Monopoly

AEB 2104

Agricultural Economics

http://www.geocities.com/dsolisw/AEB2104.html

Introduction

- ***Monopoly*** is a market structure in which a single firm makes up the entire market.
- Monopolies exist because of barriers to entry into a market that prevent competition.

Introduction

- ***Legal barriers***, such as patents, prevent others from entering the market.
- ***Sociological barriers*** – entry is prevented by custom or tradition.

Introduction

- ***Natural barriers*** – the firm has a unique ability to produce what other firms can't duplicate.

- ***Technological barriers*** – the size of the market can support only one firm.

The Key Difference Between a Monopolist and a Perfect Competitor

- For a competitive firm, marginal revenue equals price.
- For a monopolist it does not.
- The monopolist takes into account the fact that its production decision can affect price.

The Key Difference Between a Monopolist and a Perfect Competitor

- A competitive firm is too small to affect the price.
- It does not take into account the effect of its output decision on the price it receives.

The Key Difference Between a Monopolist and a Perfect Competitor

- A competitive firm's marginal revenue is the market price.
- A monopolistic firm’s marginal revenue is not its price – it takes into account that its output decision can affect price.

A Model of Monopoly

- How much should the monopolistic firm choose to produce if it wants to maximize profit?

The Monopolist's Price and Output Numerically

- The first thing to remember is that ***marginal revenue*** is the change in total revenue that occurs as a firm changes its output.

TR = P x Q

MR = Change in Total Revenue / change in output

Another way to say it is:
"how much does your Total Revenue changes as you increase output"

The Monopolist's Price and Output Numerically

- When a monopolist increases output, it lowers the price on all previous units.
- As a result, a monopolist's marginal revenue is always below its price.

The Monopolist's Price and Output Numerically

- In order to maximize profit, a monopolist produces the output level at which marginal cost equals marginal revenue.

- Producing at an output level where $MR > MC$ or where $MR < MC$ will yield lower profits.

Profit Maximization for a Monopolist

Output	Price	TR	MR	TC	MC	ATC	Profit
0	36	0	—	47	—		–47
1	33	33	33	48	1	48.00	–15
2	30	60	27	50	2	25.00	10
3	27	81	21	54	4	18.00	27
4	24	96	15	62	8	15.50	34
5	21	105	9	78	16	15.60	27
6	18	108	3	102	24	17.00	6
7	15	105	–3	142	40	20.29	–37
8	12	96	–9	196	56	24.75	–102
9	9	81	–15	278	80	30.89	–197

The Monopolist's Price and Output Graphically

- The marginal revenue curve is a graphical measure of the change in revenue that occurs in response to a change in price.
- It tells us the additional revenue the firm will get by expanding output.

MR = *MC* Determines the Profit-Maximizing Output**

- If *MR* > *MC*, the monopolist gains profit by increasing output.
- If *MR* < *MC*, the monopolist gains profit by decreasing output.
- If *MC* = *MR*, the monopolist is maximizing profit.

