1. The cost function of competitive firm is TC=20+0,2Q2 . The product's market price is 20 AZN. Please find the firm's profit.
2. The price elasticity of a product that monopoly produces equals to **-2**. The price of a good is **6** AZN. **MC= 2+2Q**. Find output level at which the firm maximizes its profits.
3. If the inverse demand curve a monopoly faces is p = 100 - Q, and MC is constant at 10, then the deadweight loss from monopoly equals
4. If the price of a slice of pizza rises from $2.50 to $3, and quantity demanded falls from 10,000 slices to 7,400 slices, using the formula for arc price elasticity what is the percentage change in quantity?
5. Suppose the demand function for a good is expressed as Q = 100 - 4p. If the good currently sells for $10, then the point price elasticity of demand equals
6. The demand function of a good is Q=60-P. If the price elasticity of this good is -2, find the price of the good.
7. The price elasticity of a product that monopoly produces equals to -3. The price of a good is 15 AZN. MC= 2+2Q. Find output level at which the firm maximizes its profits.
8. The demand function of monopoly in the market is P=10-0,1Q. Short run total cost function SRTC=2Q+0,1Q2 .Find the market power of this firm.
9. A monopoly sets a price of $40 per unit for an item that has a marginal cost of $5. Assuming profit maximization, the implicit demand elasticity is.
10. Total cost function in competitive firm is TC = 24+ 6Q2. If firm gets normal profit please find the average total cost of this firm.
11. The demand function of X good QD = 80 – 2P + 4M. M is consumer income and equals 30 AZN. P(price of X good) and equal 25 AZN. Please find the income elasticity of demand.
12. Consumer utility function is, Uxy = 10x0.5y0.5. The price of X good 10 AZN and Y good 20AZN. If consumer income is 500 AZN, find how much consumer can buy X good.
13. QD = 20 - P, QS = 10 + Pif the government impose 6 AZN tax per unit of good, please find the tax income of government gained from consumer.
14. If the price of X good decreased from 12 to 9 AZN. Consumer’s demand for good X increased from QD = 30 to QD = 40. Find change in consumer surplus.
15. Price elasticity of demand which monopoly faces in market equals – 2. Marginal cost equal 40, find monopoly’s good’s price.
16. Demand function which monopoly face in the market is QD = 100 – P. Firm’s marginal cost is 10 AZN. Find the market power of this firm.
17. If the demand curve for slices of pizza is given as Q = 300 - 16p, then the point elasticity of demand when price is $1.50 is?



1. The above figure shows the demand curve for crude oil. If the market price is $10 a barrel, what is the price elasticity of demand?
2. If the inverse demand curve a monopoly faces is p = 100 - 2Q, and MC is constant at 16, then profit maximization is achieved when the monopoly sets price equal to?
3. Suppose a monopolist has TC = 100 + 10Q + 2Q2, and the demand curve it faces is p = 90 - 2Q. What will be the price, quantity, and profit for this firm?
4. A monopoly incurs a marginal cost of $1 for each unit produced. If the price elasticity of demand equals -2.0, the monopoly maximizes profit by charging a price of?
5. If the inverse demand curve a monopoly faces is p = 100 - 2Q, and MC is constant at 16, then the deadweight loss from monopoly equals?
6. A weapons producer sells guns to two countries that are at war with each other. The guns can be produced at a constant marginal cost of $10. The demand for guns from the two countries can be represented as:

QA = 100 - 2p

QB = 80 - 4p

Why is the weapons producer able to price discriminate?

What price will it charge to each country?

