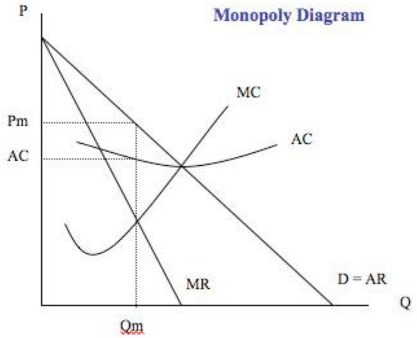
# Ch. 14 Learning Targets




- How a monopolist determines its profit-maximizing output and price
- How to determine whether a monopoly is carrying a profit or a loss
- The difference between monopoly and perfect competition, and its effects of that difference on society's welfare.
- How policy makers address the problems posed by monopoly.
- What price discrimination is, and why it is so prevalent when producers have market power.

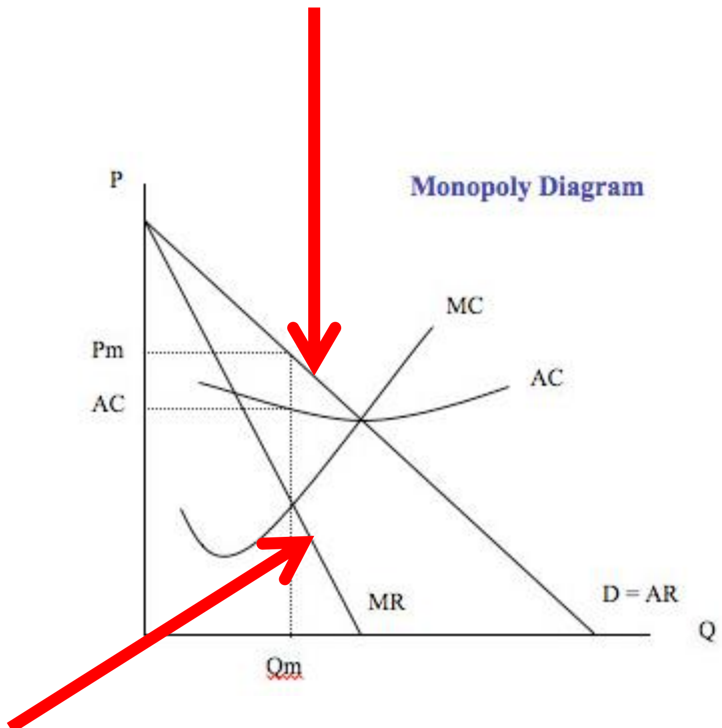
# Monopoly


Monopoly Diagram
P
Pm
AC
MC
AC
MR
D = AR
Q
Qm

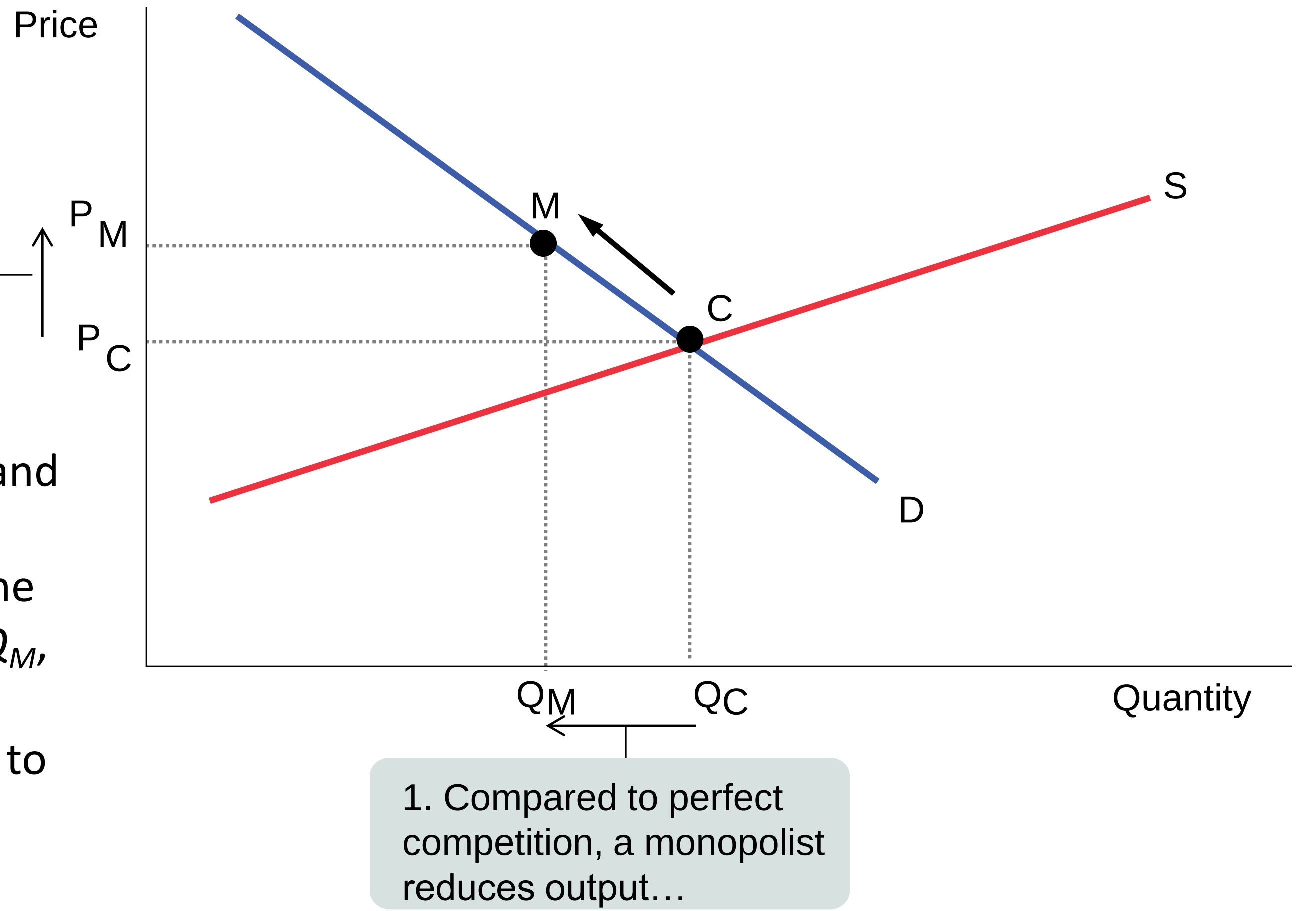

LATEST VERSION!
MONOPOLY
UPDATED FOR THE 1990'S
MICROSOFT

# Monopoly's Revenue


- The *MR curve* lies below its demand curve.
- A monopolist's *MR* is always less (double the slope)than the (DARP), because of the downward sloping demand curve.
  - If monopolist reduces price, they do so on all outputs (assuming they cannot use price discrimination.

