1) (Question-3, Chapter-18) Suppose that the U.S. personal income tax system became a “flat tax” system, in which all taxpayers paid a certain percentage of their incomes in tax, and in which there are no exemptions or deductions. In which way(s) could this flat tax be more regressive than the present U.S. system? In which ways could it be more progressive than the present system?

2) (Question-2, Chapter-19) The demand for rutabagas is \( Q = 2000 - 100P \) and the supply of rutabagas is \( Q = -100 + 200P \). Who bears the statutory incidence of a $2 per unit tax on the sale of rutabagas? Who bears the economic incidence of this tax?

3) (Question-1, Chapter-20) The market demand for super-sticky glue is \( Q = 240 - 6P \) and the market supply is \( Q = -60 + 4P \).
   a. Calculate the deadweight loss of a tax of $4 per unit levied on producers of supersticky glue.
   b. How does deadweight loss change if the tax is levied on consumers of supersticky glue?

4) (Question-6, Chapter-20) The city of Johnstown decides to build a new stadium to attract a basketball team from the city of Rosendale. One economic advisor suggests that the stadium should be financed by a 2-year sales tax of 10%, while another advisor suggests that the stadium should be financed with a 20-year sales tax of 1%. Assume the interest rate is zero. Which approach will yield a more efficient outcome? Why?

5) (Question-7, Chapter-21) Suppose that you can earn $16 per hour before taxes and can work up to 80 hours per week. Consider two income tax rates, 10% and 20%.
   a. On the same diagram, draw the two weekly consumption–leisure budget constraints reflecting the two different tax rates.
   b. Draw a set of representative indifference curves such that the income effect of the tax increase outweighs the substitution effect.