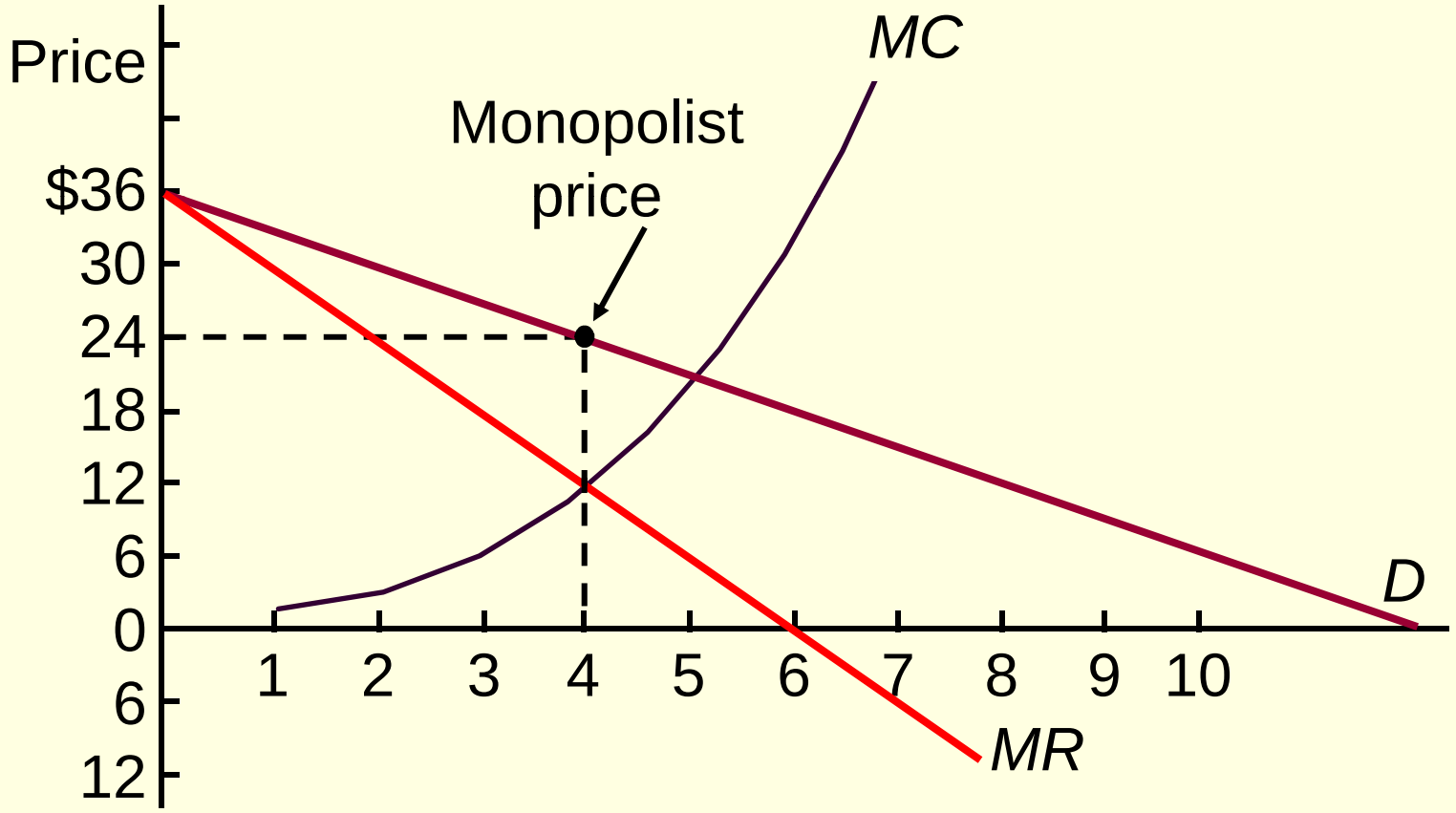
The Price a Monopolist Will Charge

- The *MR* = *MC* condition determines the quantity a monopolist produces.
- The monopolist will charge the maximum price consumers are willing to pay for that quantity.
- That price is found on the demand curve.

The Price a Monopolist Will Charge

- To determine the profit-maximizing price (where MC = MR), first find the profit maximizing output.