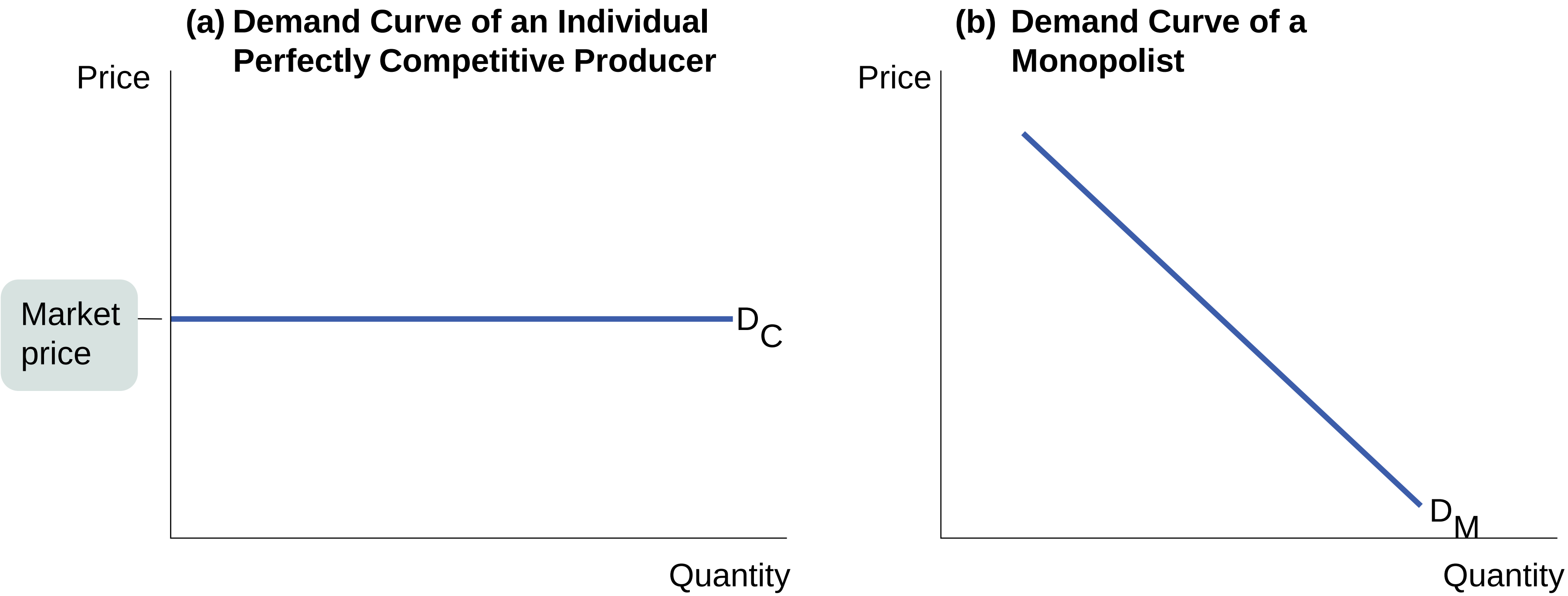


# What a Monopolist Does




Equilibrium is at *C*, where the price is $P_C$ and the quantity is $Q_C$. A monopolist reduces the quantity supplied to $Q_M$, and moves up the demand curve from *C* to *M*, raising the price to $P_M$.

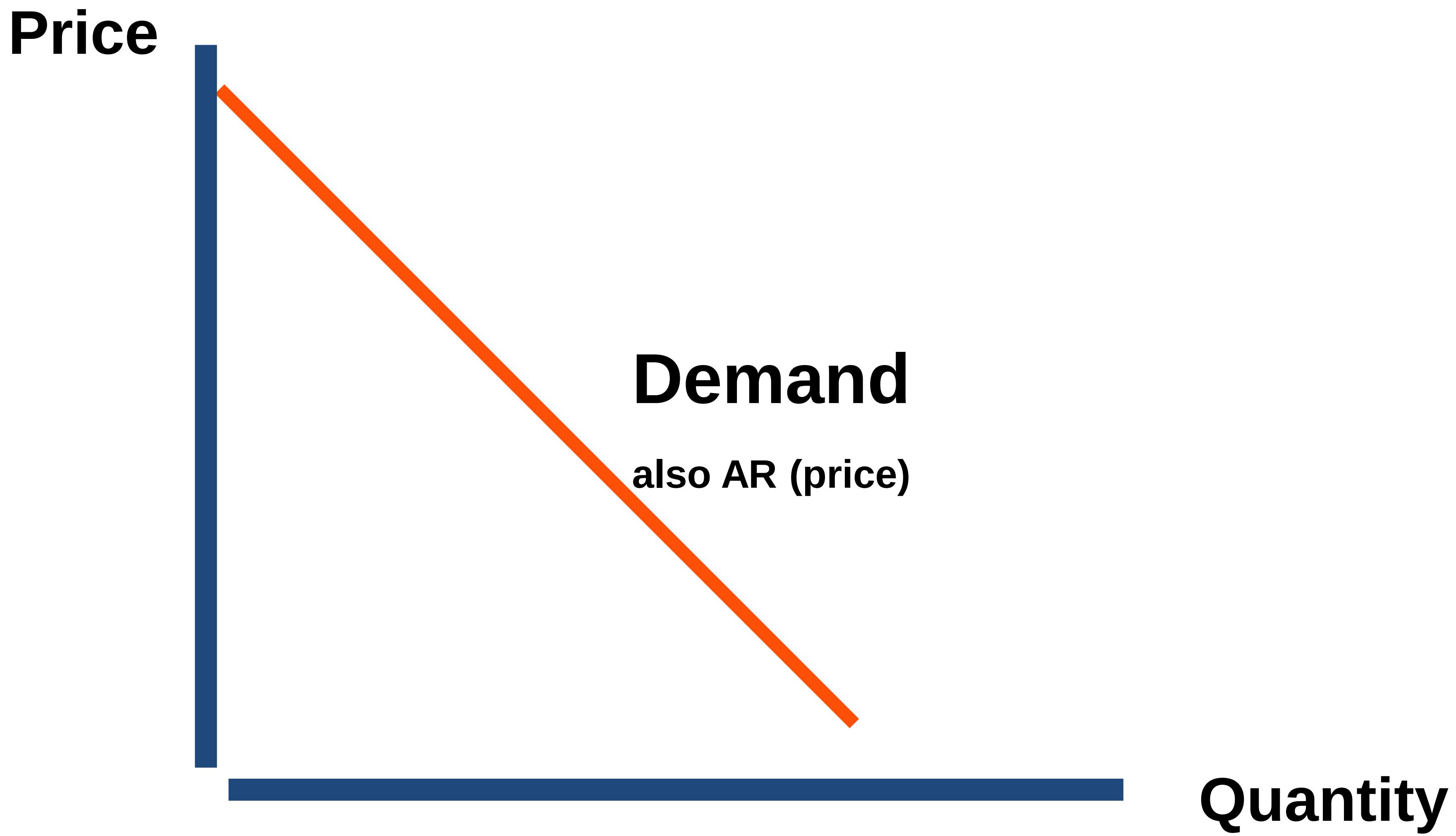
# Comparing the Demand Curves of a Perfectly Competitive Producer and a Monopolist



