PURE MONOPOLY

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Assumptions of Monopoly

- Single seller
- No close substitutes
- Price maker
- Blocked entry: Legal barriers to entry
  - Patents
  - Licenses
  - Ownership or control of essential resources
  - Pricing and other strategic barriers to entry
- Non-price competition

Types of Monopoly

- Regulated or natural monopolies
  - Electricity/Oil
- **Near monopolies**
  - **Luxottica**: A company that owns all the major brands of sunglasses. The company has bought almost all the major eyewear brands.
  - **Microsoft**: Microsoft is a Computer and software manufacturing Company. It holds more than 75% market share and is the tech space's market leader and virtual monopolist.
  - Patents provide a legal monopoly to a company, albeit for a short period.
- **Geographic monopolies:** Climbing Mount Everest

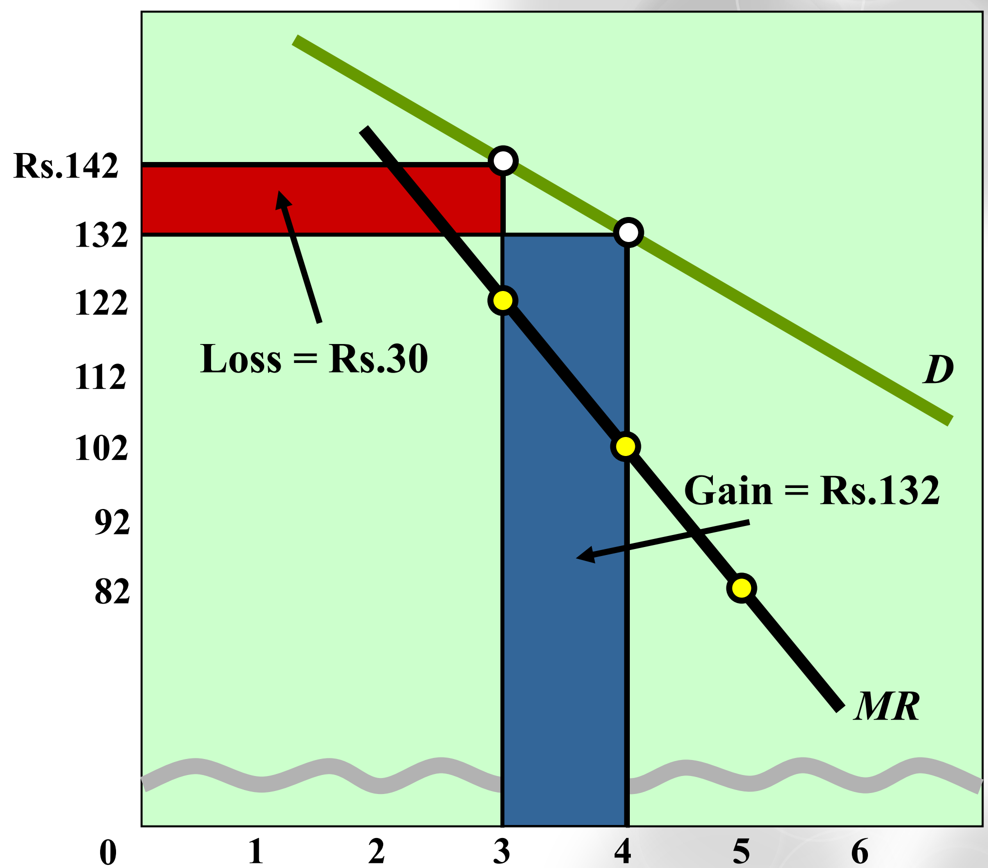
Monopoly Demand

- Assumptions:
  - Monopoly status is protected
  - No government regulation
  - Single-price monopolist
- Face down-sloping demand
  - Entire market demand

Price and Marginal Revenue

Marginal revenue is less than price

- **A monopolist is selling 3 units at Rs.142**
- **To sell 4, price must be lowered to Rs.132**
- **All customers must pay the same price**
- **TR increases Rs.132 minus Rs.30 (3xRs.10)**
- **Rs.102 becomes a point on the MR curve**



The Constructed Marginal Revenue Curve Must Always Be Less Than the Price

Down-Sloping Demand

- Marginal revenue < price
  - To increase sales, must lower price
- Firm is a price maker
  - Choose P,Q combination

