THIRD TEST. ECON 100C, FALL 2015. NAME: ____________________________________

Fill in the blanks, and answer in the spaces provided. Show your work.

1. Firm entry and exit. (8 points) Suppose that every ice cream stand in the area has the cost function $C(q) = 30q + \frac{1}{20}q^2 + 2000$, and thus the marginal cost function $MC(q) = 30 + \frac{1}{10}q$, where y is the quantity of ice cream it produces.

a) If the market price of ice cream is 40, each firm will chose to produce $q =$_______ units of output.

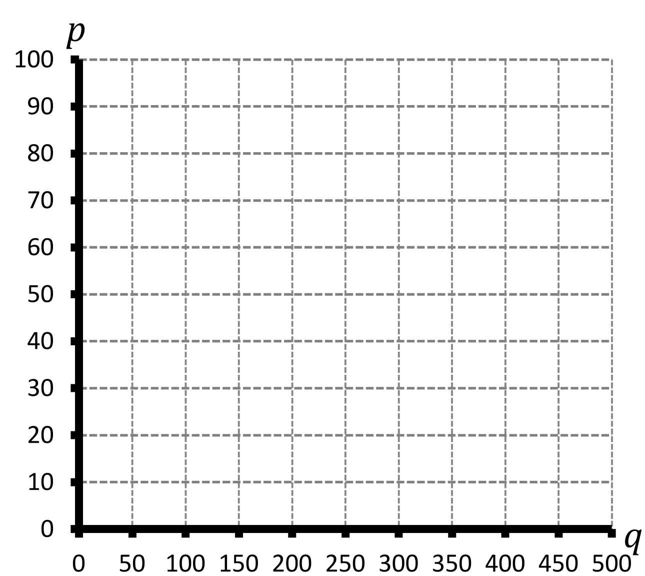
b) In this case, each firm's revenue is $R =$_______, its cost is $C =$_______, and its profit is $\pi =$_______

c) So, if the market price is 40, will firms want to enter or exit?

d) A firm's average cost function and average variable cost function are $AC(q) =$______________ and $AVC(q) =$______________.

e) In the long run equilibrium, each firm produces $\tilde{q} =$_______ units of the ice cream, and the price of ice cream is $\tilde{p} =$_______.

f) If market demand is given by $Q_d(p) = 10{,}000 - 100p$, and market supply is given by $Q_s(p) = nq_s(p)$, where $q_s(p)$ is the firm-level supply function and n is the number of firms, find n^*, the number of firms in the long run equilibrium.



g) On the graph to the right, draw MC, AC, AVC, $\tilde{q}$, and $\tilde{p}$.

2. Supply and demand, with trade. (8 points) Suppose that domestic demand and supply of bananas in Stansylvania can be represented by the following marginal benefit and marginal cost functions: $MB = 12 - \frac{1}{40}q$, and $MC = \frac{1}{40}q$ (where q gives the quantity of bananas consumed or produced, and cost and benefit are given in cents). Stansylvania is such a small country that it can have no measurable effect on the worldwide market price of bananas, which is 20¢.

a) Find Stansylvania's equilibrium quantity, price, consumer surplus, producer surplus, and total economic surplus if its government allows no imports at all.

$q =$ _____ $p =$ _____ $CS =$ _____ $PS =$ _____ $TES =$ _____

b) Find Stansylvania's equilibrium quantity demanded, quantity supplied, quantity imported, consumer surplus, producer surplus, and total economic surplus if its government allows bananas to be imported without restriction.

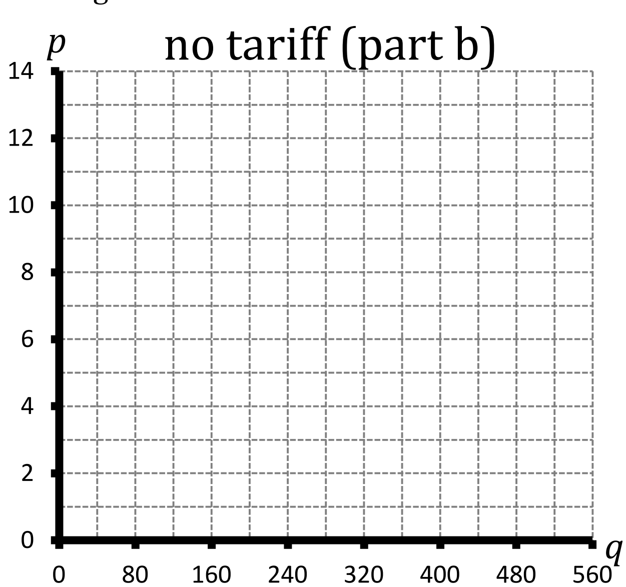
$q_d =$ _____ $q_s =$ _____ $q_i =$ _____ $CS =$ _____ $PS =$ _____ $TES =$ _____

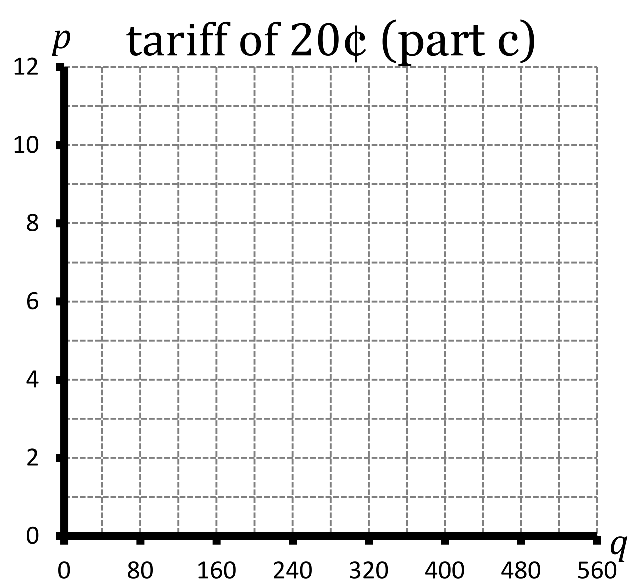
c) Find Stansylvania's equilibrium quantity demanded, quantity supplied, quantity imported, consumer surplus, producer surplus, government revenue, and total economic surplus (including government revenue) if its government imposes an import tariff of 20¢ per unit.

$q_d =$ _____ $q_s =$ _____ $q_i =$ _____ $CS =$ _____ $PS =$ _____ $GR =$ _____ $TES =$ _____

d) What is the deadweight loss of the tariff in part c? ______

e) On both graphs below, draw marginal benefit, marginal cost, and world price. On the first graph, use different shading to indicate consumer surplus and producer surplus. On the second graph, use different shading to indicate consumer surplus, producer surplus, government revenue, and deadweight loss.





3. Real GDP per capita. (3 points) What does the real GDP per capita statistic tell us about a country's standard of living? What does it leave out? Give at least two clear and distinct examples of the latter.

4. Expectations and reality. (3 points) Explain how widespread expectation of low employment and low national income can in fact cause low employment and low national income.

5. Monetary and fiscal policy. (6 points)

a) What is the basic goal of expansionary policy, whether fiscal or monetary? When might it be called for? Use a diagram to illustrate your answer.

b) In simple terms, what does expansionary fiscal policy consist of? Who carries it out? How does it work toward the goal from part a?

c) What is the most obvious possible drawback of expansionary fiscal policy?

d) In simple terms, what does expansionary monetary policy consist of? Who carries it out? How does it work toward the goal from part a?

e) What is the most obvious possible drawback of expansionary monetary policy?