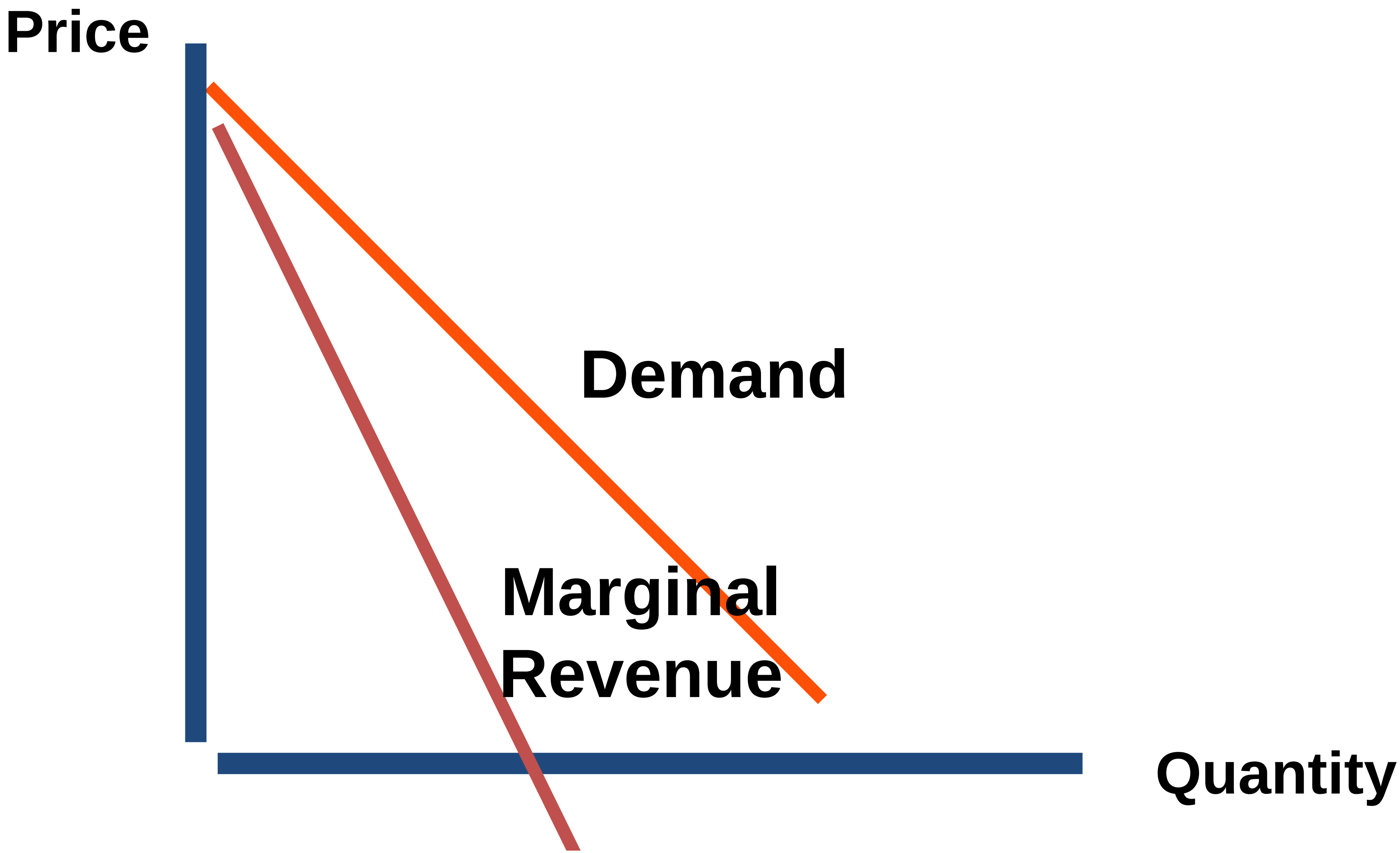

An individual <u>perfectly competitive firm cannot affect the market price of the good</u> → it faces a horizontal demand curve *DC*

A <u>monopolist, on the other hand, can affect the price</u> (sole supplier in the industry) → its demand curve is the market demand curve, *DM* To sell more output it must lower the price; by reducing output it raises the price.