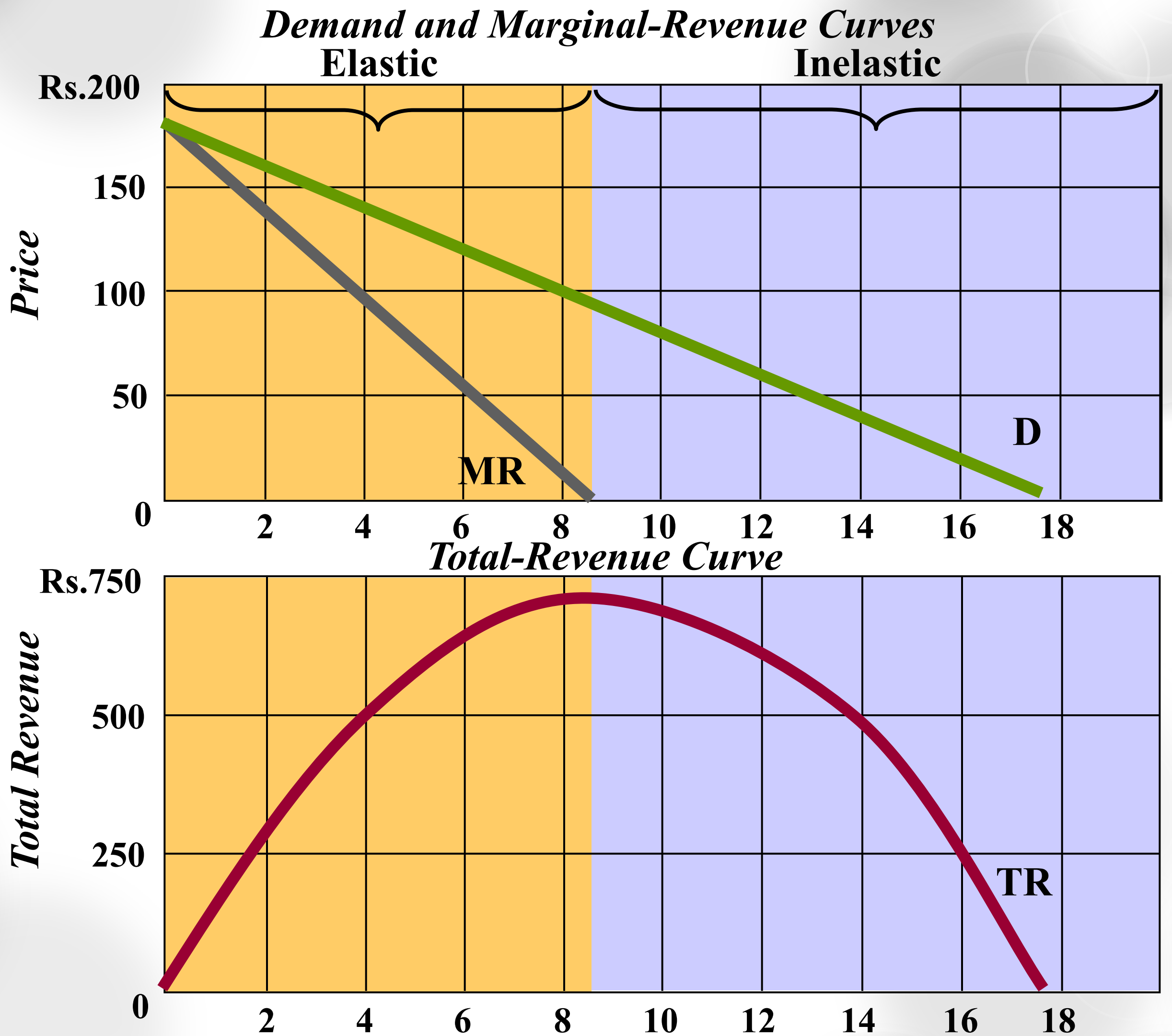
Profit Maximization

- Output-price determination
  - Marginal revenue marginal cost rule
  - Same cost definitions
- No supply curve