Determining the Monopolist's Price and Output



Comparing Monopoly and Perfect Competition

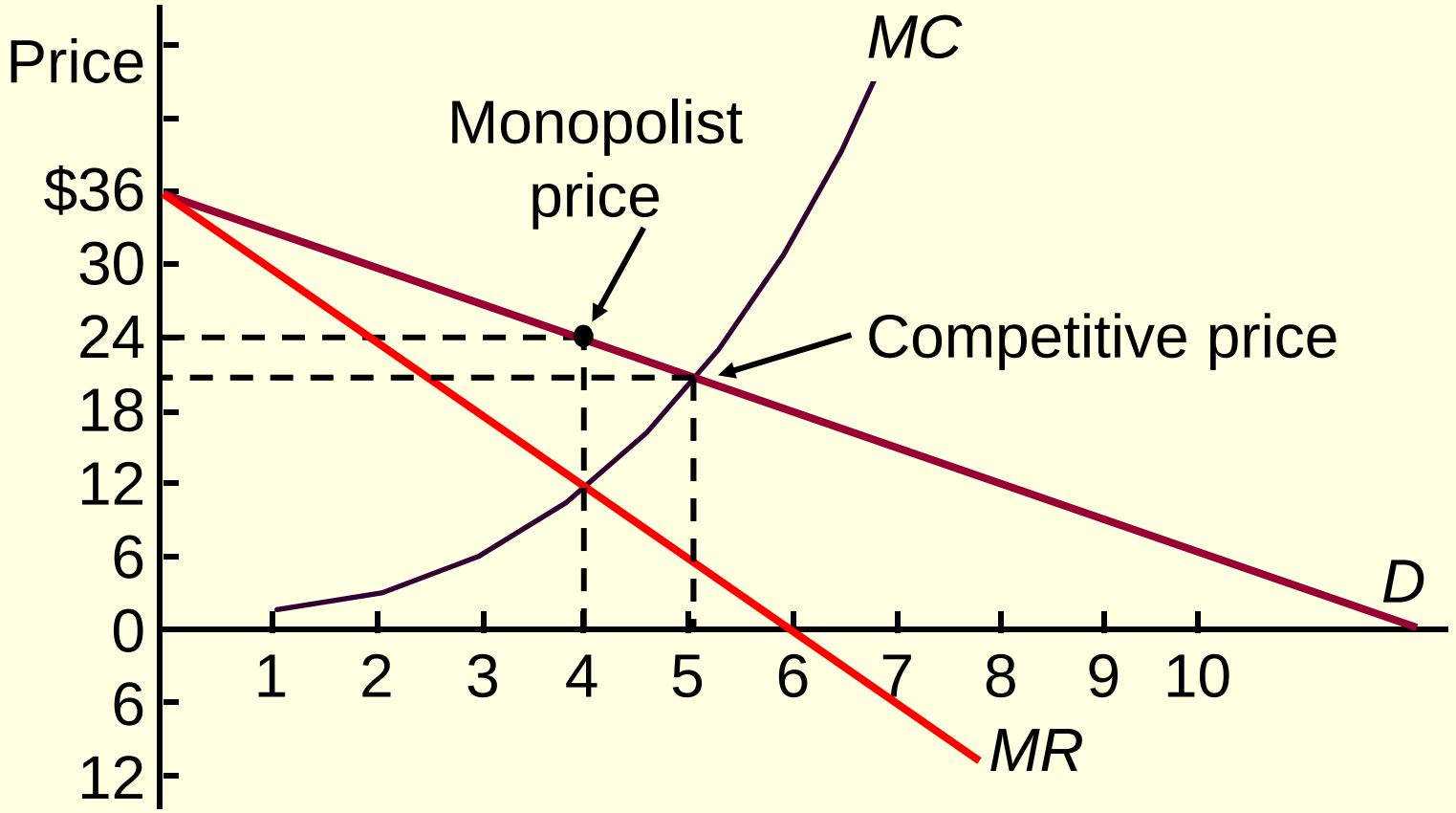
- Equilibrium output for both the monopolist and the competitor is determined by the *MC* = *MR* condition.

Comparing Monopoly and Perfect Competition

- Because the monopolist's marginal revenue is below its price, price and quantity will not be the same.

- The monopolist's equilibrium output is less than, and its price is higher than, for a firm in a competitive market.

Comparing Monopoly and Perfect Competition



Profits and Monopoly

- Draw the firm's marginal revenue curve.
- Determine the output the monopolist will produce by the intersection of the *MC* and *MR* curves.

Profits and Monopoly

- Determine the price the monopolist will charge for that output.
- Determine the average cost at that level of output.

Profits and Monopoly

- Determine the monopolist's profit (loss) by subtracting average total cost from average revenue (*P*) at that level of output and multiply by the chosen output.

