Economic Welfare:
Monopoly v. Perfect Competition

Agenda

- Societal Welfare/Economic Welfare: Criteria
  - Consumer Surplus
  - Producer Surplus
- Compare Monopoly and Perfect Competition
- Price Discrimination

Economic Welfare

- Consumer surplus measures economic welfare from the buyer/consumer perspective.
- Producer surplus measures economic welfare from the seller/producer perspective.

Consumer Surplus

- **Consumer surplus is the amount a buyer is willing to pay for a product minus the amount the buyer actually pays.**
- **Consumer surplus is the area below the demand curve and above the market price.**
  - **A lower market price will increase consumer surplus.**
  - **A higher market price will reduce consumer surplus.**

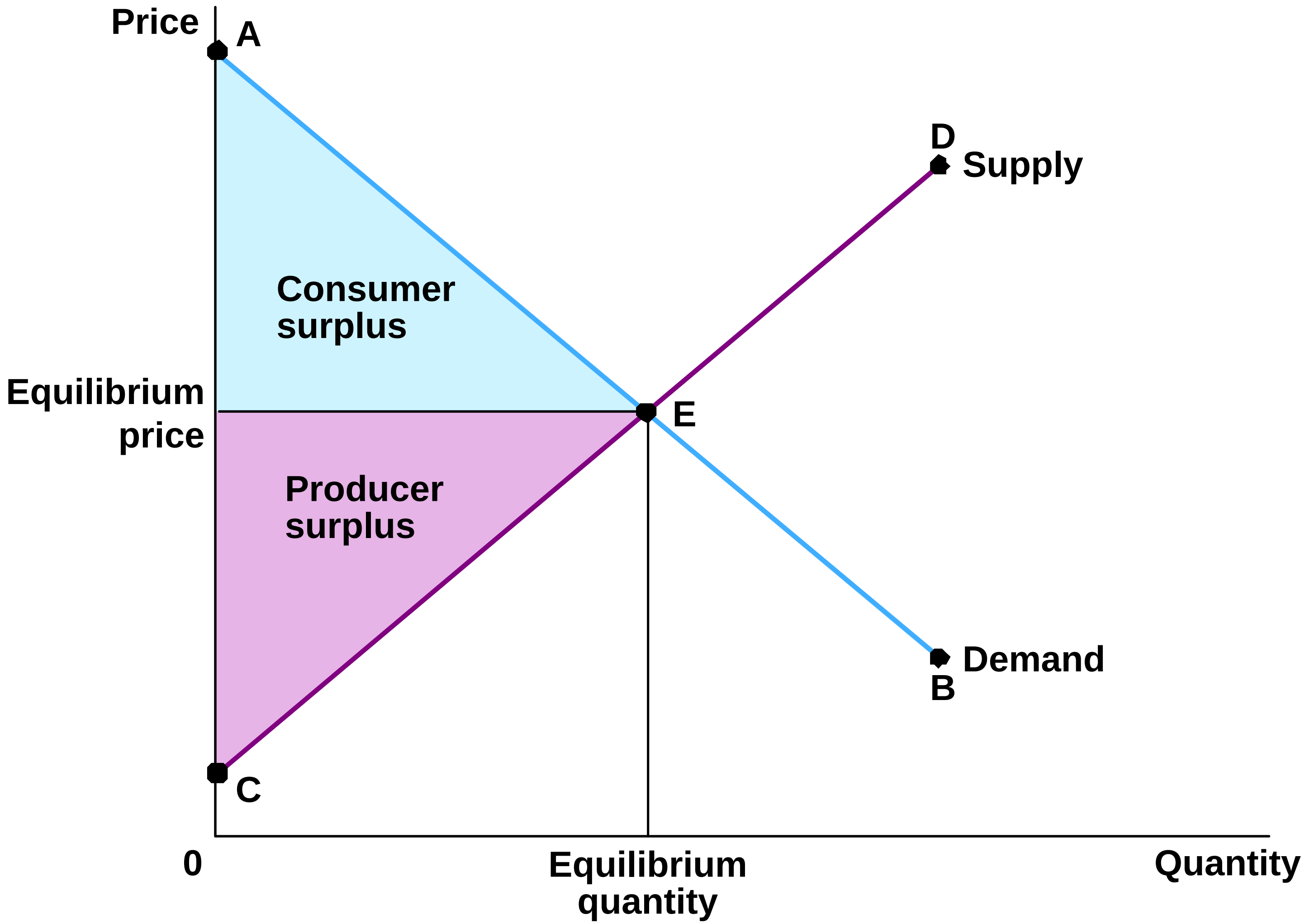
Producer Surplus

- **Producer surplus is the amount a seller is paid for a product minus the total variable cost of production.**
- **Producer surplus is equivalent to economic profit in the long run.**

Economic Welfare

- **Economic welfare can be quantified as the sum of consumer surplus and producer surplus, i.e. equal weights assumed.**

