

# **ECON4002 Popup quiz**

## **Spring 2024**

**Write your name in the blank sheet.**

### **Instructions**

1. When everyone is ready to start, I will scroll down to the next page.
2. You cannot consult any materials.
3. You can write your answer either in English or in Korean.
4. You have 10 minutes to submit your answer.

### Quiz on Nov 7

A firm providing electricity has a monopolistic power in a market. This profit-maximizing firm sets the prices for two different groups: households (H) and industries (I). Demands for H and I are respectively given as  $Q_H(p) = 1600 - 4p$  and  $Q_I(p) = 1000 - p$ . The firm's marginal cost of providing additional unit of electricity is 40.

- (a) The firm can set a different monopolistic price to each group. Find the profit-maximizing prices and the quantities provided.
- (b) Calculate the markup ratio ( $\frac{P-MC}{P}$ ) of each group. Interpret the difference in the markup ratio with the inverse elasticity rule.