

(Q1) Suppose that the governmental authorities wished to decrease use of a pesticide that is leaching into groundwater supplies in a watershed by 60% from current use levels. Discuss the advantages and/or disadvantages of distributing marketable pesticide permits to each farm operating in the watershed equal to 40% of its current level of use of that pesticide, versus simply ordering each farm to reduce pesticide use to 40% of current levels under threat of heavy fines for non-compliance.

(Q2) Assume the graph below represents the market demand for a patented prescription drug together with the long run marginal cost and average cost functions for producing the drug. (note: the diagram assumes that at output levels over 50 million AFC ~ 0, and MC is constant so that ATC = AVC = MC = \$20)

- A) Draw the marginal revenue function for this firm. 2 pts
- B) What is the profit-maximizing price for this firm? 3 pts
- C) On the graph show the area which represents the net loss to society resulting from the monopoly power conferred by the patent. 3pts
- D) What do you predict will happen to the structure of competition and to the price in this market when the patent expires? (Hint: use the concept of "Minimum efficient scale " of production in your answer.) 4pts.