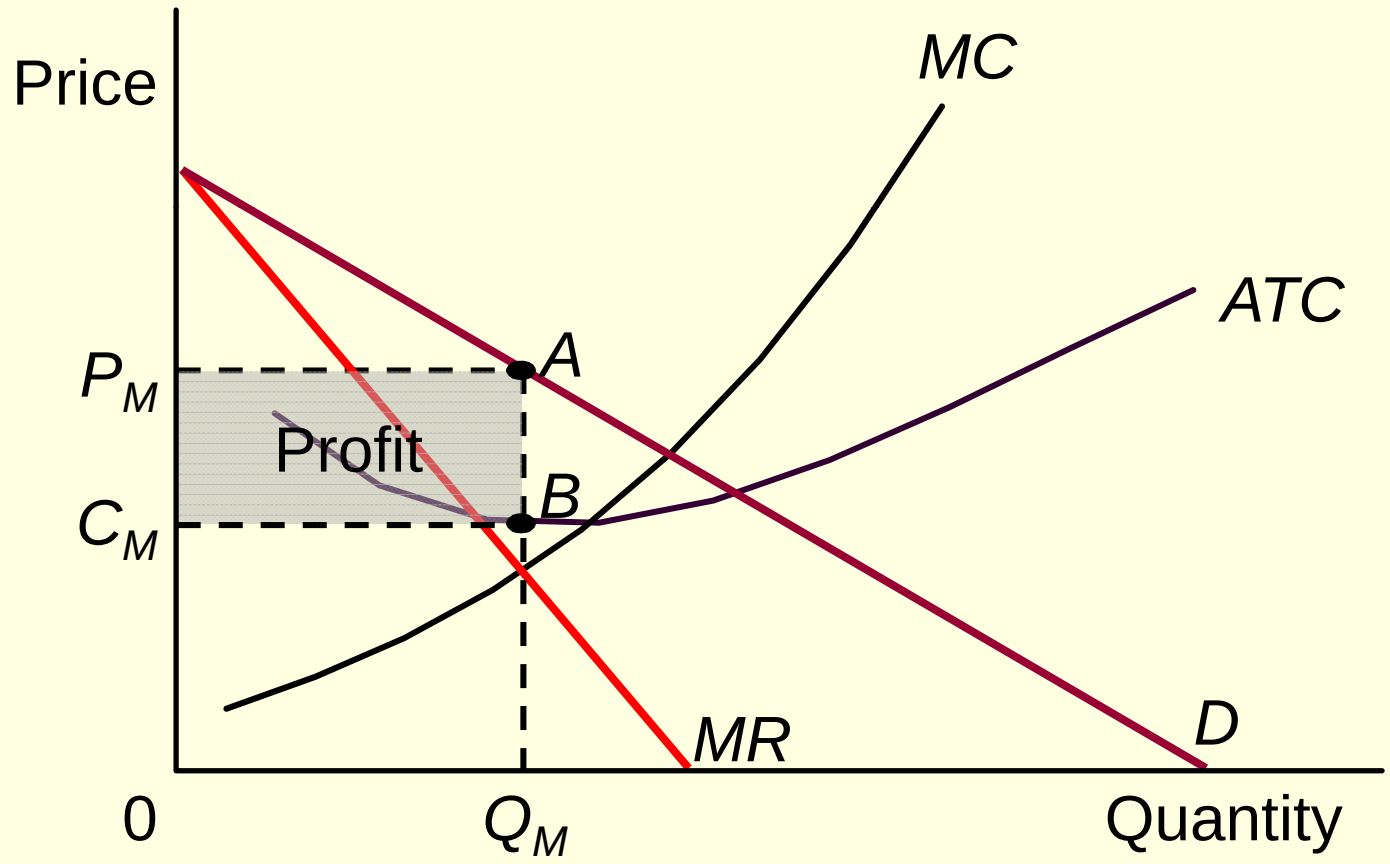
Profits and Monopoly

- The monopolist will make a profit if price exceeds average total cost.
- The monopolist will make a normal return if price equal average total cost.
- The monopolist will incur a loss if price is less than average total cost.

A Monopolist Making a Profit

- A monopolist can make a profit.

