Econ 160A Summer 2013 International Trade Philip Luck

Name ______________________ ID#______________________

Quiz 2

July 16th, 2013

Begin your answer with the quick assertion "true", "false", or "uncertain" and justify your answer with a few sentences. Do not spend too much time answering any of these questions: 1-2 sentences at most will suffice. (3 points each)

1. An increase in the index of intra-industry trade implies that there has been an increase in the country's exports in that industry.

2. In models of trade with monopolistic competition, consumers gain access to an overall larger number of varieties, but may end up with a lower number of domestically produced (or local) varieties.

3. The gravity equation predicts that there should be more trade between the United States and Canada than between the United States and Argentina. Give two reason to support your assertion. (*HINT: Argentina's economy is roughly 25% the size of Canada's*)

4. Traditional models of monopolistic competition (the Krugman model) are not a good representation of reality because they imply that all firm should export and all firms are the same size.

5. Assume that San Francisco (SF) does not trade with the rest of the Bay Area and the market for sourdough bread in SF is monopolistically competitive, each baker makes a differentiated sourdough and sets their own price. Bakeries within this market are symmetric – opening a bakery requires a fixed cost "F", while each loaf sold incurs a marginal cost C. The demand facing each bakery is given by

$$q(P) = S\left[\frac{1}{N} - b(P - \bar{P})\right]$$

Under the above assumptions optimal prices and averages costs are given by

$$P^* = c + \frac{1}{bN}, \qquad AC = c + \frac{FN}{S}$$

a) Graph these two equations with price and cost on the vertical axis and the number of firms on the horizontal axis. Label your PP and CC curves as well as the equilibrium number of firms and the equilibrium price level and average cost. (label this equilibrium 1)
b) Imagine that trade is opened between Oakland and SF. Show the short run equilibrium, make sure to indicate any change in AC and prices. (Label this equilibrium as 2)
c) Lastly, show the long run equilibrium once bakeries are allowed to enter and exit the market. Make sure to label the new number of firms and the new price level (label this equilibrium as 3)
d) Briefly describe the welfare gains to San Franciscans' of opening up to trade with Oakland.