

Economics 326: Suggested Solutions to Midterm 1

31 January, 2004

1. This is up to you...
2. Akerlof question:
 - (a) Under perfect information trade occurs if $\theta \geq 1/2$.
 - (b) A seller trades if $\theta \geq 1 - p$. Hence $E[\theta | r(\theta) \leq p] = 1 - p/2$. The unique competitive price is $p = 2/3$. (How do I know this is unique?) Thus trade occurs if $\theta \geq 1/3$.
 - (c) Too much trade! This is the opposite to the problem when $r(\theta)$ is increasing.
3. Spence question:
 - (a) In the pooling equilibrium the high type gets $w_H = \lambda\theta_H + (1 - \lambda)\theta_L$ and $e_H = 0$.
 - (b) In the separating equilibrium the high type gets $w_H = \theta_H$ and $e_H = \tilde{e} > 0$ independent of λ .
 - (c) If $\lambda = 1$ the high type gets $w_H = \theta_H$ and $e_H = 0$.
 - (d) Under the pooling equilibrium, $w_H \rightarrow \theta_H$ and $e_H \rightarrow 0$ as $\lambda \rightarrow 1$.
 - (e) Under the separating equilibrium, $w_H \rightarrow \theta_H$ and $e_H \rightarrow \tilde{e} > 0$ as $\lambda \rightarrow 1$. Yet in the limit $e_H = 0$.