

Microeconomics Policy

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Return method: through mycourses by the deadline

### Problem Set 1: Question 4

A person has a utility function of the form  $u(w) = \sqrt{w}$ . Initial wealth is  $w = 4$  euros. There is a lottery ticket that returns 12 euros with 50% possibility, and 0 otherwise. What is the person's willingness to pay for the ticket?

- What is the person's expected wealth?
- What are the utility levels in the two possible outcomes?
- What is the expected utility?
- How much the person is willing to sacrifice income to have the lottery ticket? Note that this gives the person's willingness to pay for the lottery ticket.