

Philosophy 4300: Decision Theory  
Spring 2019

Homework 2 – due in class on Friday, Feb 15.

You should feel free to work with others on this homework and to talk to me about it. However, any work you produce must be your own.

- 1) Do Resnik's problem #1 on page 32
- 2) Do Resnik's problem #6 on page 32
- 3) Do Resnik's problems #1, #2, and #4 on page 35
- 4) Do Resnik's problems #1 and #2 on page 37
- 5) Do Resnik's problems #1 and #2 on page 40

Resnik's conditions 05 on page 23 says that a rational agent's preferences over outcomes should be transitive – that is, for any three outcomes  $x$ ,  $y$ , and  $z$ , if  $x$  is preferred to  $y$  and  $y$  is preferred to  $z$ , then  $x$  must be preferred to  $z$ . Here is a case that might plausibly challenge this requirement:

(From Philip Pettit): A decision-maker is given a choice between two pieces of fruit: one will go to him, the other to his dining companion. Imagine that when the choice is between a large apple and an orange, he chooses the large apple, and when the choice is between an orange and a small apple, he chooses the orange. However, when the choice is between a large apple and a small apple, he prefers to take the small apple and offer the large apple to his companion, in order to be polite.

What do you think that this case shows? Is the agent being rational in the story? If so, is this a violation of transitivity (Resnik's 05)?