1. Jonatha commutes from her suburban residence in Elk Grove to the city center of Sacramento. When asked of her opinion of a proposed congestion tax of $5.00 per trip, she says, “Of course I oppose the congestion tax. It would make me worse off by $5.00 per trip. What do you think I am, stupid?” Critically appraise Jonatha’s statement.

The congestion tax will decrease traffic volume so travel speed increases (decreasing travel time). Depending on the opportunity cost of Jonatha’s time, the decrease in travel time may more than offset the $5.00 in congestion tax she will pay for driving. Local governments can also use revenue from the tax to lower local income taxes. Depending on Jonatha’s marginal income tax rate, this lower income tax rate may benefit her fare more than the $5.00 tax. (the second argument applies more to other areas outside of California)

2. The city of Evilville suffers from two types of crimes, marijuana consumption and burglary. Suppose that you must decide how to allocate the city’s crime-fighting resources between the two types of crime. The marginal-prevention-cost (MPC) curves are linear, and for a given crime rate, the marijuana MPC is twice the burglary MPC. The marginal-victim-cost (MVC) curves are horizontal. Under what conditions will the optimum number of marijuana crimes be less than the number of burglaries? Illustrate your answer with a graph.

For the optimum # of marijuana crimes to be less than the number of burglaries, the MVC for Marijuana must also be higher than the MVC for Burglary as shown in the graph above.

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3. In Weather City, the winters are cold and the summers are hot and humid. In Mild City, the
winters and summers are mild. Except for the differences in weather, the two cities are similar.
Would you expect the distance between bus stops to be longer or shorter in Mild City?

The intemperate weather in Weather City would encourage the distance between bus stops to be shorter
than in Mild City. People will be less willing to endure the cold, heat and humidity to walk to the bus
stop than in the mild weather of Mild City. Again—there is not a specific answer I’m looking for with
this question. I am looking to see if you can pick a position and logically support it with economic
thinking.

4. Suppose you built a low-income house that qualifies for the low-income housing tax credit.
The cost of building the house is $100,000. Textbook pp. 304-305
A. Over a 10-year period, what is your tax credit?
Builder earns annual credit of 9% of project’s cost, so 9% of $100,000 = $9000/year
Over a 10 year period the tax credit adds up to $9000 * 10 = $90,000

B. Based on Quigley’s (2000) results, predict the market value of the house.
Quigley concluded that each dollar of federal subsidy produced only $0.62 worth of housing, so the
$90,000 in tax credits generated only $55,800 of housing ($0.62* $90,000).

C. Why is the market value less than the building cost?
Subsidized housing displaces unsubsidized housing, so as the gov’t encourages subsidized housing to be
built, those families will leave the housing market, causing the D curve to shift to the left. This creates
excess supply which will cause the market price for such housing to drop. Additionally, the tax credit is
based on bldg cost, not on eventual mk’t value, so the builder has no incentive to cut costs.

Ungraded Portion:
1. According to Summers and Wolfe (1977), low achievers learn more in small classes and with
inexperienced teachers, while high achievers learn more in large classes with experienced
teachers. Why?