Inference at ∗ 1 0 1 1 1
of proof for Lemma Agatha Murder Puzzle (JProver)Lori2R:

1. Agatha hates Charles
2. Agatha hates Agatha
3. $\forall p$:Person. $\neg p$ is richer than Agatha $\Rightarrow$ The Butler hates p
4. $\forall p$:Person. Agatha hates $p \Rightarrow \neg$Charles hates p
5. $\forall p$:Person. Agatha hates $p \Rightarrow$ The Butler hates p
6. $\forall p$:Person. $\neg p$ hates Agatha $\vee$ $\neg p$ hates The Butler $\vee$ $\neg p$ hates Charles
7. $\forall p$, q:Person. p kills $q \Rightarrow \neg p$ is richer than q
8. $\forall p$, q:Person. p kills $q \Rightarrow p$ hates q
9. ¬The Butler is richer than Agatha $\Rightarrow$ The Butler hates The Butler
10. Agatha hates Agatha $\Rightarrow$ ¬Charles hates Agatha
11. Agatha hates Agatha $\Rightarrow$ The Butler hates Agatha

$\vdash$ ¬The Butler kills Agatha & ¬Charles kills Agatha
by allL (5) Charles

1:
12. Agatha hates Charles $\Rightarrow$ The Butler hates Charles
$\vdash$ ¬The Butler kills Agatha & ¬Charles kills Agatha
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