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Market Power

Anderson, Survey of Economics 1e

LEARNING OBJECTIVES

1. Identify the sources of market power

2. Explain how a monopoly chooses its price and quantity to maximize its profit

3. Use payoff matrices to show how interdependence affects decision making within oligopolies

4. Characterize a monopolistically competitive market

SOURCES OF MARKET POWER

- A firm has **market power** if it has influence over the price it charges.
- Firms in perfect competition are price-takers because they do not have market power.
- Sources of market power include:
  - legal barriers to entry
  - control of resources
  - strategic barriers
  - economies of scale

MONOPOLIES

- A **monopoly** is a market with only one firm. The firm in a monopoly is called a *monopolist*.

- Many small towns have *local monopolies* because they are not big enough for multiple gas stations or grocery stores.

- Monopolists have the most market power, but they are not exempt from the law of demand.

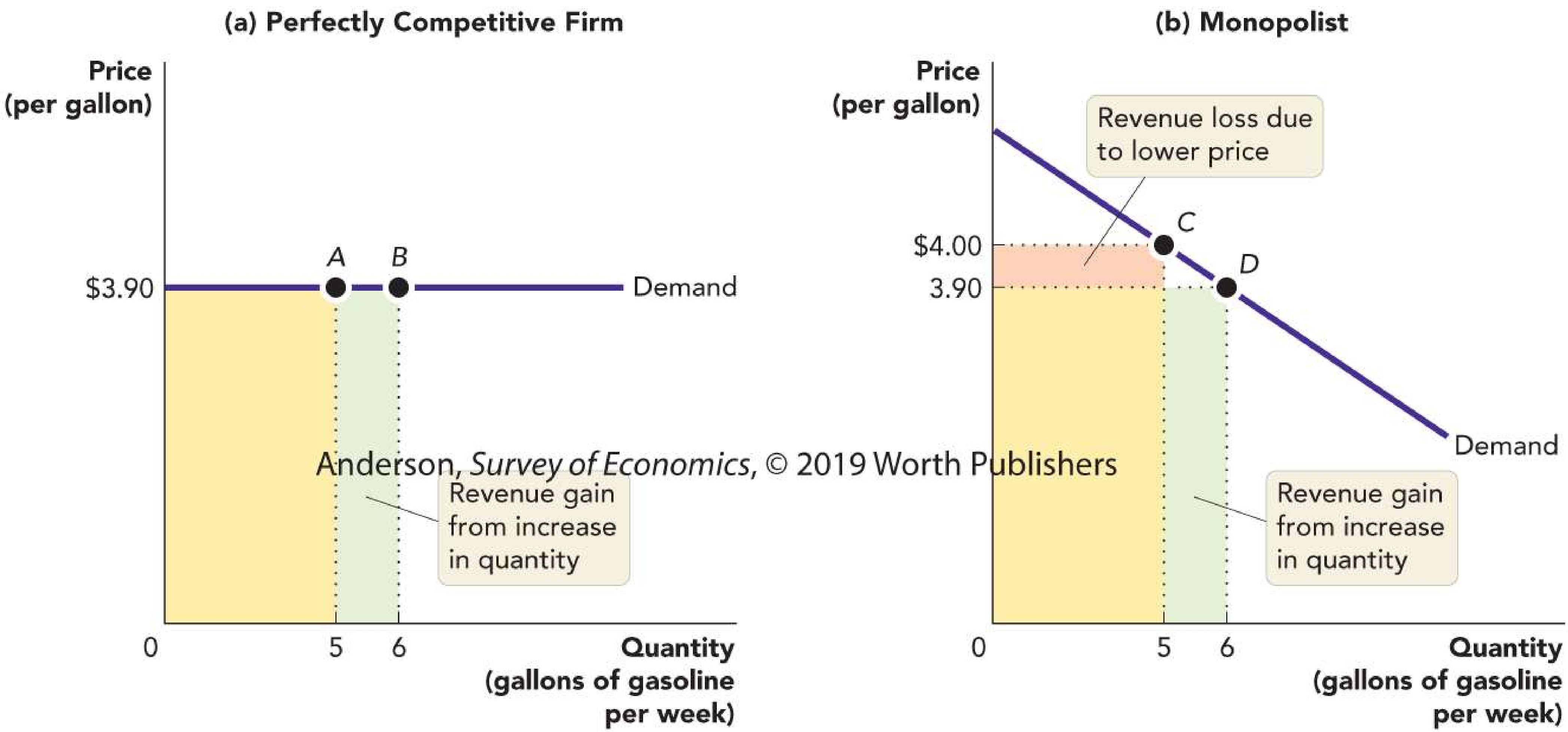
- As a product's price goes up, the quantity demanded by consumers goes down.

