

# ECON 107

## Quiz 6

This quiz will last 10 minutes.

1. (3 points) **Honor Statement:** Please read and sign the following statement:

I promise that my answers to this test are based on my own work without reference to any notes, books, or the assistance of any other person. I will also neither help others nor use a calculator or other electronic aid for calculation.

Name and Surname: \_\_\_\_\_

Student ID: \_\_\_\_\_

Signature: \_\_\_\_\_

2. (9 points) Let  $A \succsim B$  mean "the outcome  $A$  is at least as good as the outcome  $B$ ." Using this symbol or words write down the name of and define the three axioms economists mean when they assume people are rational.

You will get full credit for getting the name or the definition (in words or symbols) correct, and don't worry I doubt many will get all three.

- (a) Reflexivity:  $A \succsim A$  or in words "A is always at least as good as itself."
- (b) Transitivity:  $A \succsim B$  and  $B \succsim C$  means that  $A \succsim B \succsim C$ , or "no decision cycles."
- (c) Completeness: For all  $A$  and  $B$  either  $A \succsim B$  or  $B \succsim A$ , or everything can be compared
3. (5 points) Economists often make fun of themselves for assuming their subjects are infinitely smart, explain why this is a natural (if regrettable) consequence of the motivation for Economists assuming their subjects are rational.

**Solution 1** *We assume subjects are rational out of humility, or recognition that they probably have come up with a better solution to the problem than we could imagine.*

*Thus naturally, if I figure out a solution to a given problem, any of my subjects should be able to figure it out, or they are already know what I just discovered. In short they are smarter than me.*

*But this must hold for any arbitrary analyst, so they are smarter than the smartest analyst.*

*Likewise as our knowledge builds (my work builds on previous that builds on previous, etcetera) our subjects must be smarter than that tower of knowledge.*

*Thus it must be that they are smarter than any one of us, and all of us combined, and therefore are infinitely smart.*

*(If anyone gives as glib of an answer as this let me know. Maybe I have thought about it too much.)*

4. (3 points) Standard feedback questions:

(a) Out of ten, my level of comprehension of the material covered this week is:

(b) My favorite topic of the week was:

(c) The topic I understood the least this week was: