

t10_grsolv_1
(TMd4h3r2hqNV9UrVQSjWsz76AKCeRv5TqpF)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v15_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_group_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_group_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_group_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_grsolv_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_group_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_group_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_grsolv_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v15_algstr_0 X0) \wedge ((v2_group_1 \\
& X0) \wedge ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))))) \Rightarrow (\forall X1.((\neg v2_struct_0 \\
& X1) \wedge ((v15_algstr_0 X1) \wedge ((v2_group_1 X1) \wedge ((v3_group_1 X1) \wedge (\\
& l3_algstr_0 X1)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\
& X2 (u1_struct_0 X0) (u1_struct_0 X1)) \wedge ((v1_group_6 X2 X0 X1) \wedge (\\
& m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
& X1)))))) \Rightarrow (\forall X3.((v15_algstr_0 X3) \wedge (m1_group_2 X3 X0)) \Rightarrow \\
& ((v15_algstr_0 (k10_group_6 X3 X1 (k1_grsolv_1 X0 X1 X2 X3))) \wedge (\\
& m1_group_6 (k10_group_6 X3 X1 (k1_grsolv_1 X0 X1 X2 X3)) X1 (k10_group_6 \\
& X0 X1 X2))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v15_algstr_0 X0) \wedge ((v2_group_1 \\
& X0) \wedge ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))))) \Rightarrow (\forall X1.((\neg v2_struct_0 \\
& X1) \wedge ((v15_algstr_0 X1) \wedge ((v2_group_1 X1) \wedge ((v3_group_1 X1) \wedge (\\
& l3_algstr_0 X1)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\
& X2 (u1_struct_0 X0) (u1_struct_0 X1)) \wedge ((v1_group_6 X2 X0 X1) \wedge (\\
& m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
& X1)))))) \Rightarrow (\forall X3.(m1_group_2 X3 X0) \Rightarrow (k2_grsolv_1 X0 X1 X2 \\
& X3 = k10_group_6 X3 X1 (k1_grsolv_1 X0 X1 X2 X3))))))
\end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v15_algstr_0 X0) \wedge ((v2_group_1 \\ & X0) \wedge ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))))) \Rightarrow (\forall X1.((\neg v2_struct_0 \\ & X1) \wedge ((v15_algstr_0 X1) \wedge ((v2_group_1 X1) \wedge ((v3_group_1 X1) \wedge (\\ & l3_algstr_0 X1)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 (u1_struct_0 X0) (u1_struct_0 X1)) \wedge ((v1_group_6 X2 X0 X1) \wedge (\\ & m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\ & X1)))))) \Rightarrow (\forall X3.((v15_algstr_0 X3) \wedge (m1_group_2 X3 X0)) \Rightarrow \\ & ((v15_algstr_0 (k2_grsolv_1 X0 X1 X2 X3)) \wedge (m1_group_6 (k2_grsolv_1 \\ & X0 X1 X2 X3) X1 (k10_group_6 X0 X1 X2)))))) \end{aligned}$$