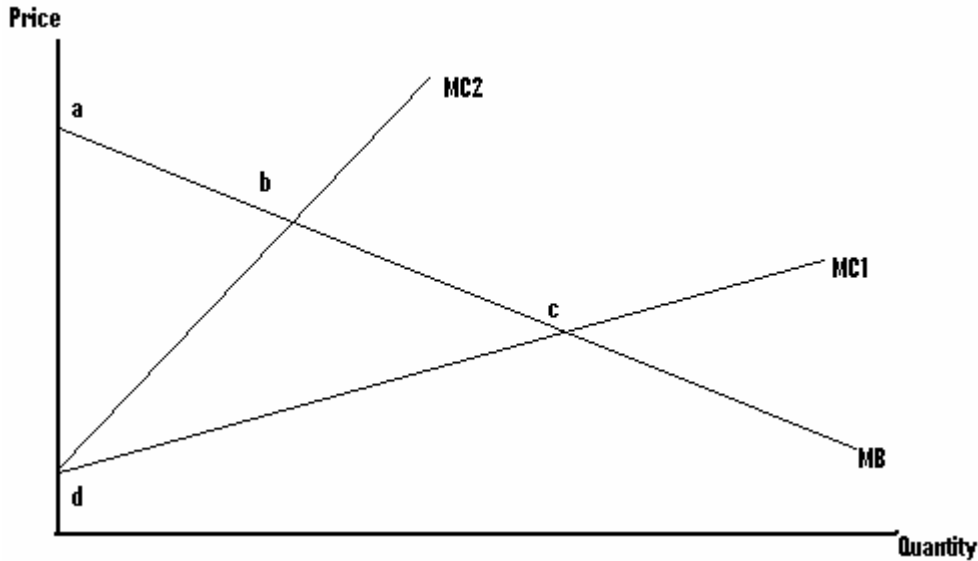


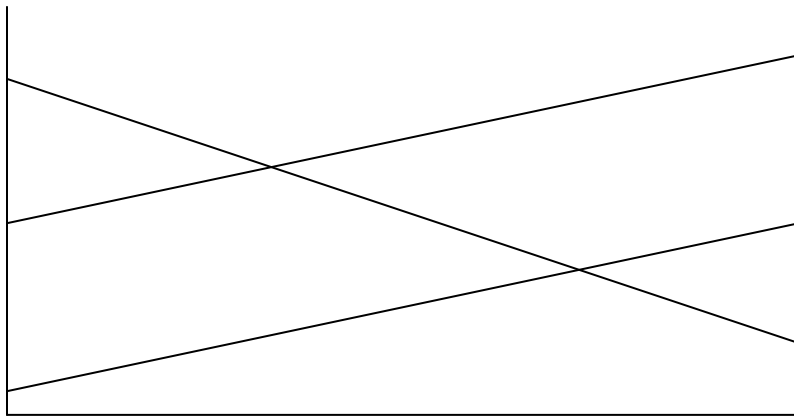
Instructions: You have 90 minutes to complete this exam. You may use a calculator but, you can NOT use your neighbor. Cheating is considered academic dishonesty and will be dealt with in the strictest manner. GOOD LUCK!

1) [10 points] Using the graph below, answer the following questions.



- Label the Supply and Demand Curve.
- Indicate the equilibrium Price and Quantity using MC1 (use P1 & Q1).
- Indicate the equilibrium Price and Quantity using MC2 (use P2 & Q2).
- Using the letters and P1 and Q1, what is Consumer Surplus when MC=MC1?
- Using the letters and P1 and Q1, what is Producer Surplus when MC=MC1?
- Using the letters and P2 and Q2, what is Consumer Surplus when MC=MC2?
- Using the letters and P2 and Q2, what is Producer Surplus when MC=MC2?
- Is there any Dead Weight Loss? If so describe the area.
- Who is made worse off by the shift from MC1 to MC2, producers or consumers? Why?

- 4) [15 points] Using the graph below,
- Label the curves so that this represents a positive externality (i.e. supply, demand, MC, MB,...).
 - Is this a consumption or production externality?
 - Label the market outcome (use P_m & Q_m)?
 - Label the socially optimal outcome (use P_s & Q_s)?
 - Is this good being over or under produced? Why?
 - Indicate the marginal damage from this externality?
 - Suppose you wanted to use a tax/subsidy to fix this, what would you do? What would this look like?



5) [10 points] What characteristics are necessary for something to be a *public good*?
A *pure public good*? Define these characteristics.

6) [10 points] Are the following things a *public good*? If not, why not?

a. Interstate 75

b. Streetlights

c. The Wall Street Journal (print edition)

d. The Wall Street Journal (online edition)

e. Coffee

f. Yellowstone National Park

g. Lifeguards

h. Keeneland

i. Main Street

