

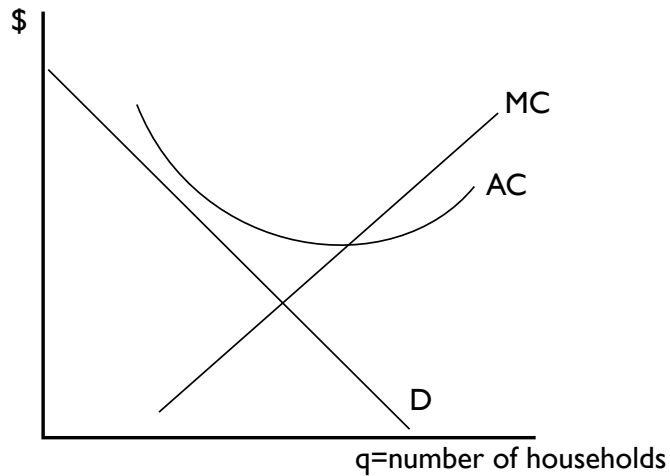
ECON 224, Prof. Hogendorn, Spring 2010

First Quiz

5 points for each question, 25 points total. -1 for messiness.

1. *RuralBroadband*. One part of the Obama administration's stimulus package funds broadband Internet service for rural and other underserved areas. This problem consider why government funding might be justified.

Suppose that the cost and demand curves for broadband Internet in a rural area are given by the following graph:



- (a) Explain concisely what could shift the AC curve up so far.
  
  
  
  
  
  
  
  
  
  
- (b) Show on the diagram the smallest loss a monopoly could make serving this market.

- (c) Could the government increase total welfare by subsidizing the monopoly loss? Explain with reference to the graph.
- (d) Is it possible for the government to raise total welfare beyond what you showed in part (c). Again, explain with reference to the graph.
- (e) The Smith family buys the broadband service and the family members get pleasure and productivity from using World of Warcraft and Skype. Are these examples of positive externalities from the government's broadband Internet initiative? Explain why or why not.