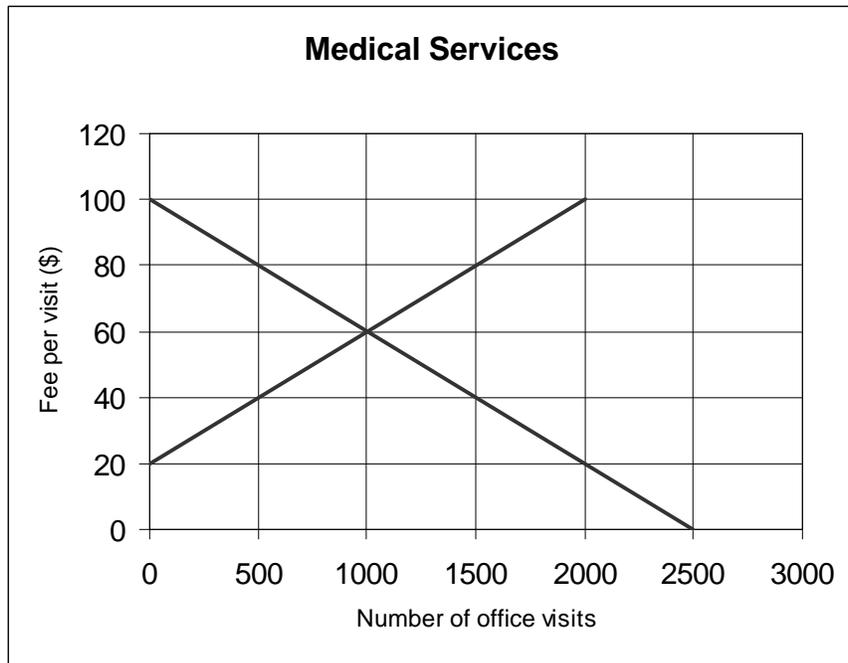


Quiz #1

Note: Please answer in the space provided. Extra paper is available in the front of the room. The examination will end at 11:50. Show your calculations in order that you may receive partial credit even if you make a numerical error.

Part I: Carefully consider the graph of the competitive market for medical services in Never-Never Land:



- a. Label the demand curve "D", the supply curve "S", and mark the competitive equilibrium with an "e". The equilibrium quantity sold (office visits) is _____, the equilibrium price is \$_____ per patient visit, and the slope of the demand curve is _____.

- b. Calculate the (point) price elasticity of demand at e:
(Hint: Show your work)

2. Senator Soapbox, a staunch advocate of medical reform, argues that the government should impose a tax of \$20 per patient visit. As a result, the equilibrium price per visit will change to _____ and the equilibrium quantity will be _____. Further, consumer surplus will change by _____. The government will collect _____ in tax revenue.
[Hint: Show your computations]
3. Senator Smogface, an indefatigable fan of medical reform, introduces a bill to impose a \$50 ceiling on fees for medical visits. Explain the how this "reform" will change the quantity demanded, the quantity supplied, and the income of physicians.
4. Senator Bullmoose, an unflagging supporter of medical reform, argues that the government should pay 50% of the cost of each patient visit. As a result, the total quantity of medical service purchased will be _____, the price paid by the patient per visit will change to _____, and the amount received per patient visit by physicians will change to _____ and
The subsidy will cost the government _____.

II.: Answer one (only 1) of the following two questions:

*You are to draw a neat graph at the bottom of the page.
Be sure to label everything clearly!*

1. During World War II the supplies of a number of commodities were carefully rationed in many countries, including England and the United States, in order to insure "Fair Shares for All!" Show, drawing an appropriate graph, that the equal division of two commodities between two individuals may result in an inefficient allocation of resources. That is to say, show that with such an allocation it may be possible to make at least one individual better off without making anyone worse off.
2. When her income was \$20 per hour, Ann chose to work 8 hours per day, and consume 16 hours of leisure. When a 25% income tax was imposed, reducing her wage to \$15 per hour, she decided to work a 10 hour day, consuming only 14 hours of leisure. Draw an indifference map demonstrating that this type of behavior is compatible with the assumption that Ann is a utility maximizer.

Honors Option: Please read over your answers to the rest of the exam before attempting this problem; no partial credit!

Maxwell's utility function is $U(X,Y) = X^{1/3}Y^{2/3} + 10$. His income is \$60, the price of X is \$10 and the price of Y is \$20. How much X will Maxwell buy? Solve for Maxwell's demand function for X.