

Homework on §7.6—assigned Fri 11/15 and due Mon 11/18

(i) Use derivations to show:

$$\forall x (Gx \rightarrow \forall y Rxy), \forall x Gx \models \forall x \forall y (Gy \wedge Rxy)$$

(This will be fairly long if you instantiate the generalizations in all the ways you can for terms in the derivation. While it's not wrong to complete it in that way, you can save yourself some work by instantiating only in ways that seem relevant.)

(ii) Analyze (and restate using unrestricted quantifiers):

If anyone who saw everything testified, the case was settled

(Bear in mind the difference between this sentence and each of the three other sentences you could get by replacing **anyone** by **everyone** or **everything** by **anything**.)