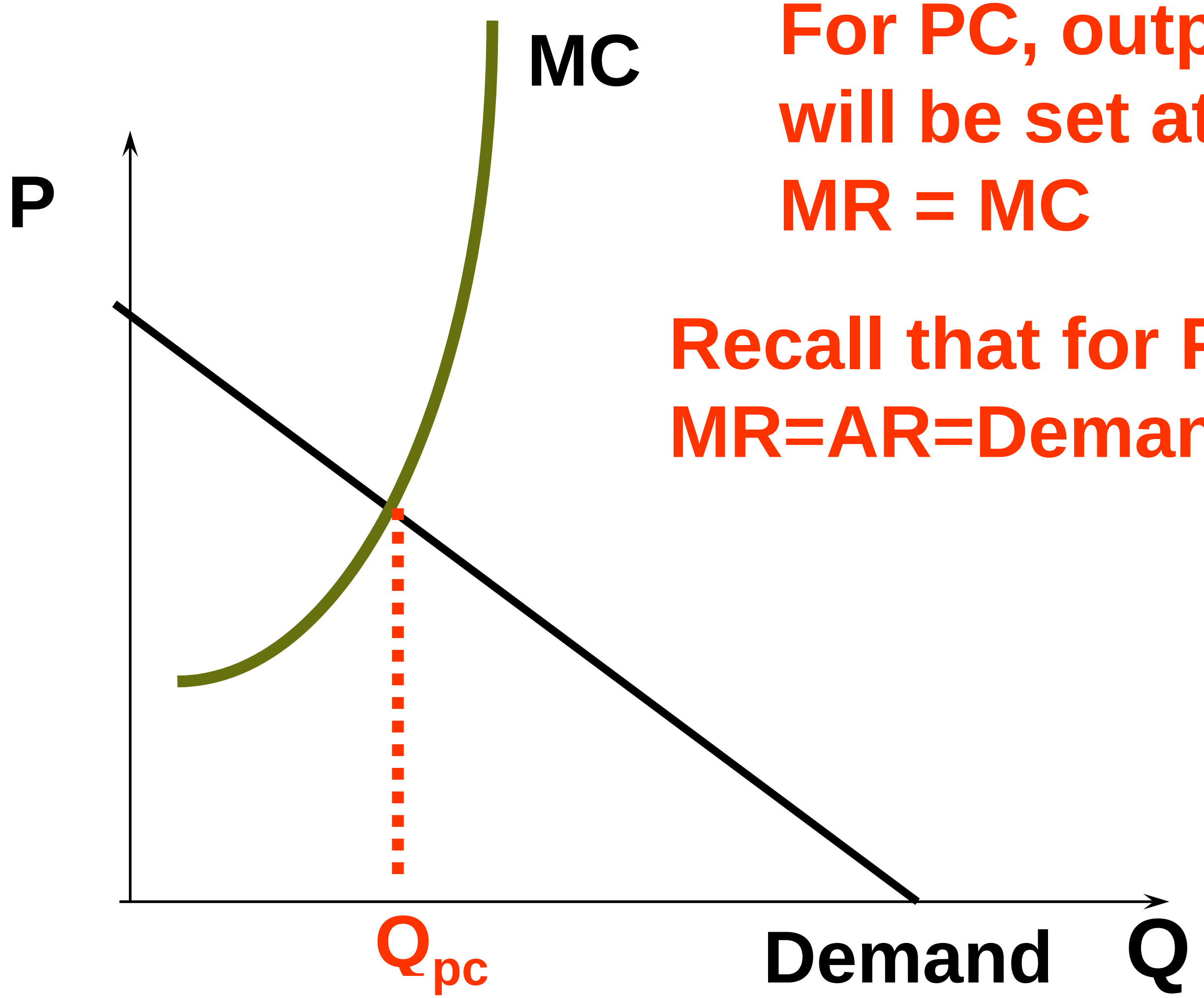
Consumer Surplus and Producer Surplus: Market Equilibrium



Monopoly v. Perfect Competition

- **Monopoly and perfect competition can be compared/contrasted by using consumer surplus and producer surplus (i.e. by using economic welfare/societal welfare measures).**

