

Econ 277 Problem Set 1

- (1) Do the Rabin calibration theorem argument for someone who rejects a 50-50 win 550, lose 500 bet from every wealth level. Find the smallest  $x$  you can such that the person rejects a 50-50 lose  $x$  win infinity bet.
- (2) Assume Kahneman-Tversky loss-aversion with piecewise linear utility. Suppose that a person always rejects a 50-50 win 1 lose 0.95 bet, from any wealth level. Find the largest  $x$  such that you know that the person also rejects a 50-50 win  $x$  lose 20 bet.
- (3) Assume KT loss aversion.
  - (a) Assuming piecewise linear utility, find a lottery with negative expected value that a person with reference point 0 accepts, or show that this is impossible.
  - (b) Without assuming piecewise linear utility, find a lottery with negative expected value that a person with reference point 0 accepts, or show that this is impossible.
- (4) In the Koszegi-Rabin model, find an example of  $L, L'$  such that  $U(L|L') > U(L'|L')$  and  $U(L'|L) > U(L|L)$ , or show that this is impossible.