A MONOPOLIST’S MARGINAL REVENUE

- As the only firm in the market, the monopolist faces the entire downward-sloping market demand curve.

- A monopolist must lower its price to sell more units, so the firm’s marginal revenue is the new price minus the losses from lowering the price on the units that could have been sold at a higher price.

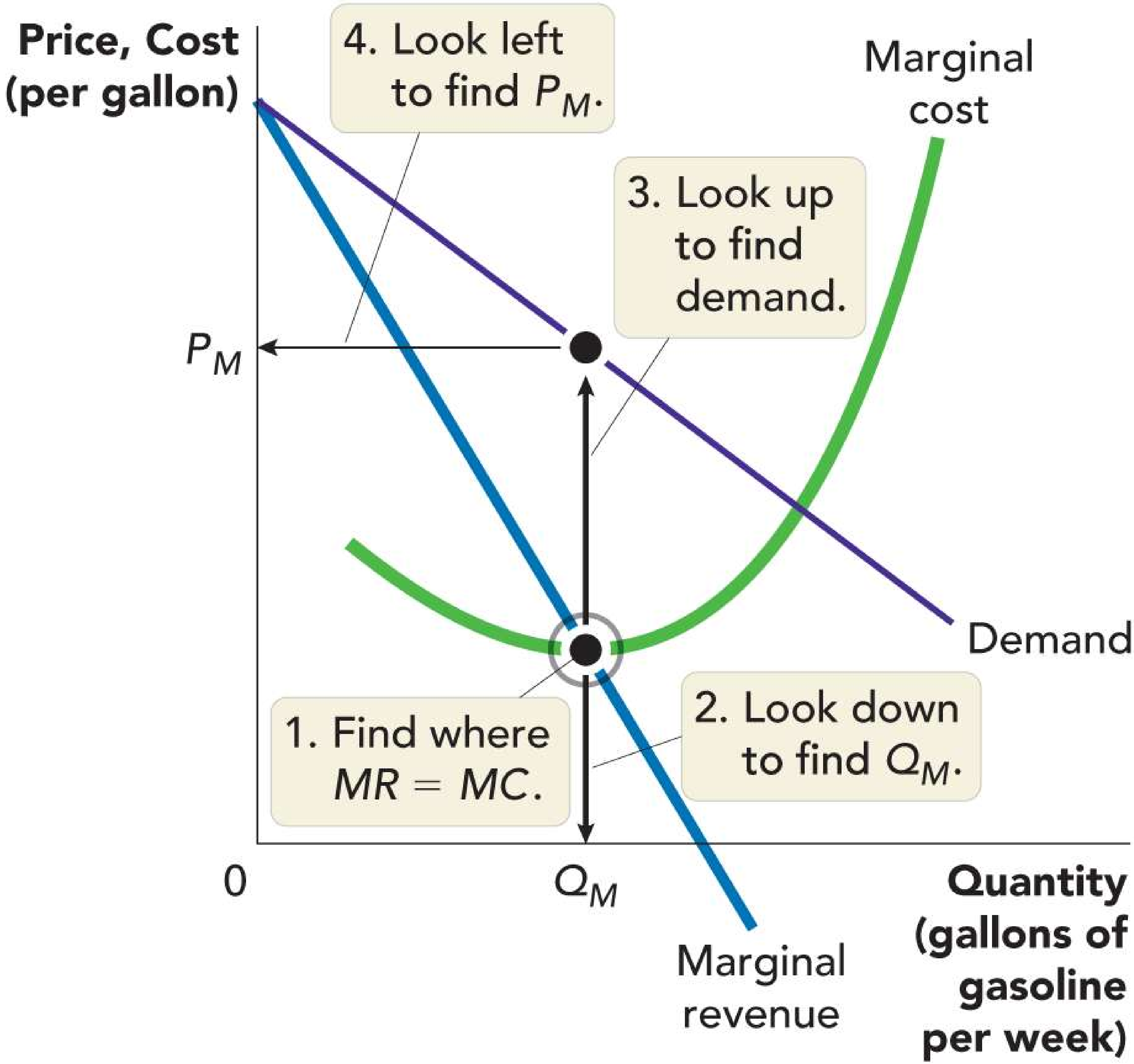
- Marginal revenue can also be found by calculating the change in total revenue when one more unit is sold.



(a) Perfectly Competitive Firm
Price (per gallon)
$3.90
A
B
Demand
Revenue gain from increase in quantity
0
5
6
Quantity (gallons of gasoline per week)
(b) Monopolist
Price (per gallon)
Revenue loss due to lower price
C
D
$4.00
3.90
Demand
Revenue gain from increase in quantity
0
5
6
Quantity (gallons of gasoline per week)

A MONOPOLIST'S PROFIT-MAXIMIZING QUANTITY AND PRICE

- A monopolist's cost curves typically have the same general shape as those of perfectly competitive firms.
- Like every firm, a monopolist maximizes profit by choosing the quantity for which marginal revenue equals marginal cost.
- Once the right quantity is found, the price is found by looking at the demand curve.