1. Suppose the demand for pizza in a small isolated town is p = 10 - Q. There are only two firms, A and B, and each has a cost function TC = 2 + q. Determine the Cournot equilibrium.
2. Joe's budget constraint equals 500 = 2F + 100S, where $500 is Joe's income, $2 is the price of food (F, y-axis) and $100 is the price of shelter (S, x-axis). How much food can Joe buy if he buys one unit of shelter?
3. Manisha could work for another firm making $10,000 per month, but she decides to open her own gourmet cheese store and pay herself $2,000 per month. In her first month of operations, she spends $6,000 on cheese, $1,000 on other items, and $2,500 on rent. She had a great opening month, and brought in revenues of $14,500. According to her accountant, what are Manisha's profits?
4. Tom is going to quit his job to pursue his PhD in economics, which will take him 6 years to complete. He currently makes $55,000 per year as a high school teacher. While going to school, he will receive a stipend of $24,000 per year plus $6,000 per year to help cover food and rent. His living expenses are the same regardless of what he does. What is Tom's opportunity cost of pursuing his PhD?
5. Suppose there are 1000 identical wheat farmers. For each, TC = 10 + q2. Market demand is Q = 600,000 - 100p. Derive the short-run equilibrium Q, q, and p. Does the typical firm earn a short-run profit?
6. A monopoly sets a price of $50 per unit for an item that has a marginal cost of $10. Assuming profit maximization, the implicit demand elasticity is?
7. If the price of a slice of pizza rises from $2.50 to $3, and quantity demanded falls from 10,000 slices to 7,400 slices, using the formula for arc price elasticity what is the percentage change in price?

**Open Questions**

1. Explain why managerial economics relies on microeconomics and industrial organization to analyze business practices and design business strategies.
2. Describe the separation of ownership and control of the Firm
3. Describe the market structure and managerial decision making
4. Describe the direct and inverse demand functions
5. Describe the direct and inverse supply functions
6. Explain the market clearing price
7. Describe the finding optimal activity levels with marginal analysis
8. Explain why sunk costs, fixed costs, and average costs are irrelevant in discussion of optimization problems
9. Explain the Simple Linear regression model
10. Explain the Quadratic and Log-Linear regression models
11. Explain the concept of utility and the basic assumptions underlying consumer preferences.
12. Define the concept of indifference curves and explain the properties of indifference curves and indifference maps.
13. Construct a consumer’s budget line and explain how to rotate or shift the budget line when either prices or income change.
14. Define a corner solution and explain the condition that creates a corner solution.
15. Use indifference curves to derive a demand curve for an individual consumer
16. Derive and interpret the equilibrium conditions for an individual consumer to be maximizing utility subject to a budget constraint.
17. Explain the difference between Private, Public, and Nonprofit Firms
18. Define market power and describe how own-price elasticity, cross-price elasticity, and the Lerner index are used to measure market power.
19. Explain why barriers to entry are necessary for market power in the long run and discuss the major types of entry barriers.
20. Show the relation between long-run and short-run cost curves using long-run and short-run expansion paths.
21. Explain the characteristics of long-run competitive equilibrium for a firm, derive long-run industry supply curves, and identify economic rent and producer surplus.
22. Explain why the demand curve facing a perfectly competitive firm is perfectly elastic and serves as the firm’s marginal revenue curve.
23. Graph a typical production isoquant and discuss the properties of isoquants.
24. Construct the firm’s expansion path and show how it relates to the firm’s longrun cost structure.
25. Explain how a variety of forces affects long-run costs: scale, scope, learning, and purchasing economies
26. Explain why uniform pricing does not generate the maximum possible total revenue and how price discrimination can generate more revenue.
27. Explain how to practice first-degree price discrimination to earn greater revenue and profit than charging a uniform price.
28. Explain how to practice second-degree price discrimination by using either two-part pricing or declining block pricing.
29. Explain how to practice third-degree price discrimination.
30. Explain the difference between decision making under risk and under uncertainty.
31. Identify deadweight loss associated with market power and discuss ways antitrust policy, second-best pricing, and two-part pricing can reduce the cost of market power.
32. Explain why common property resources and public goods are underproduced and how government can reduce market failure created by nonexcludability.
33. Explain why imperfect information about product price and quality can lead to market failure.
34. Explain Why Cartels Succeed or Fail
35. Explain the Cournot Oligopoly model
36. Explain the Bertrand Oligopoly model