

PRACTICE MIDTERM EXAM #2
University of Ottawa, ECO1104E (November 23, 2010)

Answer Key

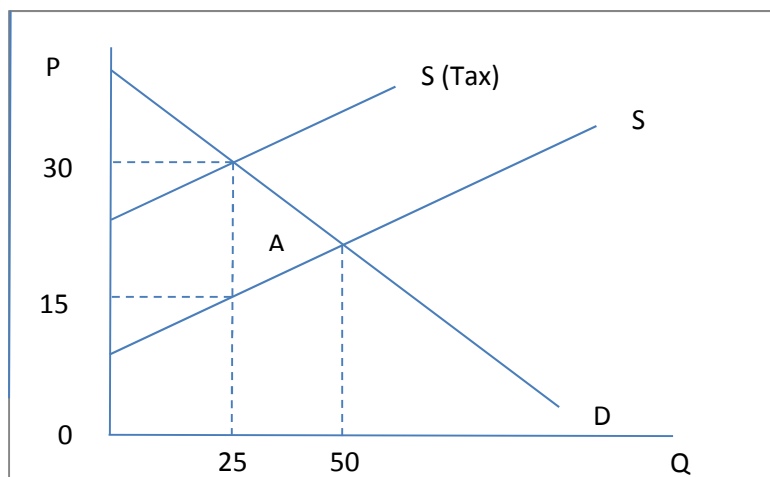
[2 points each]

1. A	11. B	21. D	31. B
2. C	12. C	22. C	32. A
3. B	13. D	23. B	33. D
4. B	14. D	24. D	34. A
5. C	15. D	25. B	35. B
6. B	16. B	26. A	36. A
7. C	17. A	27. C	37. C
8. B	18. C	28. B	38. C
9. B	19. A	29. E	39. D
10. B	20. C	30. C	40. C

41. The effects of the tax will be the same whether it is levied on producers or consumers. If levied on producers, the supply curve will shift upwards (or left) by the amount of the tax. The consumer price will be \$300; the producer price will be \$150. The difference will be the amount of the tax (\$150). The deadweight loss will equal area A. [3 points]

The deadweight loss (*DW*) of the \$150 tax equals:

$$DW = \text{area of triangle A} = \frac{1}{2}(150)(25) = \$1,875. \text{ [2 points]}$$



42. Let's say the positive externality comes from consumers (e.g., flu shots). This means that, for any quantity demanded, the social value exceeds the private value by the amount of the positive externality. The supply curve reflects both the social cost of production and the private cost of production (i.e., social costs equal private costs).

The socially desirable quantity is the quantity where the social value curve equals (or intersects) the supply curve. At this equilibrium, the social optimum quantity (Q_O) exceeds the market quantity (Q_M), and the price consumers would pay at the social optimum (P_C) is less than the market price (P_M).

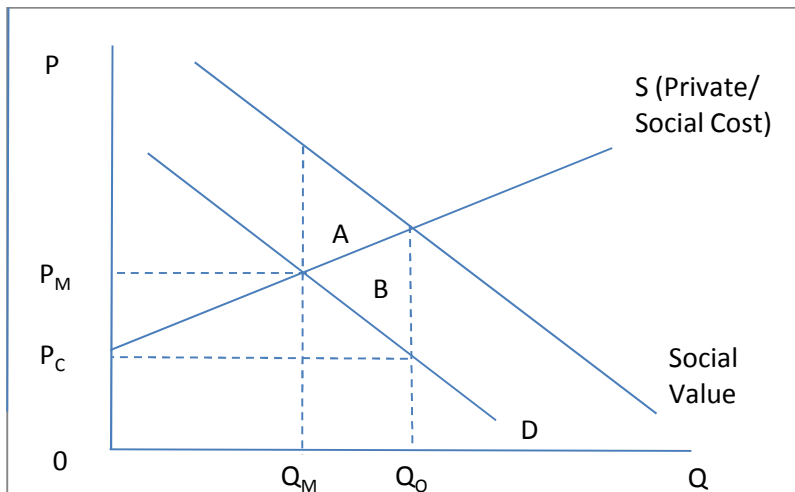
The inefficiency is represented by area A. It equals the amount by which the social value (areas A + B) exceeds the social/private cost (area B) of supplying the socially desirable output (Q_O). For all quantities between Q_M and Q_O , the social value of additional output exceeds its social/private cost. [2 points]

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A subsidy equal to the value of the positive externality would correct the inefficiency. [1 point]

[2 points for graph]



43. An effective price floor, P_F would increase the price of milk above its market clearing level P_E . This would cause the quantity demanded for milk to fall from Q_E to Q_F . Since the private value of milk exceeds the cost of producing it for all quantities between Q_E and Q_F , a deadweight loss equal to areas A plus B would result.

Due to the price floor, consumers would lose surplus equal to areas A plus C. Dairy farmers, on the other hand would gain surplus equal to area C and lose surplus equal to area B. Welfare falls by the amount of the deadweight loss ($A + B$). I would expect consumers to be hurt and producers to gain (assuming that area $C >$ area B).

[4 points for graph]