# Monopoly's Demand Curve



# Monopoly's Marginal Revenue and Demand Curves

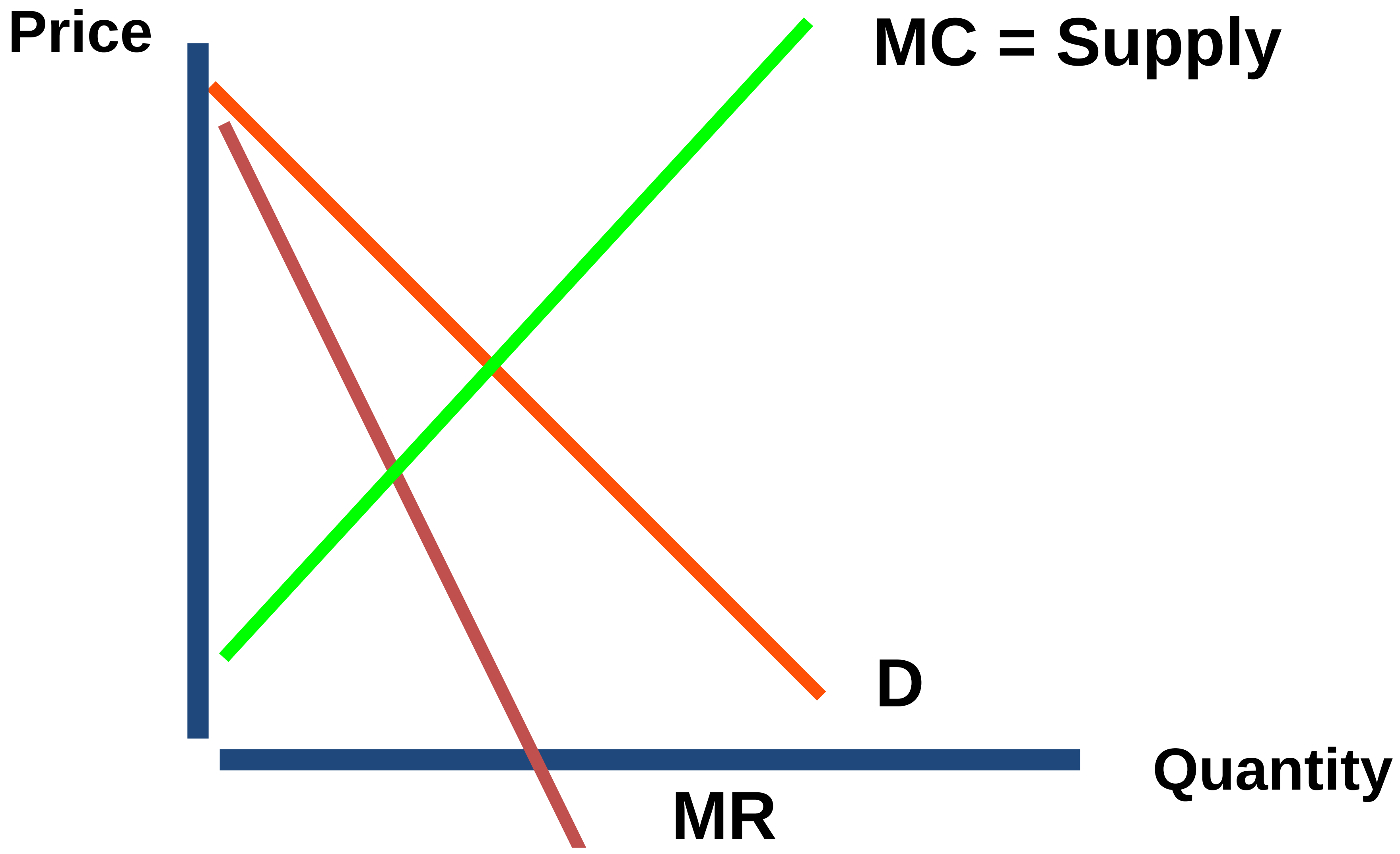


# Profit Maximization of a Monopoly

- profit-maximizing Q of output is

**MR=MC**

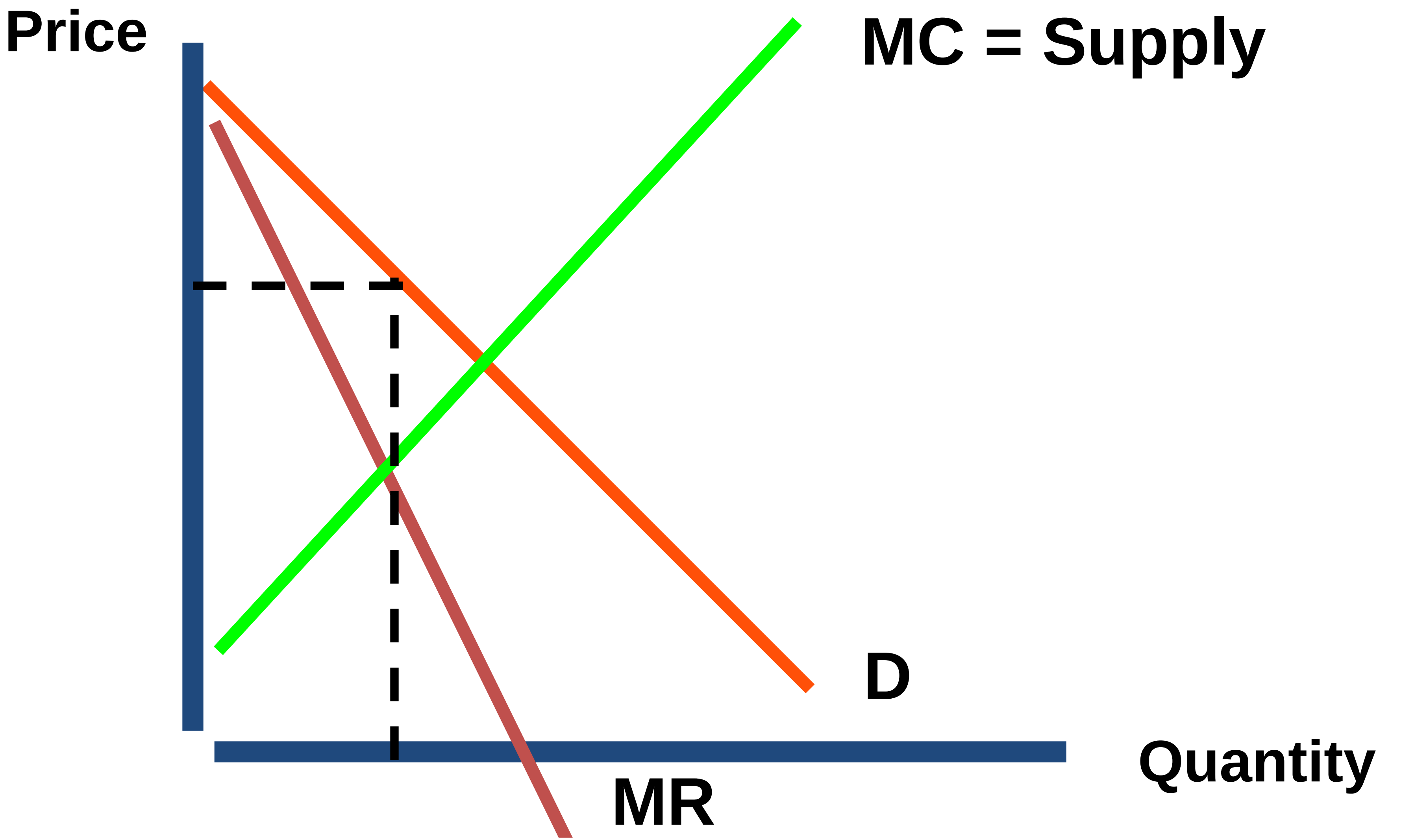
# Monopoly's Profit Maximization



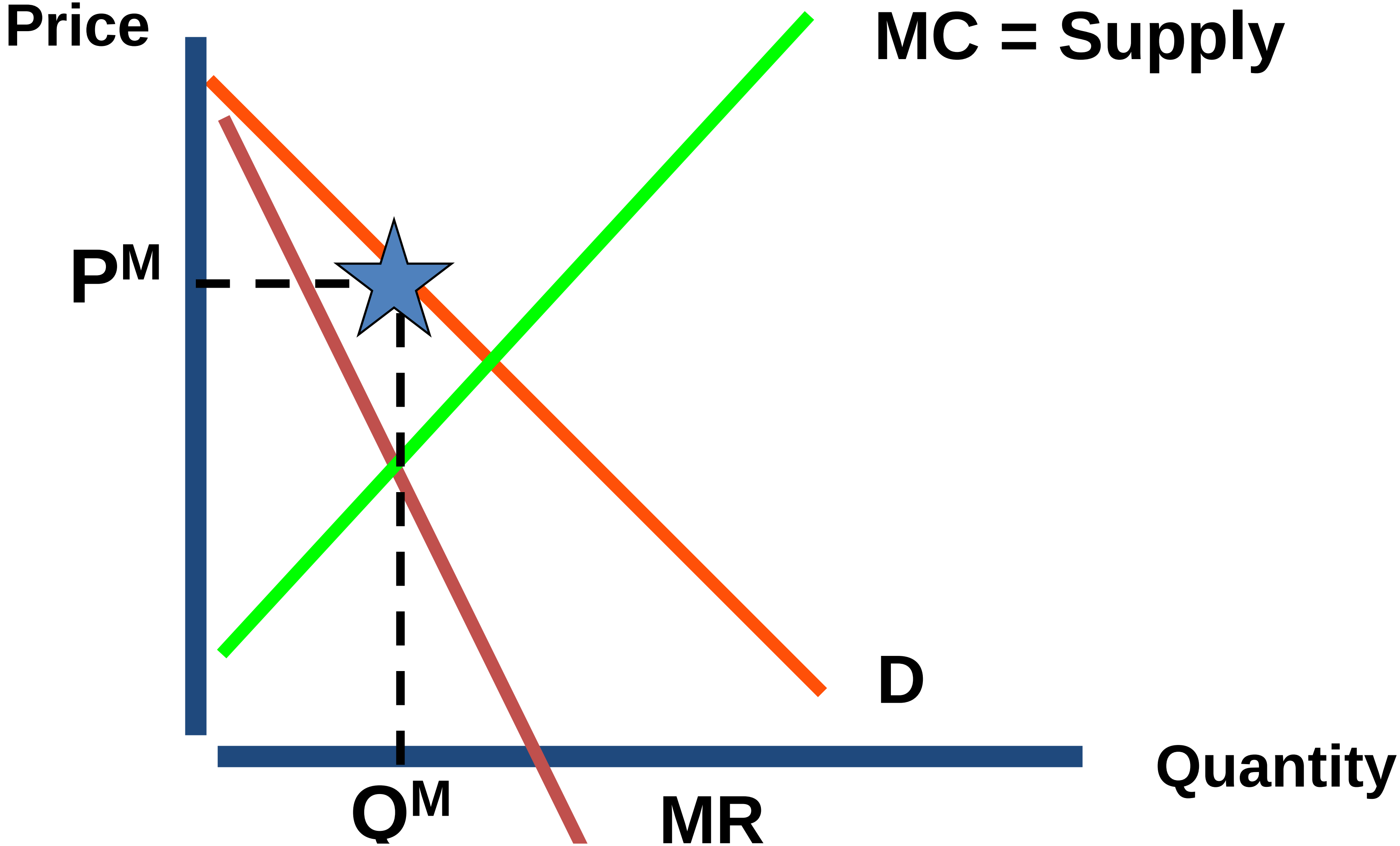
# Profit Maximization of a Monopoly

- In *Monopolized* markets price *exceeds* marginal cost.

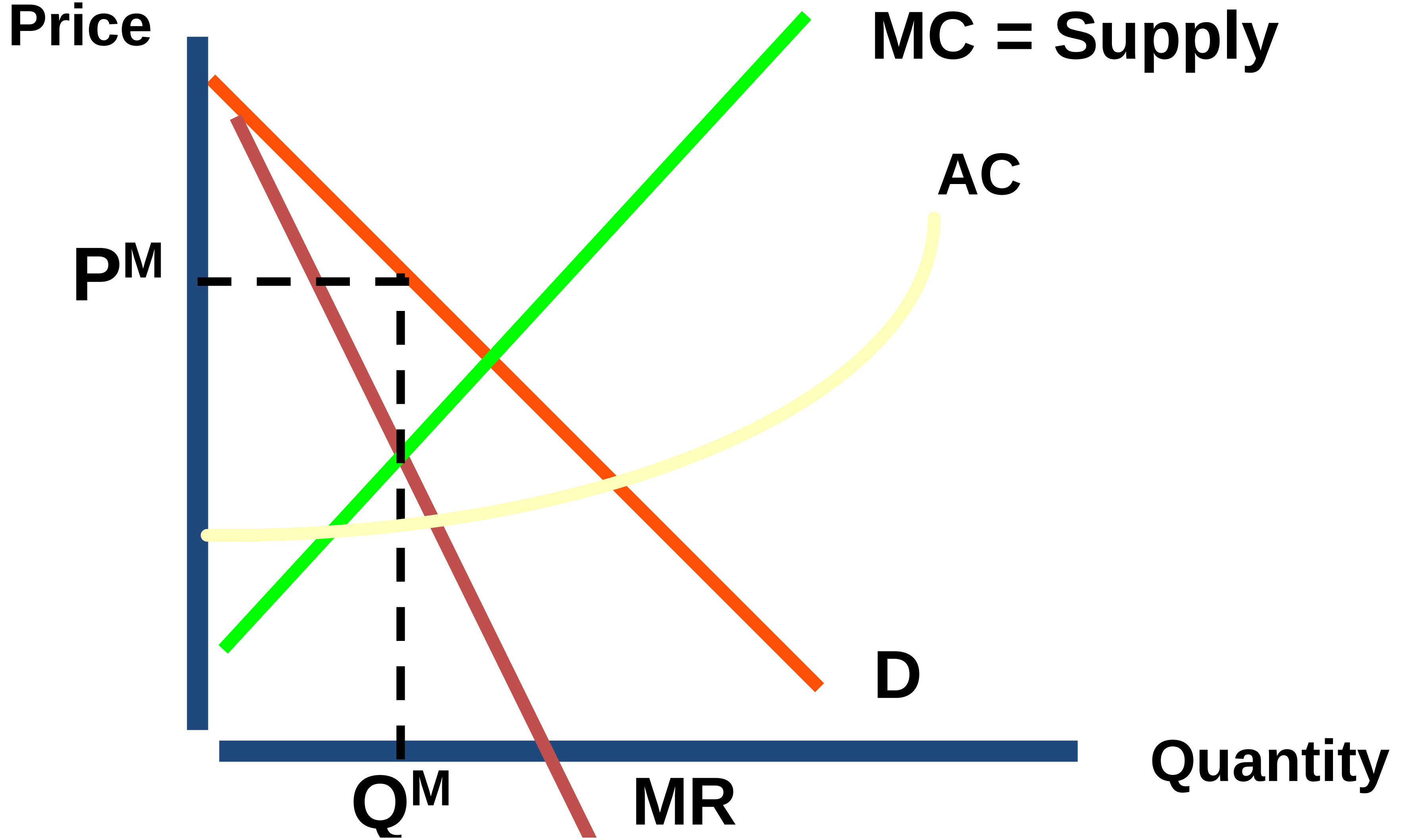
# Monopoly's Profit Maximization Price



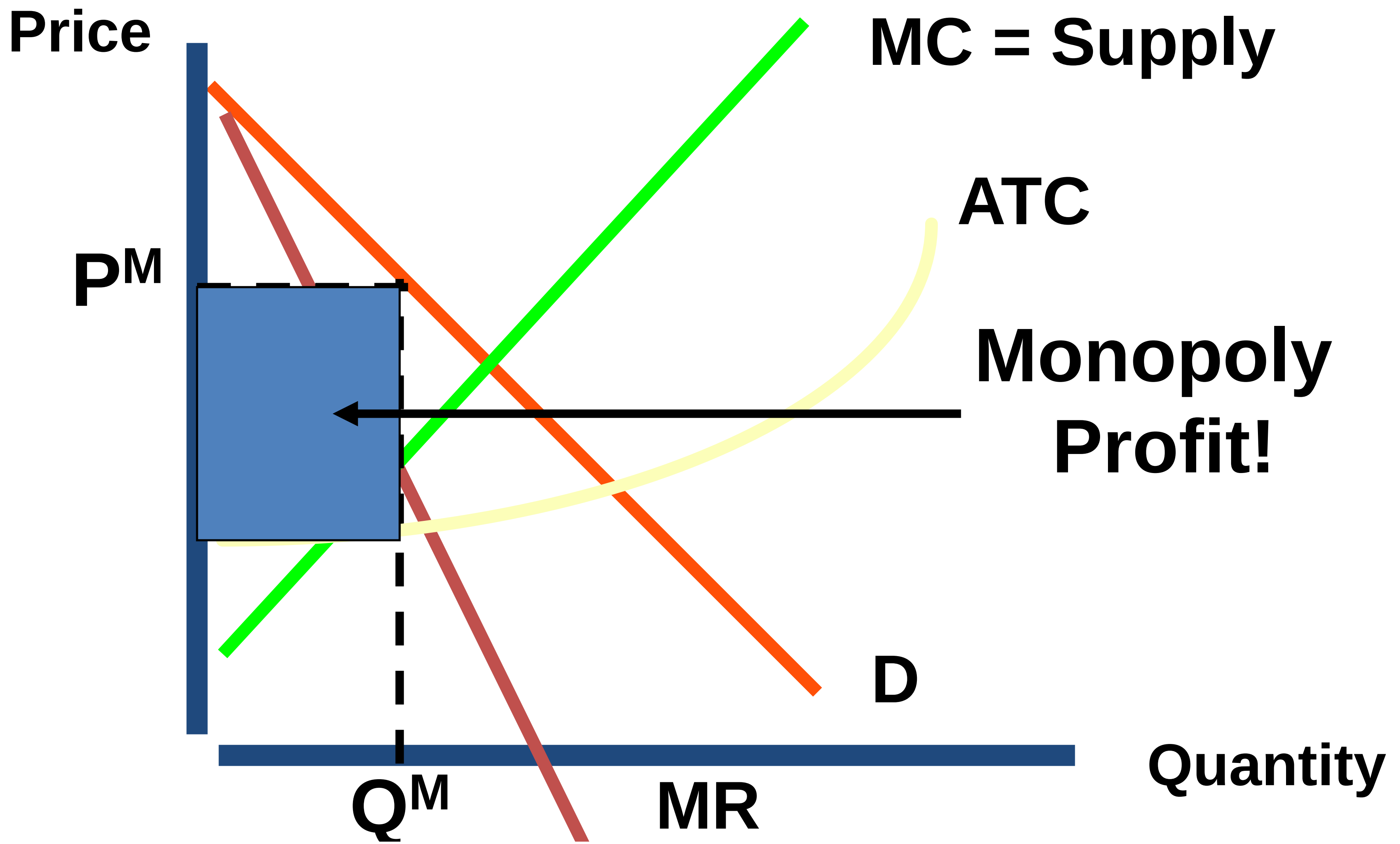
# Monopoly's Profit Maximization Price



# Monopoly's Profit Maximization



# Monopoly’s Profit Maximization



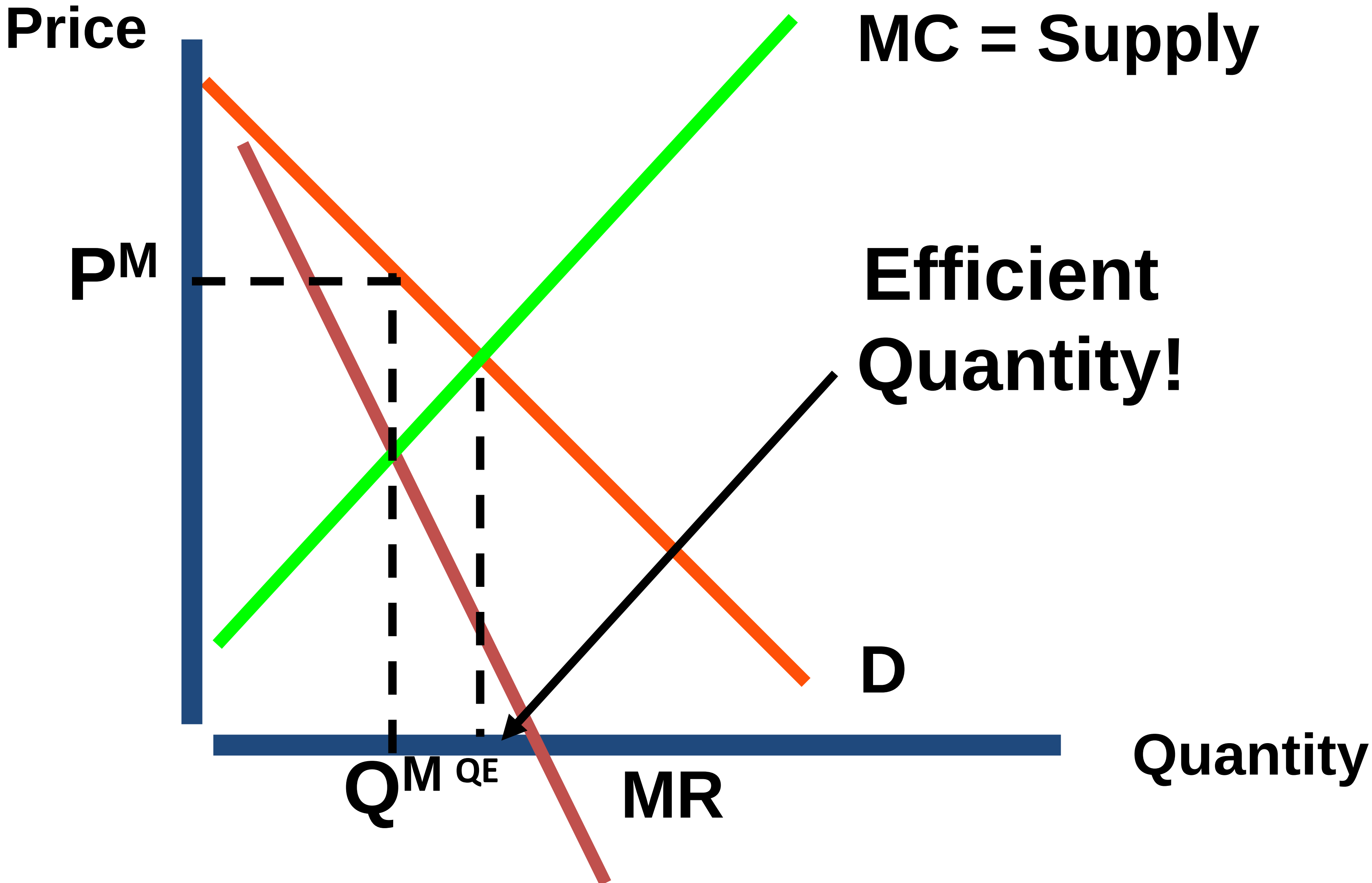
# The Welfare Cost of Monopoly

- The monopolist produces ***<u>less</u>*** *than the socially efficient (QS=QD) quantity of output.*

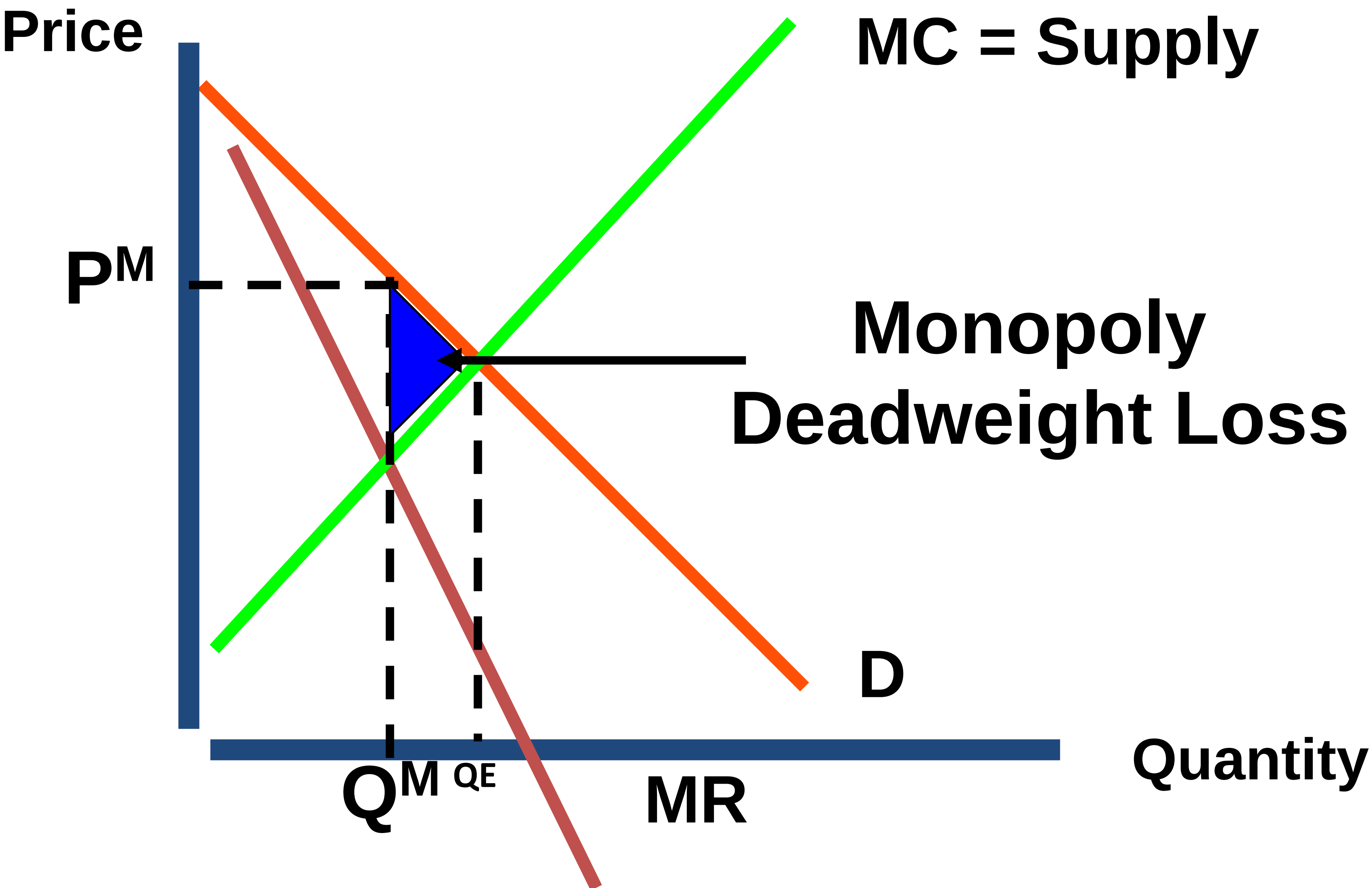
# Deadweight Loss

- Because a monopoly sets price above MC it places a wedge.
- The wedge causes the quantity sold to  fall short of the social optimum.