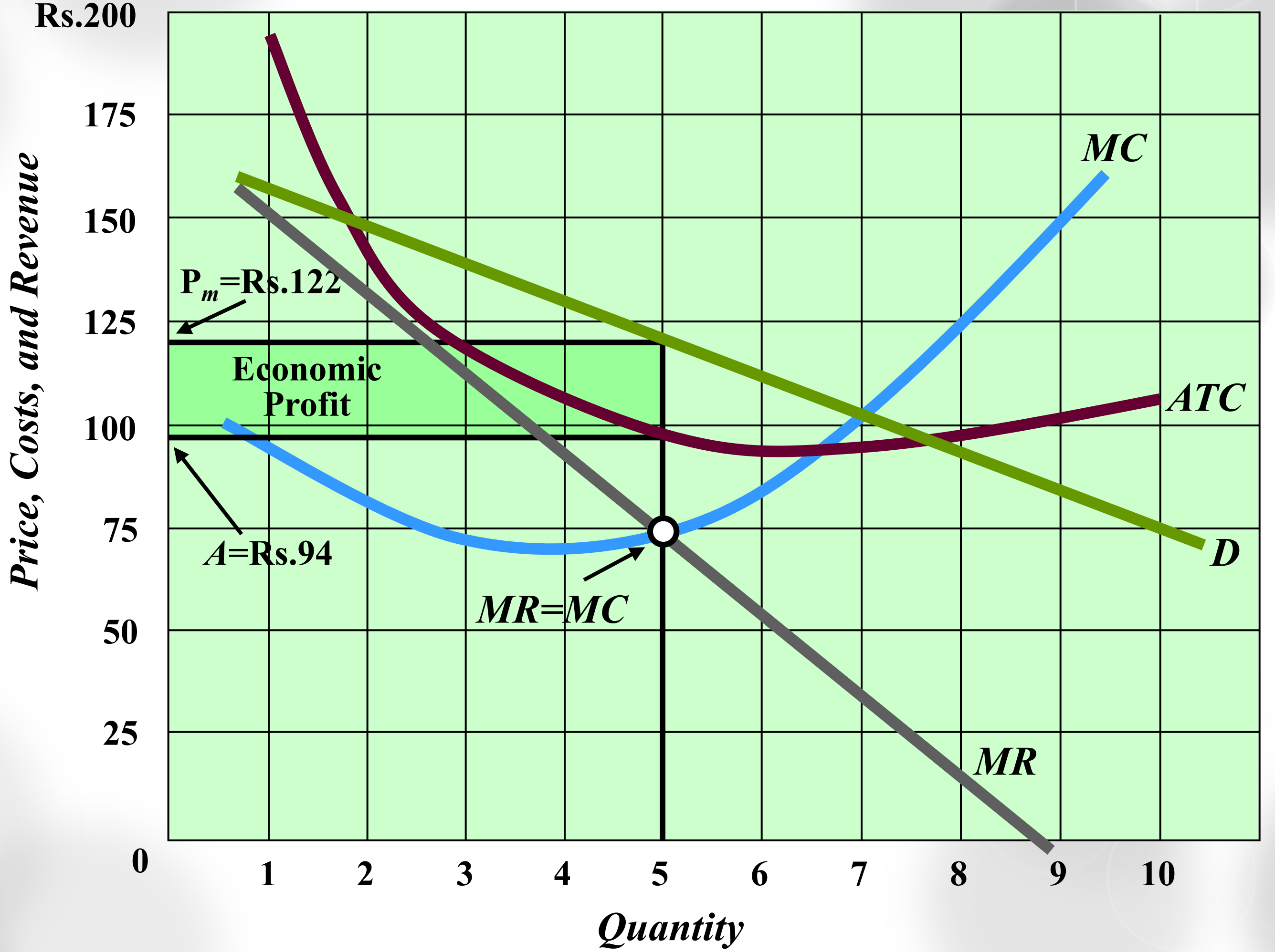
Monopoly Revenue and Costs

	Revenue Data			Cost Data			
(1) Quantity Of Output	(2) Price (Average Revenue)	(3) Total Revenue (1) X (2)	(4) Marginal Revenue	(5) Average Total Cost	(6) Total Cost (1) X (5)	(7) Marginal Cost	(8) Profit (+) or Loss (-)
0	Rs.172	Rs.0			Rs.100		Rs.-100
1	162	162	Rs.162	Rs.190.00	190	Rs.90	-28
2	152	304	142	135.00	270	80	+34
3	142	426	122	113.33	340	70	+86
4	132	528	102	100.00	400	60	+128
5	122	610	82	94.00	470	70	+140
6	112	672	62	91.67	550	80	+122
7	102	714	42	91.43	640	90	+74
8	92	736	22	93.75	750	110	-14
9	82	738	2	97.78	880	130	-142
10	72	720	-18	103.00	1030	150	-310