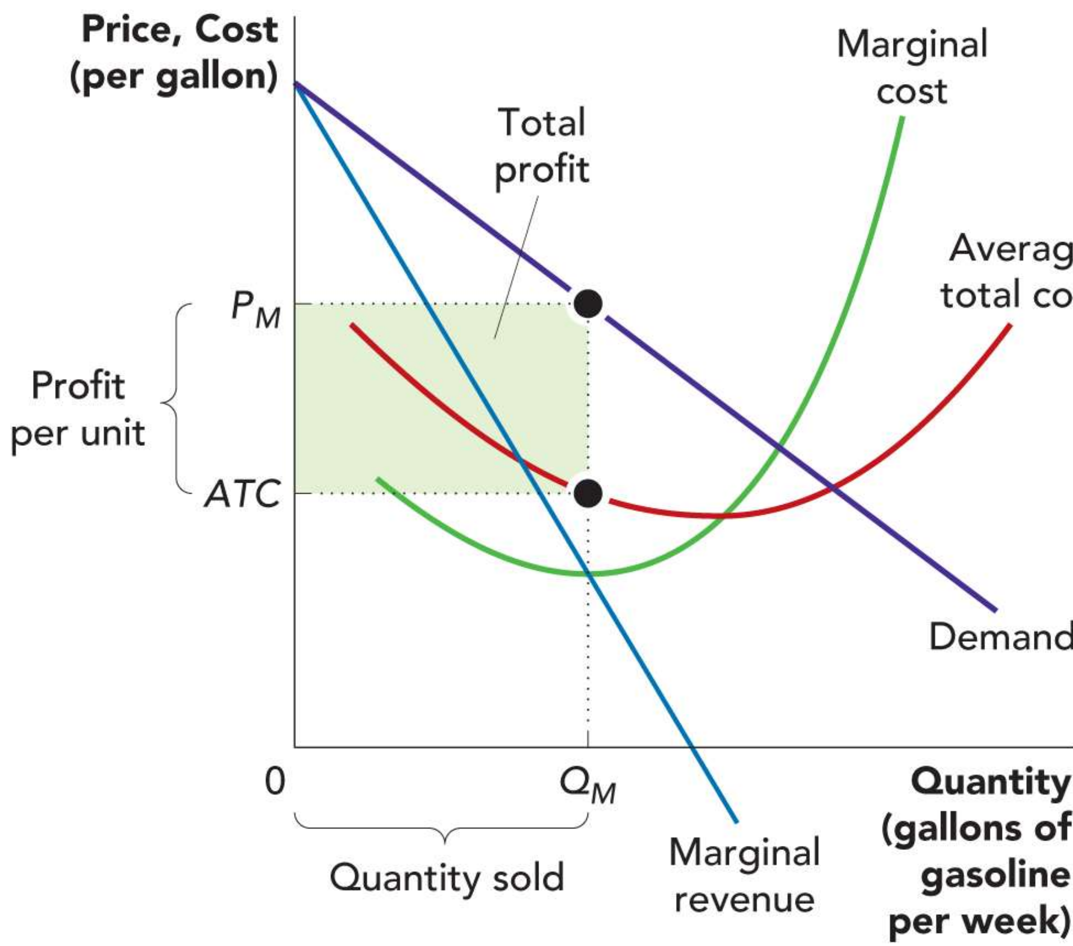


Price, Cost (per gallon)
4. Look left to find P_M.
Marginal cost
3. Look up to find demand.
P_M
Demand
2. Look down to find Q_M.
1. Find where $MR = MC$.
0
Q_M
Quantity (gallons of gasoline per week)
Marginal revenue

A MONOPOLIST'S PROFIT

profit per unit = $P_M - ATC$

total profit = profit per unit × quantity sold



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PROFIT MAXIMIZATION

- Maximizing profit is not always the goal of firms.
  - Some firms are nonprofit and have other goals.
  - Others may give up profit in exchange for prestige.

- However, in perfect competition, these are highly unlikely because no firm serves a large share of the market and all goods are identical. We can assume that firms seek to maximize profit.

