

THIRD TEST. ECON 100D, FALL 2013. NAME: _____

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

1. Firm entry and exit. Suppose that every firm in a particular (perfectly competitive) industry has the cost function $C(y) = 10y + \frac{1}{2}y^2 + 50$, and thus the marginal cost function $MC(y) = 10 + y$, where y is the quantity of output it produces.

a) If the market price of the good is 30, each firm will chose to produce $y =$ _____ units of output.

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

c) So, if the market price is 30, will firms want to enter or exit?

d) If the market price of the good is 12, each firm will chose to produce $y =$ _____ units of output.

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

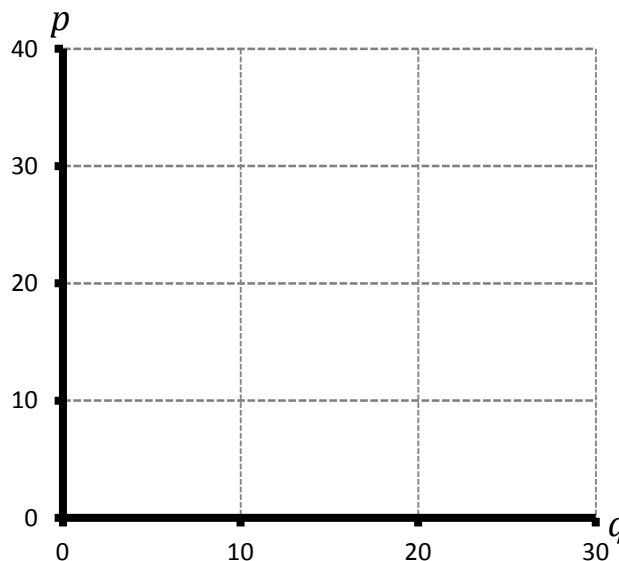
f) So, if the market price is 12, will firms want to enter or exit?

g) Find each firm's average cost function: $AC(y) =$ _____

h) In the long run, when there has been enough time for all firms who want to enter or exit to do so, each firm produces $y^* =$ _____ units of the good.

i) Therefore, the long run equilibrium price of the good is $p^* =$ _____.

j) On the graph below, draw an the marginal cost curve and average cost curve of an individual firm, and the long run equilibrium price.



2. Supply and demand, with trade. Suppose that domestic demand and supply of bananas in Stansylvania can be represented by the following marginal benefit and marginal cost functions: $MB = 80 - q$, and $MC = 20 + 2q$ (where q gives the quantity of bananas consumed or produced). Stansylvania is such a small country that it can have no measurable effect on the worldwide market price of bananas, which is 30.

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

$$q = \underline{\hspace{2cm}} \quad p = \underline{\hspace{2cm}} \quad CS = \underline{\hspace{2cm}} \quad PS = \underline{\hspace{2cm}} \quad TES = \underline{\hspace{2cm}}$$

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.

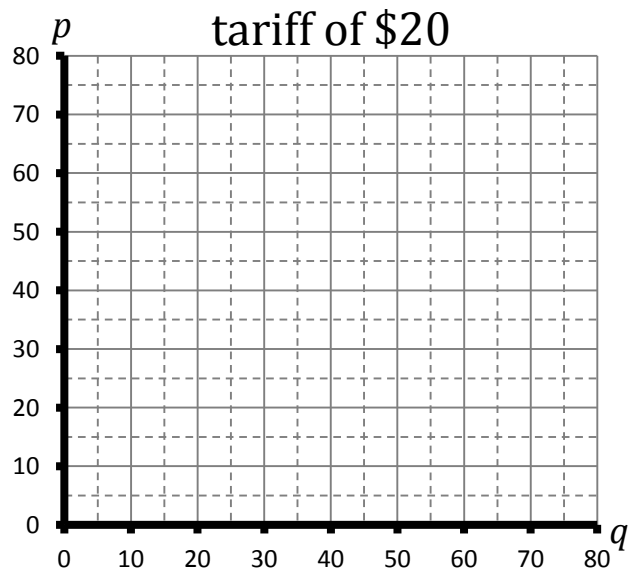
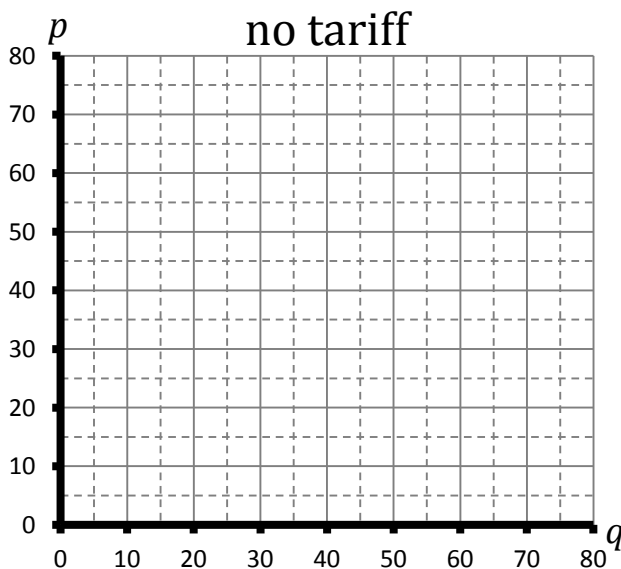
$$q_d = \underline{\hspace{2cm}} \quad q_s = \underline{\hspace{2cm}} \quad q_i = \underline{\hspace{2cm}} \quad CS = \underline{\hspace{2cm}} \quad PS = \underline{\hspace{2cm}} \quad TES = \underline{\hspace{2cm}}$$

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.

$$q_d = \underline{\hspace{2cm}} \quad q_s = \underline{\hspace{2cm}} \quad q_i = \underline{\hspace{2cm}} \quad CS = \underline{\hspace{2cm}} \quad PS = \underline{\hspace{2cm}} \quad GR = \underline{\hspace{2cm}} \quad TES = \underline{\hspace{2cm}}$$

d) What is the deadweight loss of the tariff in part c? $\underline{\hspace{2cm}}$

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. Comparative advantage. There are two neighboring countries: Florin and Guilder. In a day, a Florinese worker can produce either 20 pitchers or 4 swords, and a Guilderian worker can produce either 9 pitchers or 3 swords, as shown by the table on the left and below:

	units per day	
	pitchers	swords
Florin	20	4
Guilder	9	3

	opportunity cost	
	pitchers	swords
Florin	swords	pitchers
Guilder	swords	pitchers

- a) Complete the opportunity cost table, to show how many swords each country must give up to get an extra pitcher, and vice versa, without trade.
- b) _____ has an absolute advantage in pitchers. _____ has an absolute advantage in swords.
- c) _____ has a comparative advantage in pitchers. _____ has a comparative advantage in swords.
- d) If _____ gives _____ a sword for any number of pitchers between _____ and _____, then both countries can potentially be made better off.

4. Aggregate supply and demand

- a) On the aggregate supply and demand graph, what is the horizontal axis, and what is the vertical axis?
- b) Why does the aggregate demand curve slope downward?
- c) Why does the aggregate supply curve slope upward in the short run?

5. Unemployment. Explain the difference between frictional, structural, and cyclical unemployment.

6. Gross domestic product. Explain two things that are pertinent to a country's standard of living but not measured by the real GDP per capital statistic.

7. Monetary and fiscal policy.

a) What does the government do when it wants to carry out expansionary fiscal policy? What effect does this have on aggregate supply or demand, and why?

b) What does the Fed do when it wants to carry out expansionary monetary policy? What effect does this have on aggregate supply or demand, and why?

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

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

f) What is the argument for expansionary policy? According to this argument, when is it called for?