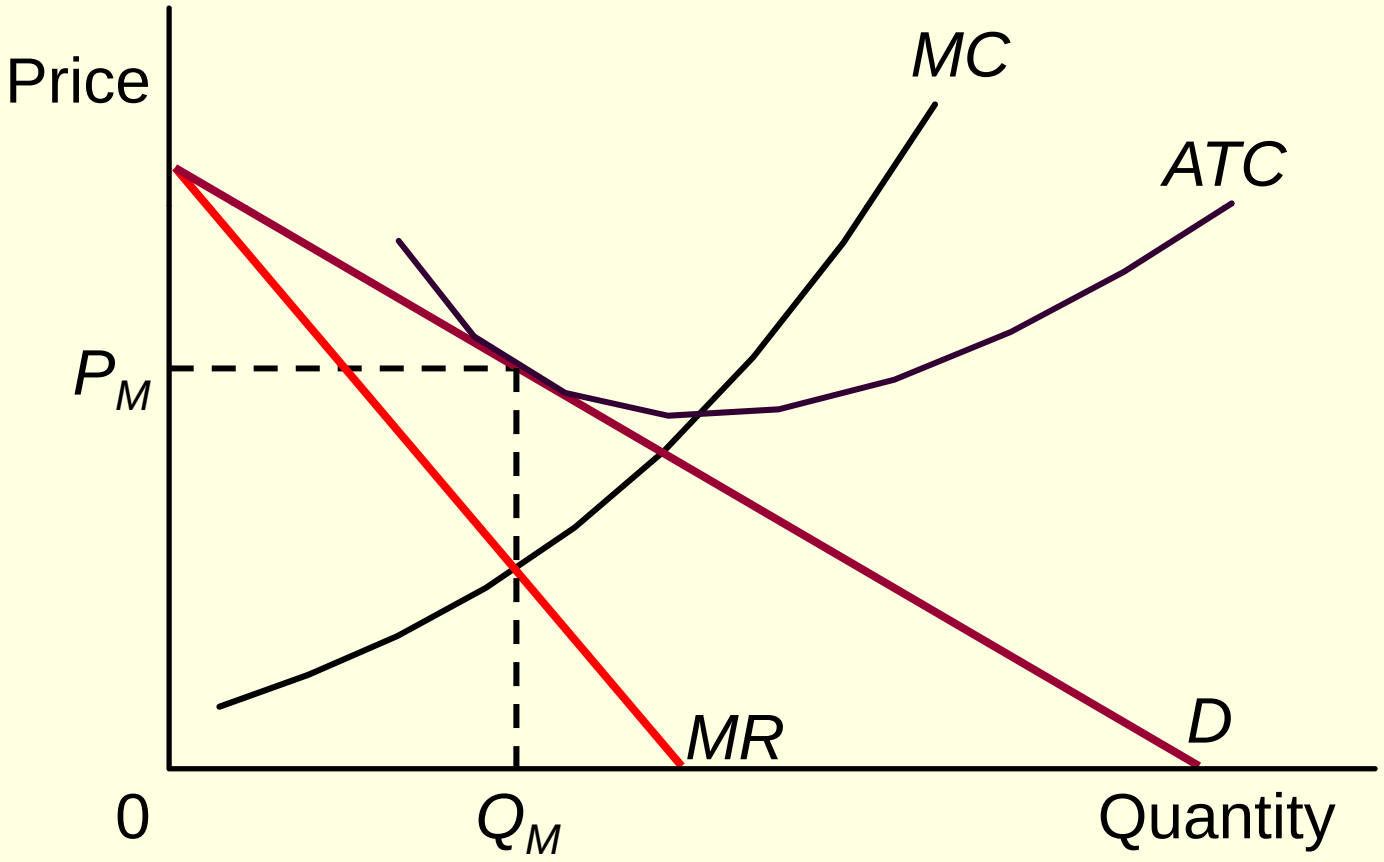
A Monopolist Making a Profit



A Monopolist Breaking Even

- A monopolist can break even.

A Monopolist Breaking Even



A Monopolist Making a Loss

- A monopolist can make a loss.

A Monopolist Making a Loss