

Assignment 3

Due: Monday 3 December 5pm Philosophy Office

1. Ex 1a (Priest p. 60)
2. Ex 4a (Priest p. 61)
3. Ex 5a (Priest p. 61)
4. Establish whether (*) is true. If (*) is false, find a countermodel and verify that it is a countermodel.

(*) $\vdash_{K\rho\tau} \Diamond\Box p \supset \Box\Diamond p$

5i) Find a sentence that is a theorem in $K\rho$, but not in $K\sigma$ or $K\tau$.

5ii) Find a sentence that is a theorem in $K\sigma$, but not in $K\rho$ or $K\tau$.

5iii) Find a sentence that is a theorem in $K\tau$, but not in $K\rho$ or $K\sigma$.

Note: A is a theorem in logic X iff $\vdash_X A$