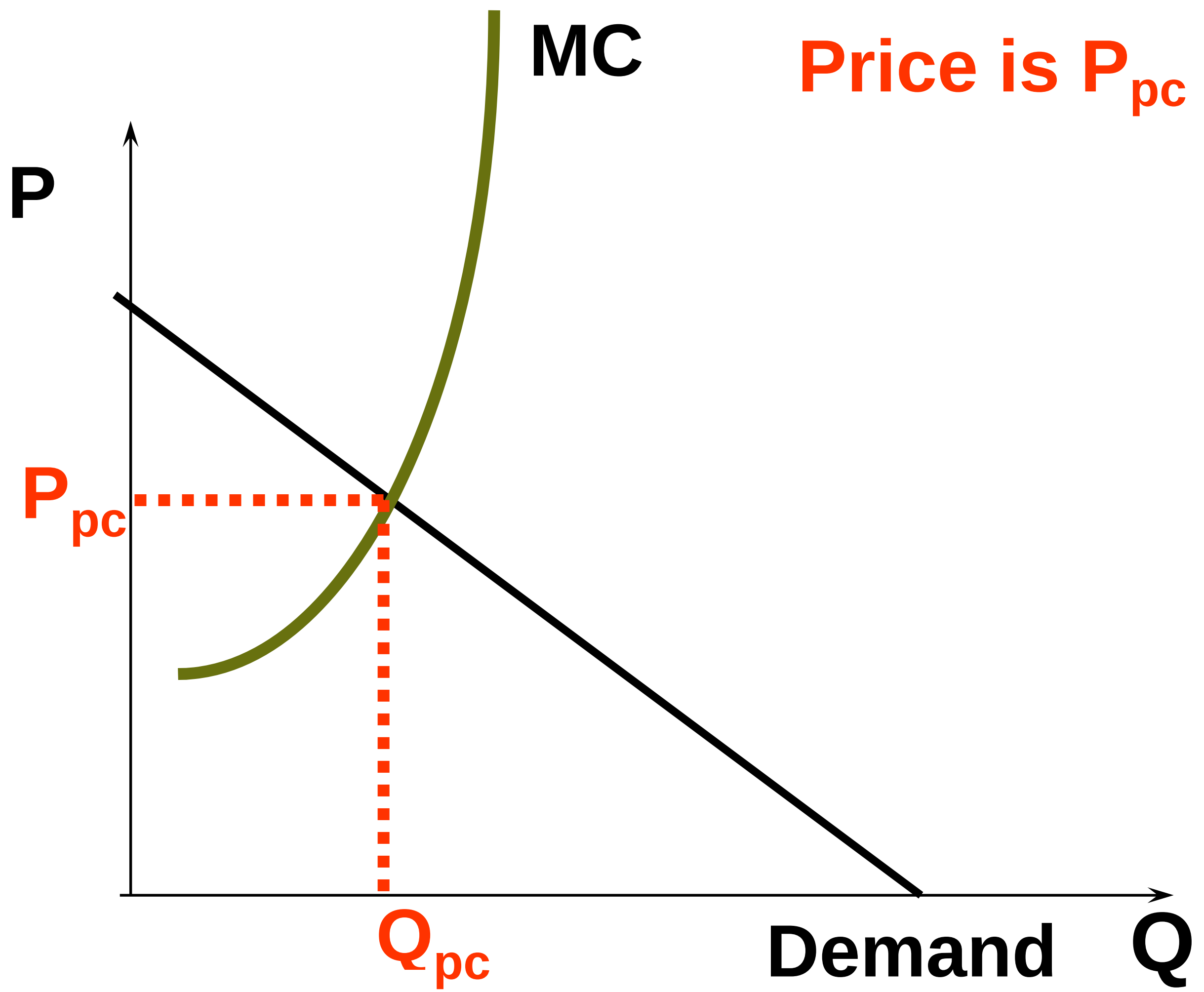
Monopoly v. Perfect Competition



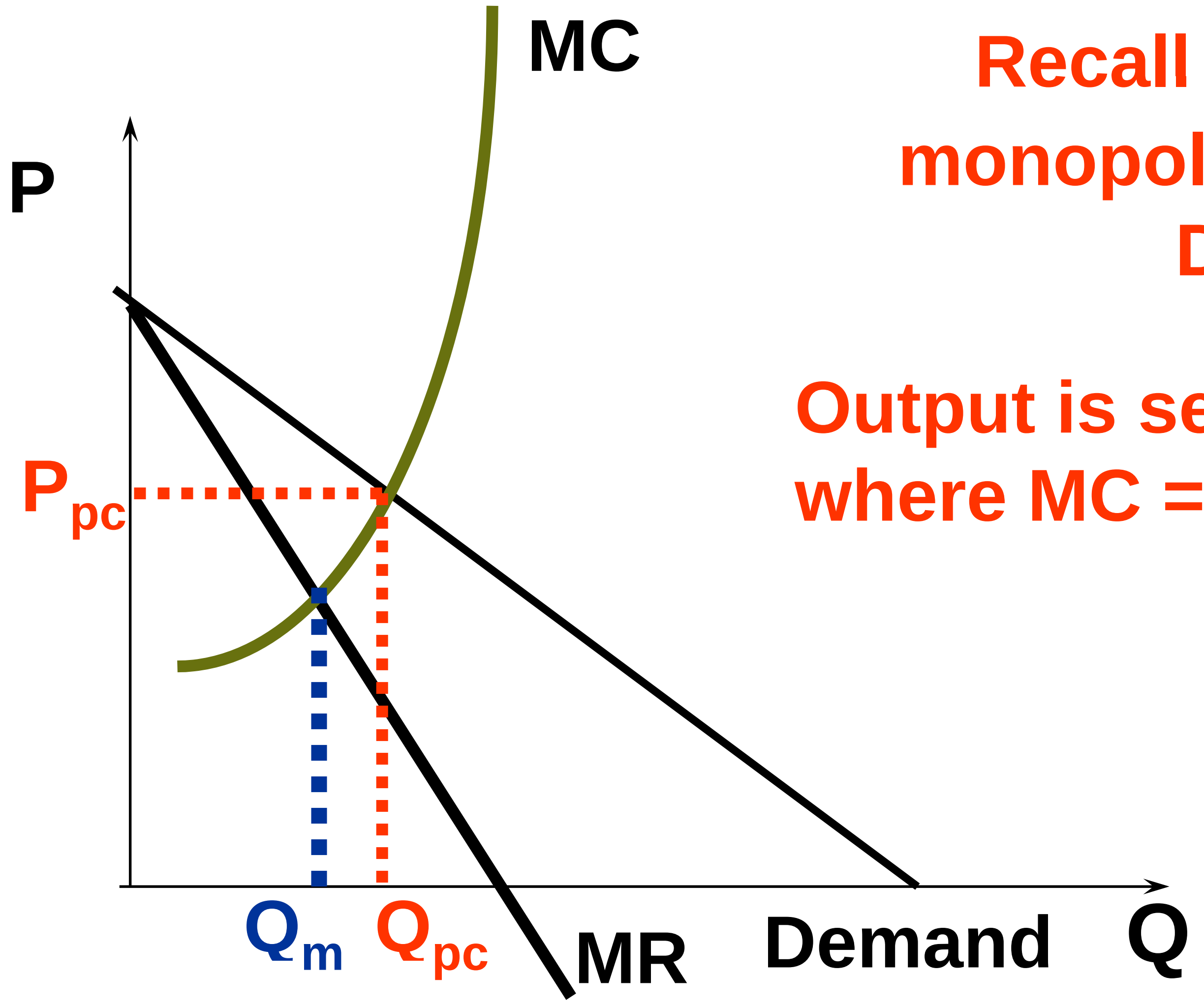
For PC, output will be set at P = MR = MC

