

t15_hessenbe (TMLudZEWHVZt- pchH1dBrSveZoaxiVtLKfQT)

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Let $v2_struct.0 : \iota \Rightarrow o$ be given. Let $v2_collsp : \iota \Rightarrow o$ be given. Let $v3_collsp : \iota \Rightarrow o$ be given. Let $v4_collsp : \iota \Rightarrow o$ be given. Let $v2_anproj.2 : \iota \Rightarrow o$ be given. Let $v3_anproj.2 : \iota \Rightarrow o$ be given. Let $l1_collsp : \iota \Rightarrow o$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct.0 : \iota \Rightarrow \iota$ be given. Let $r1_collsp : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct.0 X0) \wedge ((v2_collsp X0) \wedge ((v3_collsp X0) \wedge \\
& ((v4_collsp X0) \wedge ((v2_anproj.2 X0) \wedge ((v3_anproj.2 X0) \wedge (l1_collsp \\
& X0)))))) \Rightarrow (\forall X1.(m1_subset.1 X1 (u1_struct.0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset.1 X2 (u1_struct.0 X0)) \Rightarrow (\forall X3.(m1_subset.1 X3 \\
& (u1_struct.0 X0)) \Rightarrow (\forall X4.(m1_subset.1 X4 (u1_struct.0 X0)) \Rightarrow \\
& (\neg(\neg r1_collsp X0 X1 X2 X3) \wedge ((r1_collsp X0 X1 X2 X4) \wedge ((X1 \neq X4) \wedge (r1_collsp \\
& X0 X1 X4 X3)))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct.0 X0) \wedge ((v2_collsp X0) \wedge ((v3_collsp X0) \wedge \\
& ((v4_collsp X0) \wedge ((v2_anproj.2 X0) \wedge ((v3_anproj.2 X0) \wedge (l1_collsp \\
& X0)))))) \Rightarrow (\forall X1.(m1_subset.1 X1 (u1_struct.0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset.1 X2 (u1_struct.0 X0)) \Rightarrow (\forall X3.(m1_subset.1 X3 \\
& (u1_struct.0 X0)) \Rightarrow ((r1_collsp X0 X1 X2 X3) \Rightarrow ((r1_collsp X0 X2 X3 \\
& X1) \wedge ((r1_collsp X0 X3 X1 X2) \wedge ((r1_collsp X0 X2 X1 X3) \wedge ((r1_collsp \\
& X0 X1 X3 X2) \wedge (r1_collsp X0 X3 X2 X1)))))))))
\end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct.0 X0) \wedge ((v2_collsp X0) \wedge ((v3_collsp X0) \wedge \\
& ((v4_collsp X0) \wedge ((v2_anproj.2 X0) \wedge ((v3_anproj.2 X0) \wedge (l1_collsp \\
& X0)))))) \Rightarrow (\forall X1.(m1_subset.1 X1 (u1_struct.0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset.1 X2 (u1_struct.0 X0)) \Rightarrow (\forall X3.(m1_subset.1 X3 \\
& (u1_struct.0 X0)) \Rightarrow (\forall X4.(m1_subset.1 X4 (u1_struct.0 X0)) \Rightarrow \\
& (\forall X5.(m1_subset.1 X5 (u1_struct.0 X0)) \Rightarrow (\neg(\neg r1_collsp \\
& X0 X1 X2 X3) \wedge ((r1_collsp X0 X1 X2 X4) \wedge ((r1_collsp X0 X1 X3 X5) \wedge ((X1 \neq \\
& X4) \wedge ((X1 \neq X5) \wedge (r1_collsp X0 X1 X4 X5)))))))))
\end{aligned}$$