

Haifa MA Micro I. Fall 2010
Assignment 9: Risk Aversion.
Due: Monday January 3, 3:15 pm

1. A person has $u = \sqrt{w}$. His initial wealth is \$4. He has a lottery ticket that is worth \$12 with prob. $\frac{1}{2}$ and 0 with prob. $\frac{1}{2}$. What is his expected utility? What is the lowest price p that he will part with the ticket?
2. A person has $u(w) = e^{2 \cdot w}$. His initial wealth is \$0. He also has a lottery ticket that is worth $\ln 7$ with prob. $\frac{1}{2}$ and 0 with prob. $\frac{1}{2}$. What is his expected utility? What is the lowest price p that he will part with the ticket?
3. A consumer utility $u = \ln(w)$. He can bet on a coin with prob p of coming up heads. If he bets $\$x$, he will have $w + x$ for heads and $w - x$ for tails. What the optimal x as a function of p ?