Recall that for PC:
MR=AR=Demand

Monopoly v. Perfect Competition



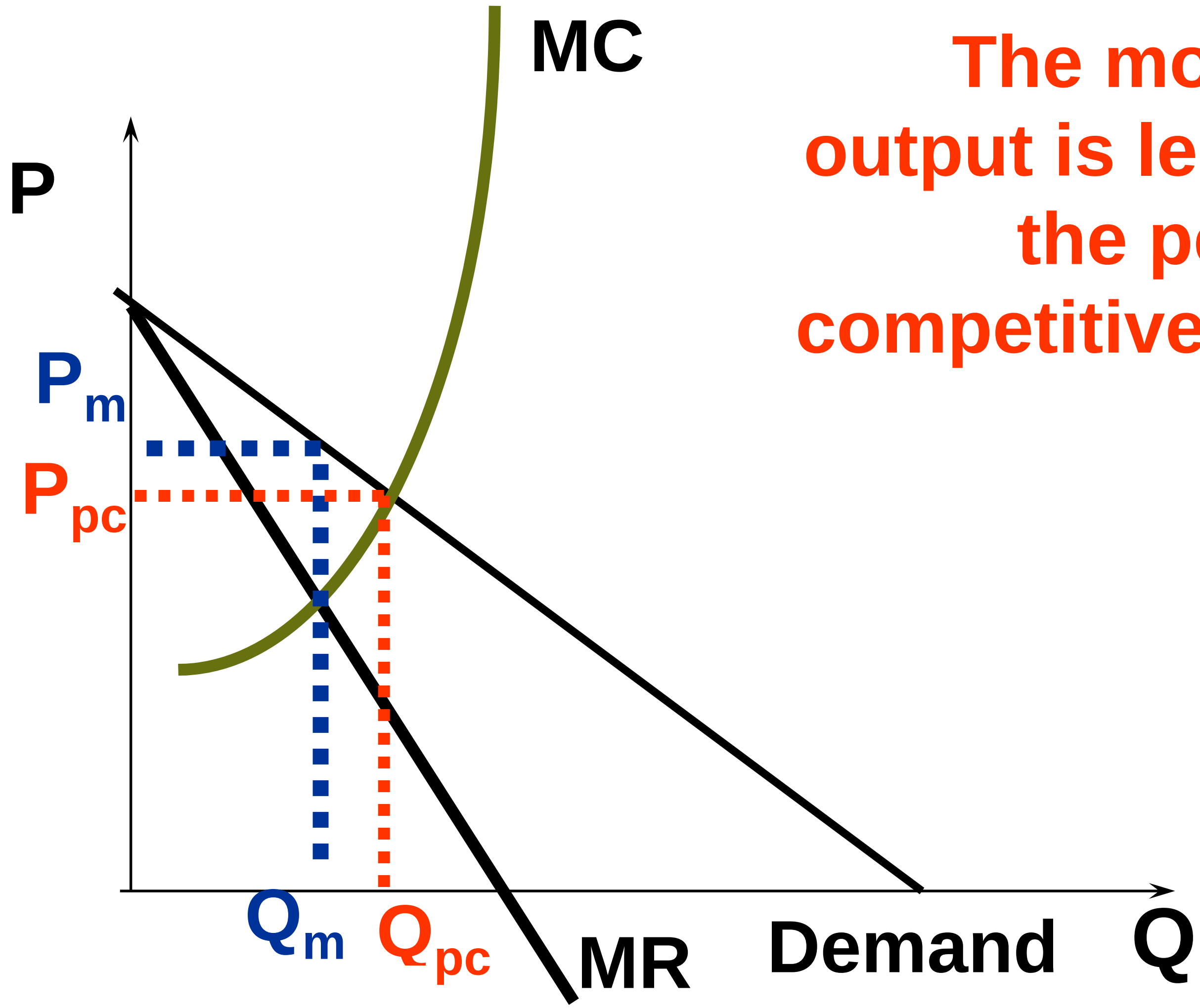
Monopoly v. Perfect Competition



Recall that for monopoly, MR ≠ Demand