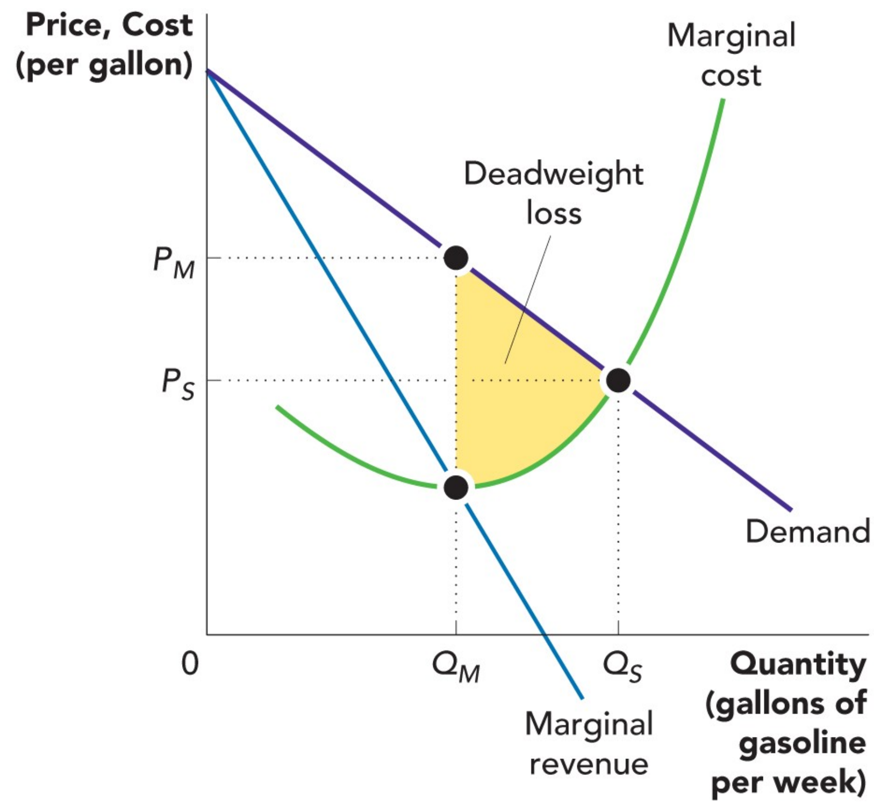
EFFICIENCY AND MARKET POWER

- At the efficient quantity for society, $P = MC$.
  - At the profit-maximizing quantity, $MR = MC$, and $MR < P$.

- Under some monopolies, less is produced than what would be socially optimal.

- Since resources aren't allocated efficiently, there is *deadweight loss*.

- Some monopolies do not create a deadweight loss.



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PRICE DISCRIMINATION PART I

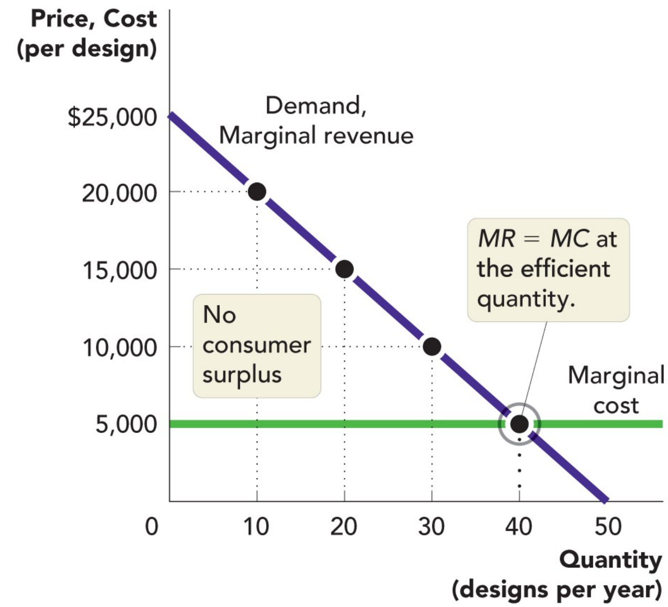
- In general, every customer pays the same price when buying the same good from the same firm.

- When a firm practices **price discrimination**, the same good is sold to different customers at different prices.
  - Examples include airplane tickets and college tuition.

PRICE DISCRIMINATION PART II

- In order to price-discriminate, a firm must be able to:
  - influence the price rather than being a price-taker; that is, the firm must have some market power
  - identify those customers whose demand is relatively elastic
  - prevent the resale of the good from one group to another

PERFECT PRICE DISCRIMINATION



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- In the case of **perfect price discrimination**, each customer is charged the highest price he or she is willing to pay.
- Since the firm doesn't have to reduce the price of the first 10 goods in order to sell the eleventh good, marginal revenue equals price.
  - So, a firm that perfectly price discriminates sells up to the point where $P = MC$, which is the socially optimal quantity, and deadweight loss is eliminated.
- Since consumers pay the most that they're willing to, consumer surplus is zero.