ECON 310
Assignment #1
Quiz Date: Wednesday, January 30th

1. The demand and supply for catnip are given by the following tables:

Demand		Supply	
Price	Quantity	Price	Quantity
$0.50/lb	10 lb	$0.50/lb	4 lb
1.00	9	1.00	5
1.50	8	1.50	6
2.00	7	2.00	7
2.50	4	2.50	10
3.00	3	3.00	11

i. What quantity is sold in equilibrium, and at what price?

ii. Suppose that a sales tax of $2 per pound is imposed on catnip. What is the new market price of catnip? What price do demanders actually pay? What is the new equilibrium quantity?

iii. Suppose that an excise tax of $2 per pound is imposed on catnip. What is the new market price of catnip? What price do suppliers actually collect? What is the new equilibrium quantity?

iv. As a consumer (demander) of catnip, would you prefer to live in a world with a sales tax or with an excise tax? What about if you were a supplier?

2. Chapter 1, Problem Set 14 (page 29) *Note: in edition 7, this is problem 15, page 28*

3. Suppose the demand curve for a good is given by $Q = -4P + 500$ and the supply curve is given by $Q = 2P - 100$.

i. Find the equilibrium price and quantity.

ii. Suppose the government imposes a $6 per unit sales tax. The tax's legal incidence is paid by _______________.

iii. Does this $6 sales tax change the demand or supply equation? Write the new equation.

iv. Find the new market price and equilibrium quantity.

v. What is the price actually paid by demanders? What is the price actually received by suppliers?

vi. What percent of the tax is paid by demanders? Suppliers?

vi. If the demand curve were steeper, demanders would pay a ___________ percent of the tax.

vii. Suppose this tax was an excise tax. Who would pay the legal incidence of this tax?

viii. Under an excise tax, what is the new equilibrium price and quantity? What price do demanders pay? What price do suppliers receive?

ix. If you are a demander, under which scenario would you prefer to be taxed? Why?

3. Chapter 2, Numerical Exercise N1

4. Chapter 2, Problem Set #1

5. Multiple Choice

i. If the supply of oil falls and all other relevant factors remain unchanged, then,
a. the demand for oil will fall.
b. the quantity demanded of oil will fall.
c. the demand for oil will rise.
d. the quantity demanded of oil will rise.

ii. According to the law of demand, if other relevant factors remain unchanged, then a rise in the price of a commodity will cause
a. a reduction in the equilibrium quantity.
b. excess supply.
c. suppliers to reduce their production in reaction to the lower demand.
d. a fall in the quantity demanded.

iii. The term *demand* refers to
a. a collection of numbers, listing the quantities demanded at a variety of hypothetical prices.
b. the information on tastes, incomes, and prices needed to determine people's desired purchases of a commodity.
c. the amount of a commodity that is being purchased under current market conditions.
d. the quantity purchased at each and every possible level of income.

iv. Suppose that there are only two goods in Spain, chocolate and bottled water. The absolute price of a 100-gram bar of chocolate is 200 pesetas, and the absolute price of a liter of bottled water is 100 pesetas. What is the relative price of bottled water in terms of chocolate?
a. 100 grams per liter.
b. 200 grams per liter.
c. 50 grams per liter.
d. 400 grams per liter.

v. Suppose that because of inflation, the absolute price of a gallon of gasoline increases by 20% and the absolute price of a gallon of milk increases by 10%. In this situation, the price of gasoline relative to the price of milk
a. falls.
b. rises.
c. remains the same.
d. changes unpredictably.

vi. Comparing a market basket A to other market baskets, we can say that for a typical consumer, A is preferred to baskets to the
a. southwest but less preferred to baskets to the northeast.
b. northeast but less preferred to baskets to the southwest.
c. northwest but less preferred to baskets to the southeast.
d. southeast but less preferred to baskets to the northwest .

vii. An indifference curve shows the baskets of goods which
a. have the same marginal values.
b. the consumer can purchase, given his income and the prices he faces.
c. are the most preferred of the baskets within his budget.
d. are all equally desirable, providing the consumer with some fixed level of satisfaction.

viii. Under standard assumptions, which of the following is *not* a property of indifference curves?
a. They are downward sloping and convex.
b. They fill the plane and never cross.
c. Their slope is equal, in magnitude, to the relative price of the goods.
d. Baskets on indifference curves further away from the origin provide more satisfaction than those which are closer to the origin.

ix. Suppose that an indifference curve for Jack is drawn measuring quantities of coffee along the horizontal axis and quantities of root beer along the vertical axis. If the marginal value of an additional cup of coffee is 3 root beers for Jack, the slope of his indifference curve in this range is
a. 1/3.
b. 3.
c. 6
d. dependent upon the prices of the two goods

x. A budget line is constructed to show
a. how consumers who budget their expenditures achieve more satisfaction than those who do not.
b. the set of all baskets that the consumer can afford, given prices and his or her income.
c. the set of all baskets that the consumer would be willing to purchase given various prices for the goods in the basket.
d. the set of all baskets that the consumer considers equally desirable.