



Introduction to nonmonotonic reasoning

Winter Semester 2019/20

Exercise Sheet 13 – Belief Revision

5th February 2020

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Exercise 13.1 Show that the AGM postulates (* 1) to (* 6) imply that $(T_\varphi^*)^* = T_\varphi^*$ holds.

Exercise 13.2 Complete the proof for Theorem 7.6, i.e. show that $T \cap T_{-\varphi}^*$ satisfies the postulates (\neg 7) and (\neg 8).

Exercise 13.3 Prove that epistemic entrenchment orderings are total preorders, i.e. for any two sentences φ and ψ : $\varphi \leq \psi$ or $\psi \leq \varphi$ holds.

Exercise 13.4 Prove Theorem 7.9 (cuts are theories).

Hint:

Use result from last exercise.