

# EconS 301- Intermediate Microeconomic Theory

## Recitation - Friday March 21st, 2025.

1. There is a new restaurant in town called The White Cypress selling Keftedes. The market demand function has a constant elasticity of  $-4$ . More precisely the actual daily demand was estimated to be  $Q = 30150p^{-4}$ , where  $p$  is the price per pound. Each pound costs  $c = \$5$  to produce. The White Cypress is the only restaurant in Pullman selling Keftedes (local monopoly producer). Compute the monopoly's profit-maximizing price and the monopoly's profit level. What should be the price in a perfect competitive market? Calculate the approximated welfare loss. Please show your computations.
2. Consider a perfectly competitive market with aggregate demand given by  $q^D(p) = 10 - p$ . Assume that only two firms operate in this industry. The cost function of firm 1 is  $C_1(q_1) = 3q_1^2 - 7q_1$ , whereas that of firm 2 is  $C_2(q_2) = 4q_2^2$ .
  - (a) Find the supply function of each firm. Consider a long-run approach so firm can alter all their inputs.
  - (b) If no more firms can enter in the industry, find aggregate supply. Then, identify the equilibrium price and output.