

14.123 Microeconomics III—Problem Set 4

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Instructions. You are encouraged to work in groups, but everybody must write their own solution to the problem that is for grade. Good Luck!

1. (For Grade) Ann is a Rank-dependent utility maximizer with utility function $u(x) = x$ (i.e. "risk neutral") and probability weighting function

$$w(p) = p^{1+\alpha},$$

where the parameter $\alpha \in (-1, \infty)$ measures the level of her "optimism". There are assets, indexed by $a \in [-1, 1]$, that pay a single dividend

$$D_a = 1 + as$$

where

$$s \in [-1, 1]$$

is an unknown state that is uniformly distributed over $[-1, 1]$. Find the preference relation of Ann over the assets a as a function of α . Briefly interpret your result.

2. Lecture Notes, Exercise 6.5.
3. Final Exam 2014, Problem 4.
4. Problem Set 4 in 2014, Problem 1.

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