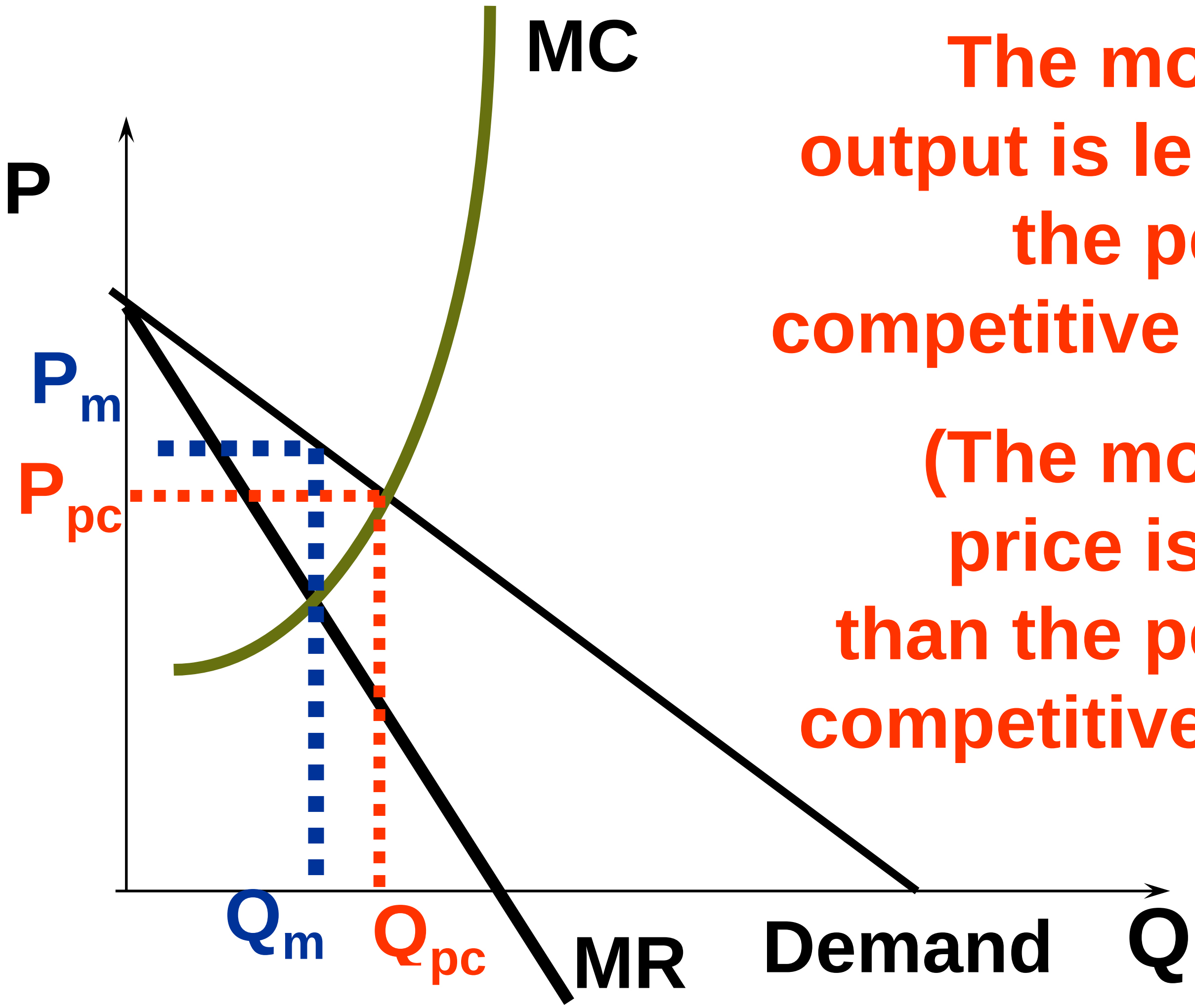
Output is set where MC = MR

Monopoly v. Perfect Competition



The monopoly output is less than the perfectly competitive output

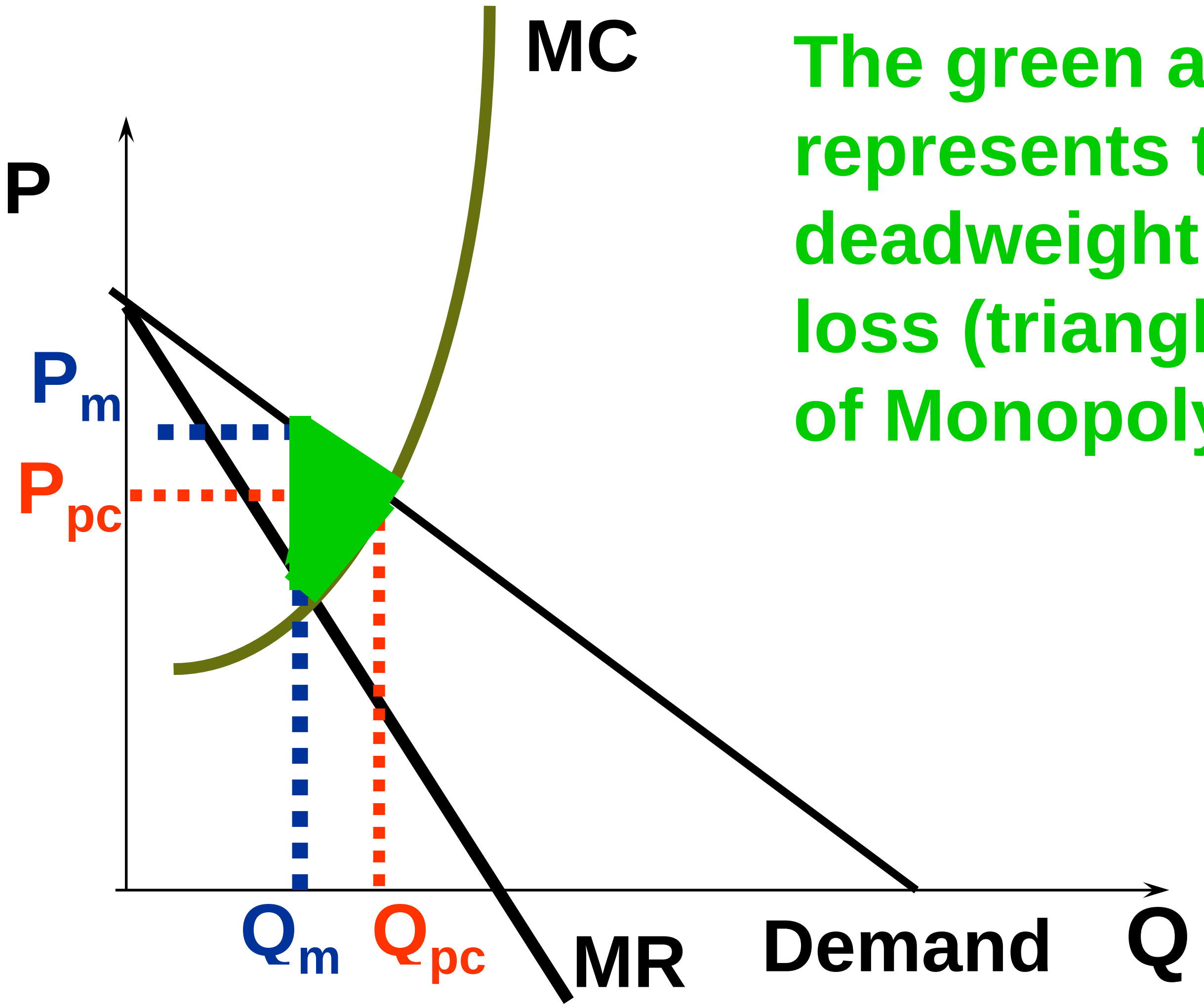
