In a monopoly there is, by definition, only one firm. In the absence of regulation, this means that a monopolist need only take account of costs and market demand information in setting its price and output. There are no competitors for the monopolist to worry about.

Because of this ability to control both price and quantity, the monopolist's choices will often be inefficient from the market's perspective. How governments respond to monopolies, depends on the source of the monopoly power.

Outline
I. The basic profit maximization model
   A. Marginal revenue = Marginal cost
   B. The role of the price elasticity of demand

II. Extensions of the basic model
   A. Pricing and production with multiple plants.
   B. Price discrimination

III. Regulation
   A. When to regulate and when not to regulate a monopoly
   B. Standard regulations
   C. Demsetz competition

Key Concepts and Ideas
- A monopolist sets output so that marginal revenue equals marginal cost and then determines the maximum price at which it can sell all of its output using demand information.
- The profit-maximizing output and price for a monopolist is not socially efficient. That is, gains from trade are not maximized.
- When monopolies form naturally, it means that one firm can serve the market at a lower cost than two or more firms. In such cases, society benefits from monopoly production. To maximize the social benefits, regulation is the best way to deal with the monopoly.
- For some products, governments can use competition for the market as a substitute for competition in the market. This competition changes the monopoly's price-setting incentives.
- Price discrimination allows a monopolist to increase its profits relative to when it charges a uniform price. Consumer surplus can also increase if price discrimination results in an increase in total sales.

Important Skills
- Calculate the profit-maximizing output and price with one plant and with multiple plants.
- Calculate the monopolist's price and output under each type of regulation.
- Calculate the optimal prices and quantities under third-degree price discrimination.