## Economics 314 Daily Question #22

Suppose that  $\Pi(P_i; P, M)$  is a function giving firm i's operating profits (not considering price-adjustment costs) when the firm sets price  $P_i$ , all other firms set price  $P_i$ , and aggregate demand is at level M. All firms initially have price equal to  $P_0$ . The long-run optimal (profit-maximizing in the absence of adjustment costs) price is  $P^*$ , which depends on aggregate demand M.

1. Explain the macroeconomic meaning of each of the following expressions:

a. 
$$\Pi(P^*, P_0; M) - \Pi(P_0, P_0; M)$$

b. 
$$\Pi(P^*, P^*; M) - \Pi(P_0, P^*; M)$$

2. If Z is the menu cost of adjusting price, what is the firm's optimal price strategy (adjust or non-adjust price) if other firms do not adjust price and  $\Pi(P^*, P_0; M) - \Pi(P_0, P_0; M) < Z$ ?