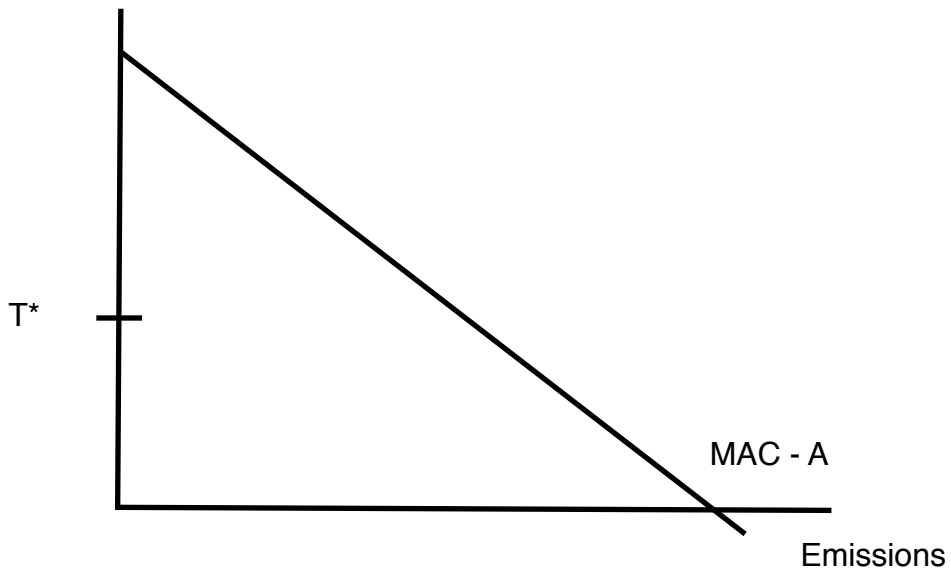
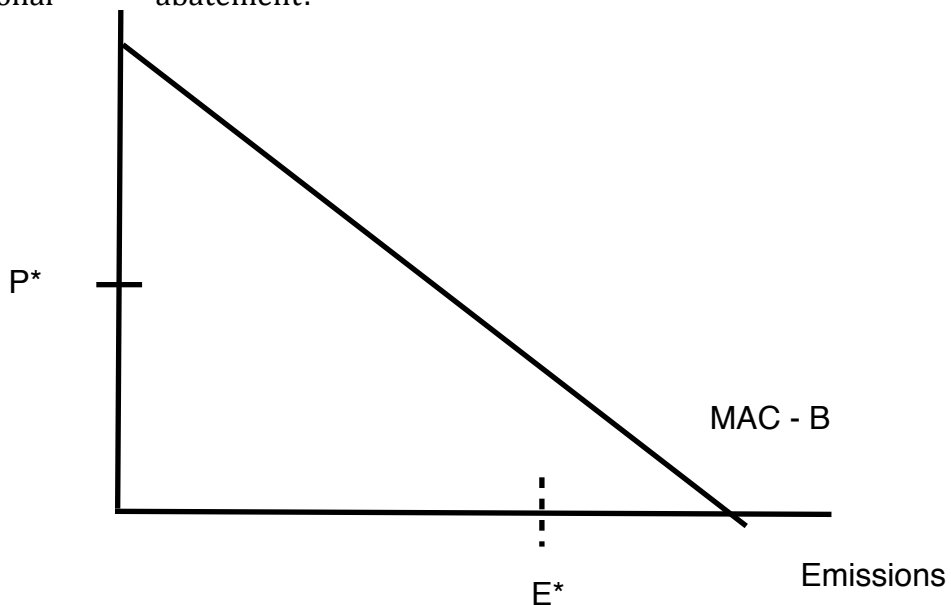


MAST/ECON676
Exam #1
April 1, 2013
(Points Per Question)

1. (10) Using the graph below, show the total cost to Firm A of an emission tax of T^* versus no regulation. Assume the firm is profit maximizing. MAC-A is the marginal abatement cost curve. What portion of the cost is due to additional abatement?



2. (10) Now, show the total cost to Firm B of an emissions trading program versus no regulation where the market price for permits is P^* and the firm is initially allocated E^* permits. Assume the firm is a profit maximizing. What portion of the cost is due to additional abatement?



