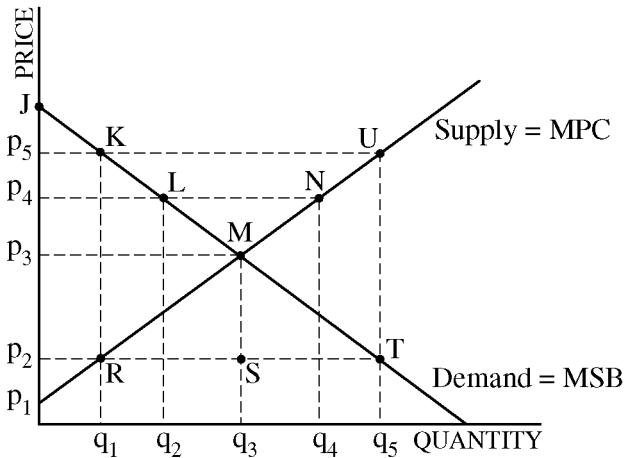


2010 AP® MICROECONOMICS FREE-RESPONSE QUESTIONS



3. The graph above shows the perfectly competitive market for hard candies in Country Alpha. In the graph the letters correspond to points, not areas. MPC denotes marginal private cost and MSB denotes marginal social benefit.
- Using the labeling on the graph, identify the area representing each of the following at the market equilibrium.
 - The consumer surplus
 - The producer surplus
 - Assume that the production of each unit of candy creates a negative externality equal to $(p_5 - p_2)$. Using the labeling on the graph, identify the socially optimal quantity.
 - Assume that the government imposes a per-unit tax of $(p_5 - p_2)$ to correct for the negative externality. Using the labeling on the graph, identify the area representing each of the following.
 - The consumer surplus
 - The deadweight loss

STOP

END OF EXAM

**AP® MICROECONOMICS
2010 SCORING GUIDELINES**

Question 3

5 points (2+1+2)

- (a) 2 points:
- One point is earned for identifying the consumer surplus as P_3JM .
 - One point is earned for identifying the producer surplus as P_1P_3M .
- (b) 1 point:
- One point is earned for identifying the socially optimal quantity as q_1 .
- (c) 2 points:
- One point is earned for identifying the consumer surplus as P_5JK .
 - One point is earned for indicating that there is no deadweight loss.