Monopoly v. Perfect Competition



The monopoly output is less than the perfectly competitive output.

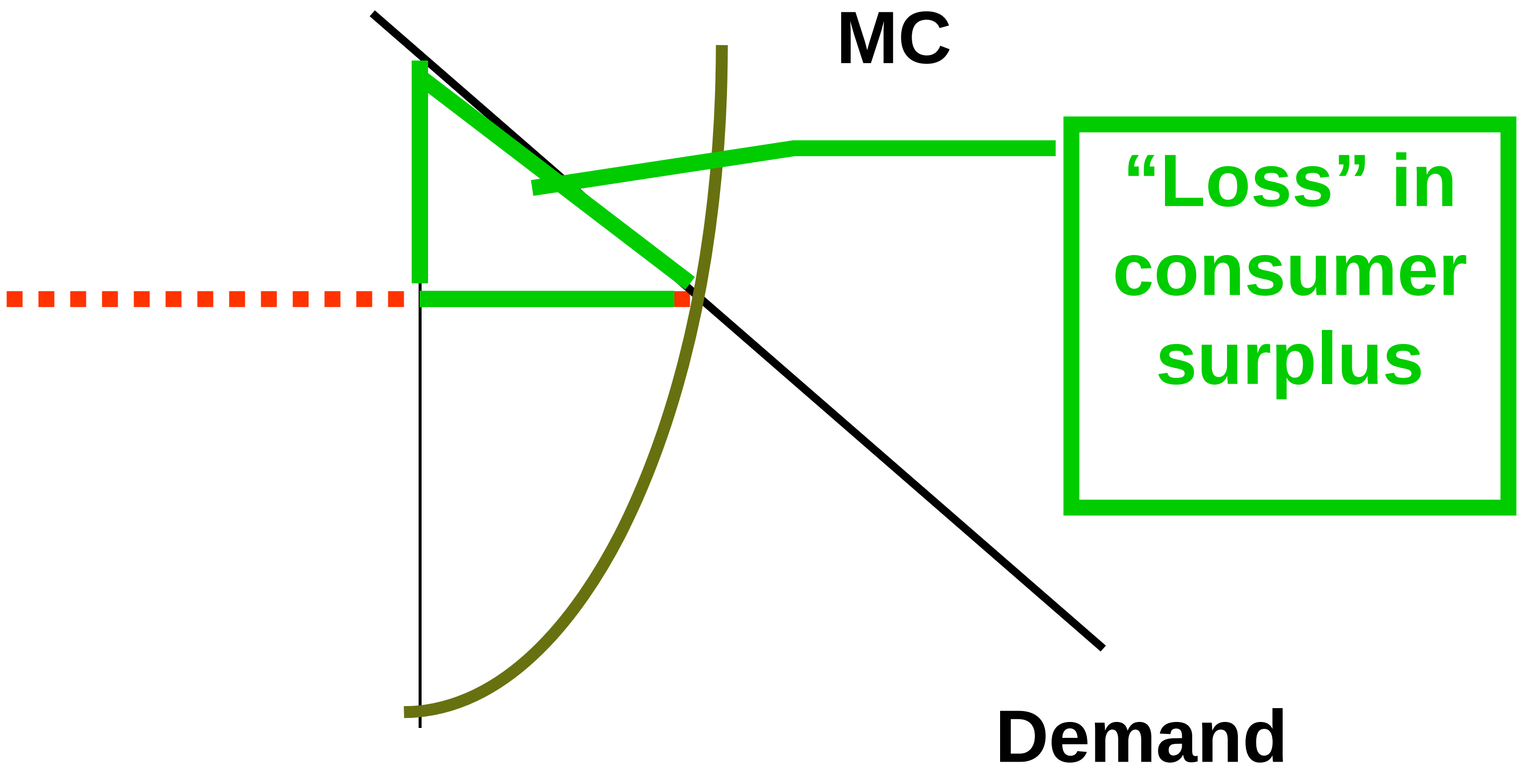
(The monopoly price is higher than the perfectly competitive price.)