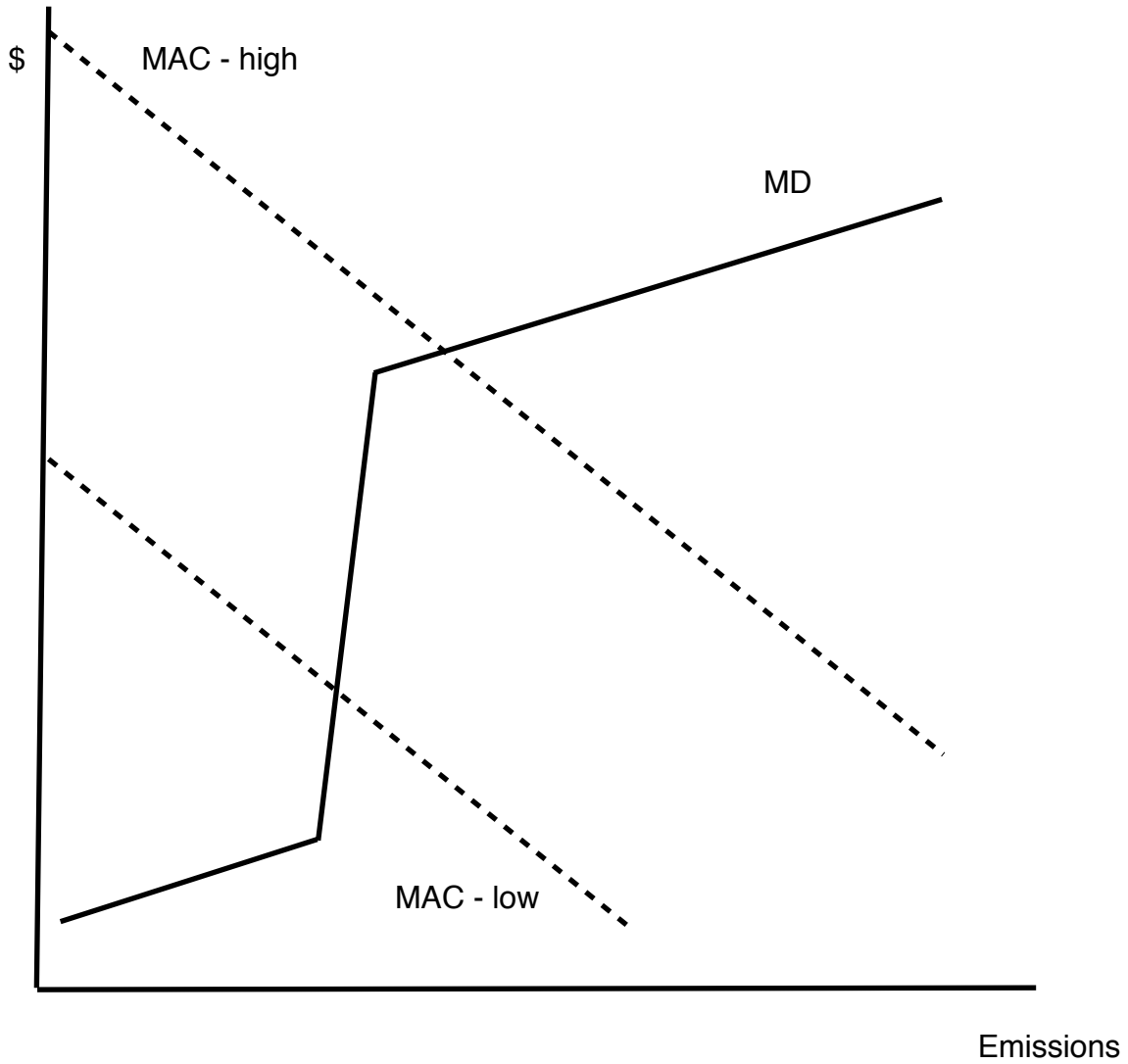
3. (10) Show graphically why uniform national standards are often inefficient. Under what conditions are they likely to approximate efficiency? Briefly discuss the logic of your result.

4. (10) What is the prisoners' dilemma and what is its relevance to environmental policy?

5. (15) Present our model of optimal precaution and show how negligence can be an efficient liability rule.

6. (20) After viewing the RFF panel discussion, would you say you come down in favor of a tax or a tradable permit scheme? Discuss the issues that sway you one way versus the other and why you ended up with your specific position. (Hint: Underline the high points as you go; it will draw my attention to the specifics of your argument.)

7. (10) Using the graph below show why Weitzman's argument in this case would favor a quantity instrument over a price instrument. The MAC curve is uncertain but known to fall somewhere between MAC-high and MAC-low. Briefly explain below the graph.



8. (5 if correct, -5 if wrong, 0 if blank) Strict liability is an efficient legal rule when bilateral care is operative.

True False

9. (5 if correct, -5 if wrong, 0 if blank) According to Rob Williams on the RFF panel, when one includes the indirect impacts of the carbon tax (realized through product price increases), the overall negative distributional impacts of the tax are lessened somewhat.

True False

10. (5) From HSW (one of the box stories I asked you to “understand” in the study questions): “Worries over pesticide contamination of groundwater resources led the Danish government to take action over pesticide use by farmers. In 1995, a new tax on pesticides was introduced as a means of reducing these environmental damages. The tax is levied as a percentage of the wholesale price, at rates of 53% (insecticides), 33% (herbicides) and 3% (wood preservatives and rodenticides). Interestingly, these tax differentials do not reflect differences in environmental risk – as economist might recommend – but rather the differences in treatment intensity (Schou and Streibig, 1999).” What were the unfortunate consequences of this tax system according to HSW.

