Understanding and Using Demand and Supply Curves

Economics for Everyone

1. What are the factors that determine the price elasticity of demand for a good or service? What are the factors that determine the price elasticity of supply?
2. You are told that when the price of a commodity is reduced from $20 to $19, the total expenditure per week is increased from $200,000 to $228,000. Is the demand for this commodity in this price range, elastic or inelastic? Give a reason for your answer and calculate the price elasticity of demand from the provided information.
3. Per capita coffee consumption during the first three months of a particular year was reported to have dropped to 3 pounds from 3.6 pounds during the same period in the previous year. Retail prices of coffee were 81 per cent higher than they had been in the previous year.
    - Calculate the price elasticity of demand on the basis of this information.
    - Why might this not be a good estimate of the price elasticity of demand for coffee?
    - Use demand and supply curves to explain why the price of coffee tends to be so variable, sometimes rising sharply and falling just as sharply within short periods of time, and why it has trended downward over the decades.
4. Use demand and supply curves to analyse the impact of a specific tax of say $\$t$ per unit of a commodity sold in a perfectly competitive market.
    - Explain the impact on the price and quantity exchanged in the new equilibrium.
    - Explain the difference between the legal and the economic incidence of the tax.
    - Illustrate a situation in which price would not change in the new equilibrium; illustrate a situation in which quantity would not change. Offer an explanation in each case and illustrate whether it is consumers or producers who pay the tax.
5. Compare the outcome of a perfectly competitive market to three alternative agricultural support programs: (i) quotas; (ii) a price-support program; (iii) deficiency payments.
    - More specifically, compare the effects of each of these programs on:
        - price;
        - quantity purchased by consumers;
        - gross incomes of suppliers;
        - financial cost to the government. (Assume that the goods purchased by the government under the price-support program are disposed of at zero cost.)
    - Explain which program, if any, you would recommend to the following constituents:
        - producers of the commodity;
        - consumers of the commodity;
        - a social planner interested in maximizing the well being of all citizens.