Monopoly v. Perfect Competition



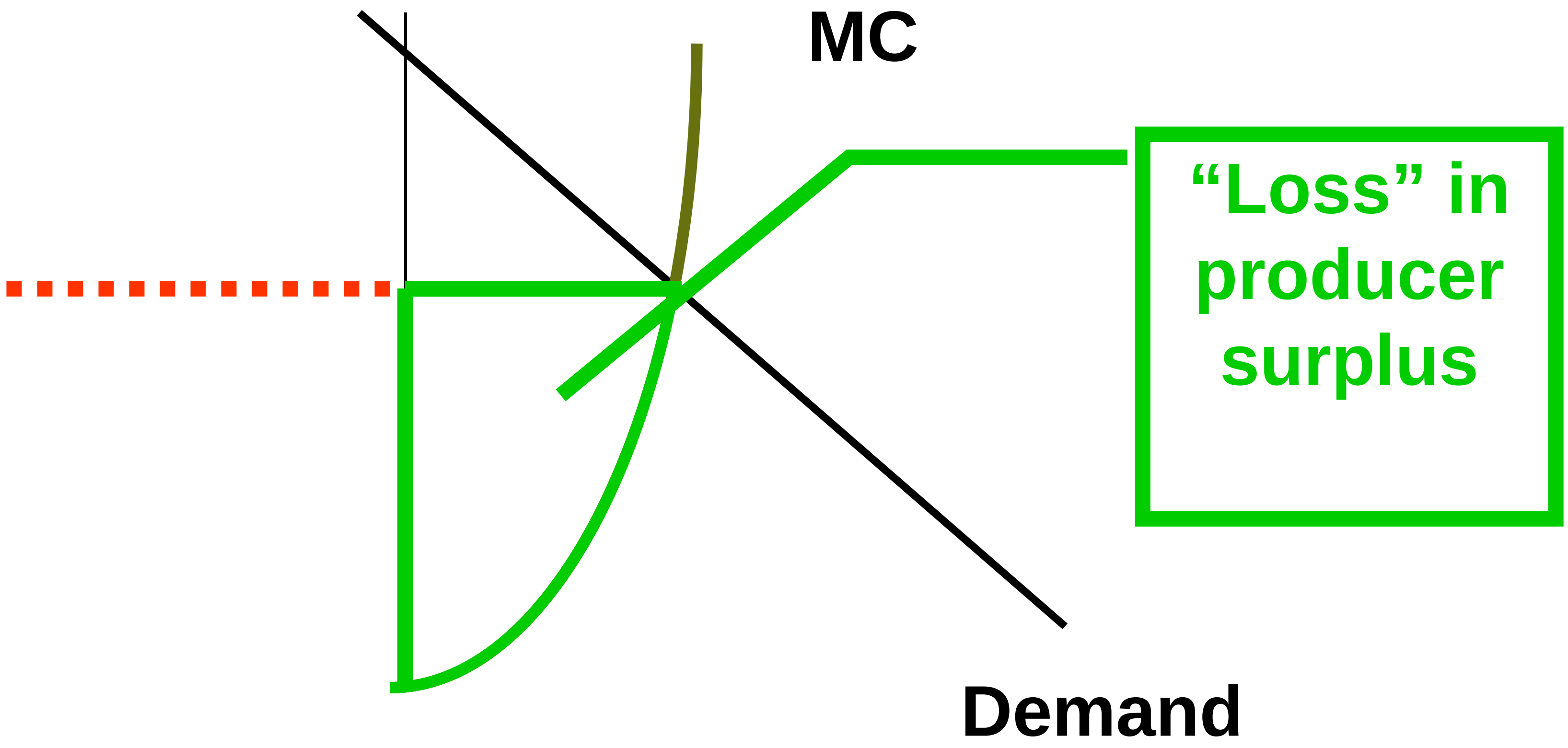
The green area represents the deadweight loss (triangle) of Monopoly

The Deadweight Loss ("Triangle")



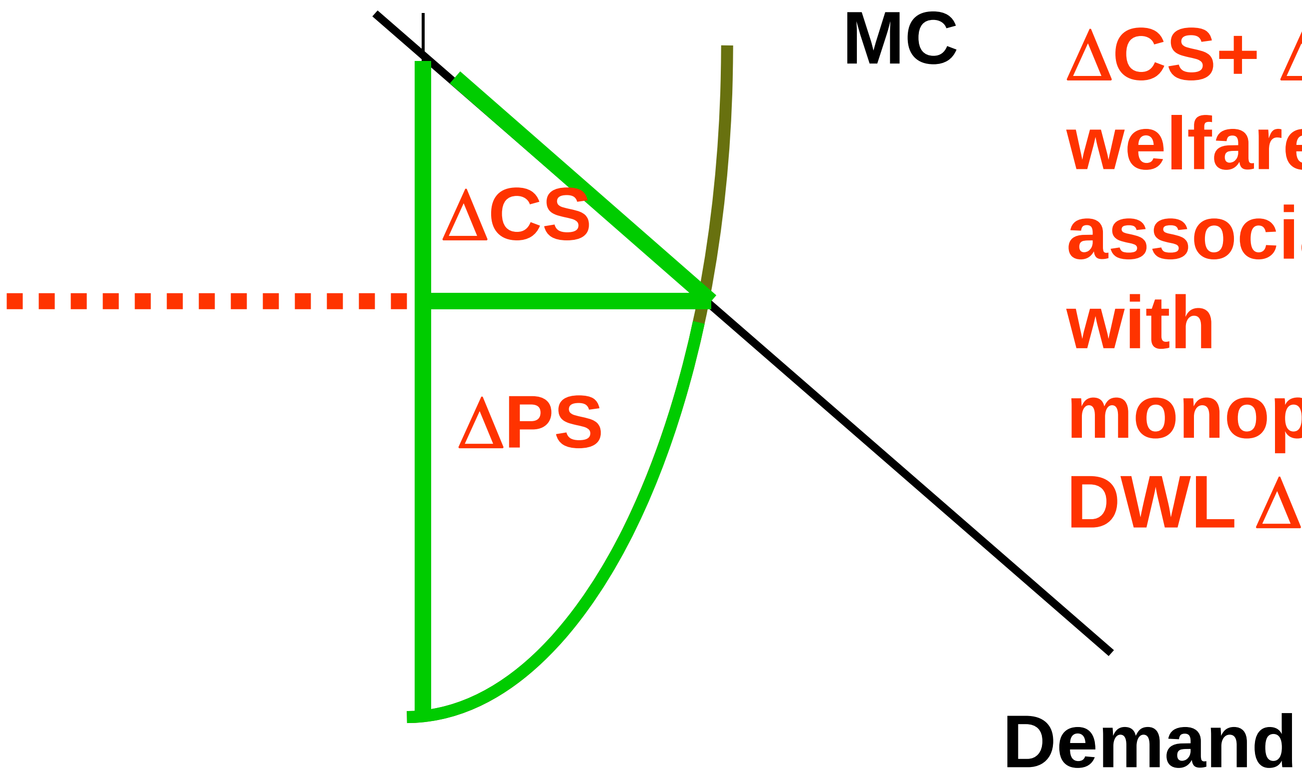
The green area from the previous diagram has been enlarged.