# Monopoly's Profit Maximization



# Monopoly's Profit Maximization



# iPad Unreg Monopoly

# iPad Regulated Monopoly

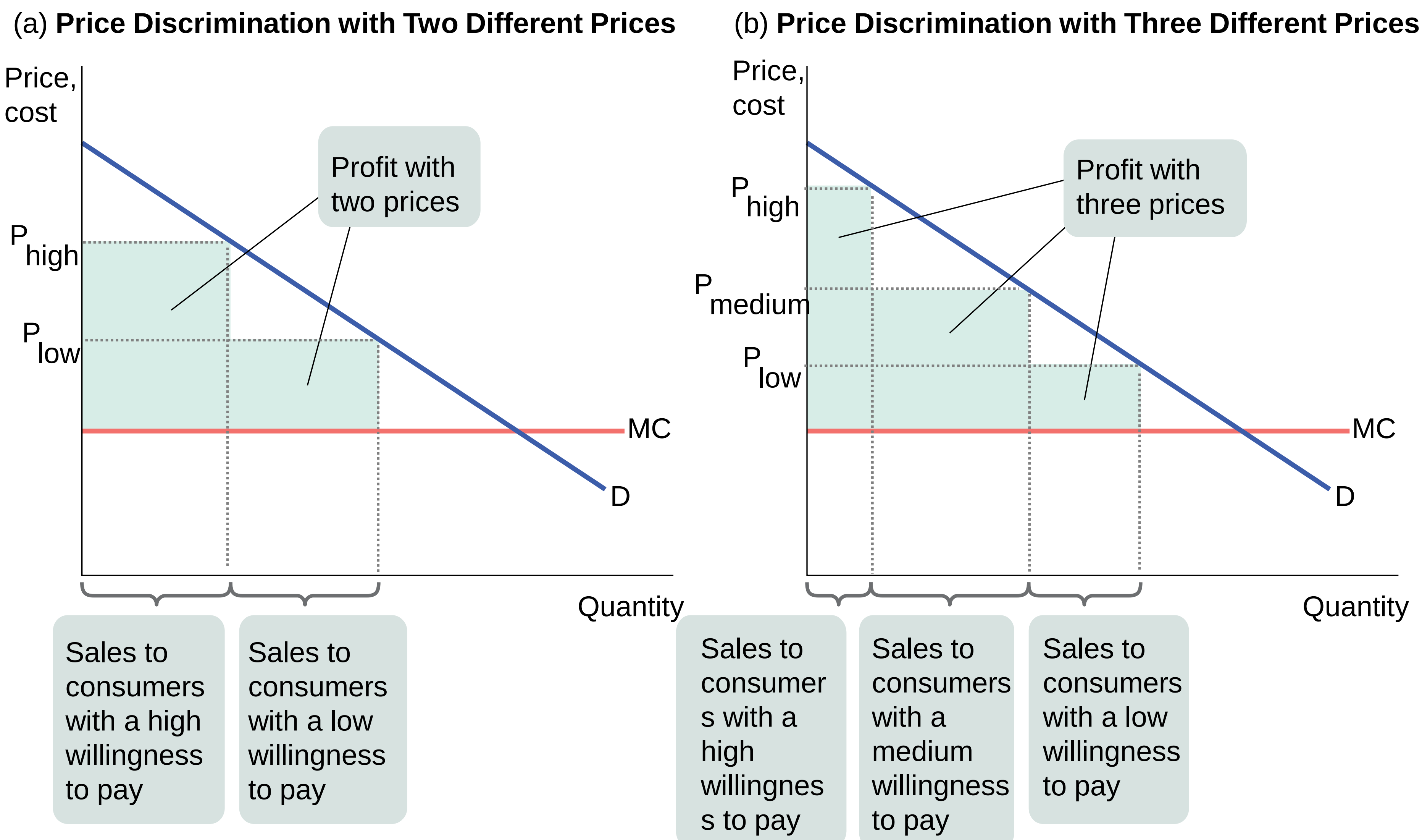
# Price Discrimination

- Up to this point we have considered only the case of a **single-price monopolist**, one who charges all consumers the same price. As the term suggests, not all monopolists do this.
- In fact, many if not most monopolists find that they can increase their profits by charging different customers different prices for the same good: they engage in **price discrimination**.
  - *Example*: Airline Tickets: If you are willing to buy a nonrefundable ticket a month in advance and stay over a Saturday night, the round trip may cost only $150, but if you have to go on a business trip tomorrow, and come back the next day, the round trip might cost $550.

# Price Discrimination and Elasticity

- A monopolist able to charge each consumer his or her willingness to pay for the good achieves *perfect price discrimination* and <u>does not</u> cause inefficiency because all mutually beneficial transactions are exploited.
- In this case, <u>the consumers do not get any consumer surplus!</u> The entire surplus is captured by the monopolist in the form of profit.
- The following graphs depict different types of price discrimination…

# Price Discrimination



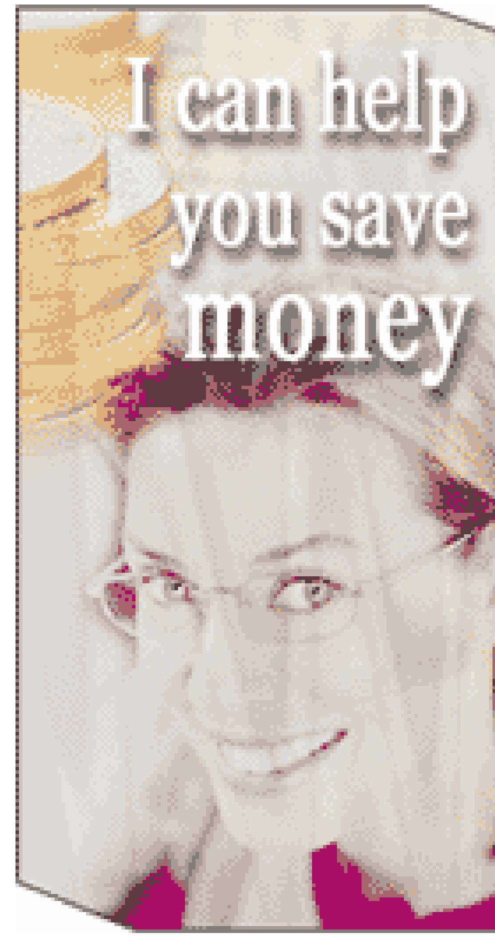
# Perfect Price Discrimination

- **Perfect price discrimination** takes place when a monopolist charges each consumer his or her willingness to pay—the maximum that the consumer is willing to pay.

# Price Discrimination

# Examples: Price Discrimination

- Airline Tickets: first class, coach, stay- over, one-way vs. round-trip
- Discount Coupons
- Utility rates: residential, business
- Two-Part Tariff, i.e., amusement park entrance fee, and then a fee for each ride



# Study Guide

- Ch. 14 Problems & Exercises: 1-5, 8, 9, 11-14a, 16
- Ch. 14 Review Q’s: 1, 5-10, 12-16, 22, 25-28, 30-31

# On a piece of paper graph the following:

- In a perfectly competitive market: a short run loss to long run equilibrium (side by side)
- An unregulated monopoly
- On the previous graph show the Q for a regulated monopoly using:
  - Allocative efficiency
  - Fair Market Return or Average Cost Pricing

- In a perfectly competitive market: a loss minimizing firm (side by side)