Monopoly Revenue and Costs



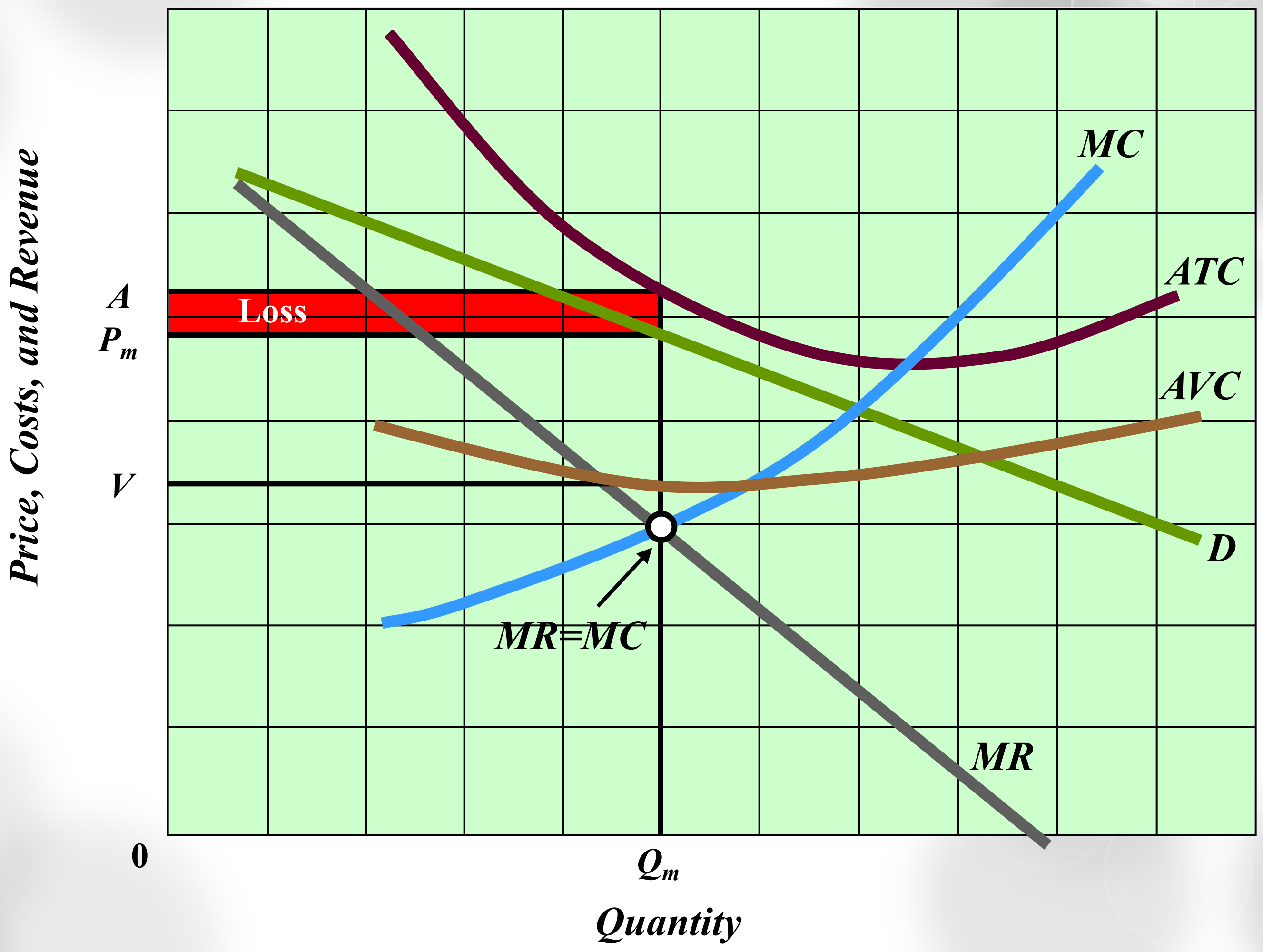
Profit Maximization



Misconceptions

- Not the highest price
- Total, not unit profit
- Possibility of losses

Loss Minimization



Economic Effects

- Pure competition is efficient
  - Productive efficiency
  - Allocative efficiency
  - CS+PS (*consumer surplus + producer surplus)* maximized
- Monopoly is inefficient
  - Charge P>MC
  - Deadweight (burden) loss: The costs to society created by an inefficiency in the market.

Policy Options

- Use antitrust laws
  - Divide the firm
- Natural monopoly
  - Regulate price
- Ignore
  - Unstable in long run

Price Discrimination

- Three forms
  - Charge each customer max willingness to pay
  - Charge one price for first unit and a lower price for subsequent units
  - Charge different customers different prices

Price Discrimination

- Conditions
  - Monopoly power
  - Market segregation
  - No resale
- Examples
  - Airfares
  - Electric utilities

REGULATED MONOPOLY

- Natural monopolies
- Rate regulation
- Socially optimum price
  - P = MC
- Fair return price

  P = ATC

Regulated Monopoly

Dilemma of Regulation