Lecture 17

- Profit maximization
  Revenue vs. profit maximization
- Marginal revenue and marginal cost
- Choosing output in the short-run vs. in the long-run
Profit

- **Definition:**
  Profit is defined as the difference between revenue and economic cost (opportunity cost)

- **Profit maximization: (examples)**
  Each firm chooses its output so that the difference between its revenue and cost (profit) is maximized

- **Shape of the profit curve: (Figure 8.1)**

- **Profit maximization condition:**
  - Slope of the total revenue curve = Slope of the total cost curve
  - \( MR = MC \)
Competitive Firms

- **Definition:**
  Each firm in a competitive industry sells only a small fraction of the entire industry sales so that how much output the firm decides to sell will have no effect on the market price of the product.

- **Demand curve: (Figure 8.2)**
  - For a competitive industry
  - For a competitive firm

- **Profit maximization:**
  \[ MC = MR = P \]
### Exercise

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Questions

• What are those series in the previous diagram?
• What if the price falls from $40 to $35?
• What if the fixed cost increases from $50 to $100, and then to $150?
• What is the relationship between a firm’s optimal output and its fixed cost?