## Economics 314 Daily Question \#22

## Spring 2014 <br> April 3

Suppose that $\Pi\left(P_{i} ; P, M\right)$ is a function giving firm $i$ 's operating profits (not considering priceadjustment costs) when the firm sets price $P_{i}$, all other firms set price $P$, 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. $\Pi\left(P^{*}, P_{0} ; M\right)-\Pi\left(P_{0}, P_{0} ; M\right)$
b. $\Pi\left(P^{*}, P^{*} ; M\right)-\Pi\left(P_{0}, P^{*} ; M\right)$
2. If $Z$ is the menu cost of adjusting price, what is the firm's optimal price strategy (adjust or nonadjust price) if other firms do not adjust price and $\Pi\left(P^{*}, P_{0} ; M\right)-\Pi\left(P_{0}, P_{0} ; M\right)<Z$ ?