The Deadweight Loss ("Triangle")



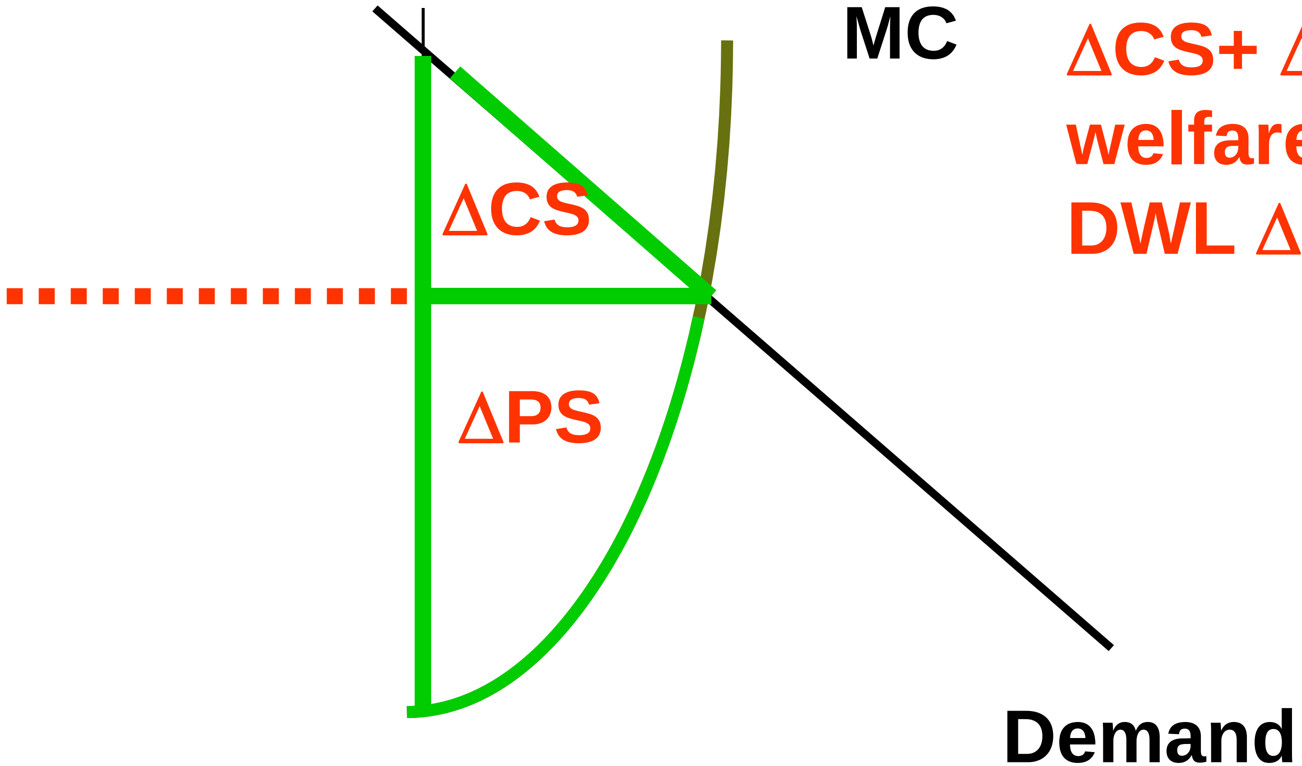
The green area from the previous diagram has been enlarged.

The Deadweight Loss (“Triangle”)



ΔCS+ ΔPS = welfare loss associated with monopoly = DWL Δ

The Deadweight Loss ("Triangle"): Allocative Inefficiency



ΔCS+ ΔPS = welfare loss = DWL Δ

Allocative inefficiency: (P ≠ MC)

Allocative Inefficiency: DWL Δ

Economic Efficiencies: Monopoly v. Perfect Competition

	Comment	PC v. M
Allocative Efficiency	P = MC	PC√ M X
Productive Efficiency	Minimum point on AC Curve	PC√ M X? (Check)
Excess profit	Rent seeking?	PC√ M X
X-inefficiency	Cost inflation	PC√ M ?
Technical progress	R & D	PC ? M ?

Price Discrimination Monopoly v. Perfect Competition

- First degree (perfect) price discrimination
  - Each consumer pays her/his reservation price. The producer/ seller captures all consumer surplus
  - Implication for Monopoly v. Perfect Competition? (MR = AR $\Rightarrow$ P = MC in monopoly, i.e. allocative efficiency)
- Second degree price discrimination
  - Bulk discounting
  - Non-linear pricing
- Third degree price discrimination
  - different prices to different groups.