```
\frac{1:f\,,\,0:p2\,,\,0:p3\,,\,2:\bot\,,\,1:p1\,\,\Rightarrow_{1}\,\,\,0:p1\,,\,0:f\,,\,0:f\,,\,0:f\,,\,0:f\,,\,1:\bot}{1:f\,,\,0:p2\,,\,0:p3\,,\,2:\bot\,\,\Rightarrow_{1}\,\,\,0:p1\,,\,0:f\,,\,0:f\,,\,0:f\,,\,0:f\,,\,0:f\,,\,1:\neg p1}\,\,\,\mathrm{Succ}} \\ \frac{1:f\,,\,0:p2\,,\,0:p3\,,\,0:\neg\neg p1\,\,\Rightarrow_{0}\,\,\,0:p1\,,\,0:f\,,\,0:f\,,\,0:f\,,\,0:f\,,\,0:f\,}{1:f\,,\,0:p2\,,\,0:p3\,\,\Rightarrow_{0}\,\,\,0:p1\,,\,0:\neg\neg p1\to f\,,\,0:f\,,\,0:f\,,\,0:f\,}\,\,\rightarrow R} \\ \frac{1:f\,,\,0:p2\,\,\Rightarrow_{0}\,\,\,0:p1\,,\,0:\neg\neg p1\to f\,,\,0:f\,,\,0:f\,,\,0:f\,}{1:f\,\,\Rightarrow_{0}\,\,\,0:p1\,,\,0:\neg\neg p1\to f\,,\,0:p2\to f\,,\,0:p3\to f\,,\,0:f\,}\,\,\rightarrow R} \\ \frac{1:f\,,\,0:p2\,\,\Rightarrow_{0}\,\,\,0:p1\,,\,0:\neg\neg p1\to f\,,\,0:p2\to f\,,\,0:p3\to f\,,\,0:f\,}\,\,\rightarrow R} \\ \frac{1:f\,\,\Rightarrow_{0}\,\,\,0:p1\,\wedge\,(p2\wedge p3)\,,\,0:\neg\neg p1\to f\,,\,0:p2\to f\,,\,0:p3\to f\,,\,0:f\,}\,\,\rightarrow R} \\ \frac{1:f\,\,\Rightarrow_{0}\,\,\,0:(\,(p1\wedge(p2\wedge p3))\vee(\,(\neg\neg p1\to f)\vee(\,(p2\to f)\vee(p3\to f)\,)))\,)\,,\,0:f\,}\,\,\rightarrow L2} \\ \frac{0:[\,(\,(p1\wedge(p2\wedge p3))\vee(\,(\neg\neg p1\to f)\vee(\,(p2\to f)\vee(p3\to f)\,)))\,]\to f\,\,\Rightarrow_{0}\,\,\,0:f\,}\,\,\rightarrow L2} \\ \Rightarrow_{0}\,\,\,0:(\,[\,(\,(p1\wedge(p2\wedge p3))\vee(\,(\neg\neg p1\to f)\vee(\,(p2\to f)\vee(p3\to f)\,)))\,)\,]\to f\,\,\Rightarrow_{0}\,\,\,0:f\,}\,\,\rightarrow R}
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