

l25_homothet

(TMQEZNbbGiJRCe7ZgADnKjQbYon9ixrjuZQ)

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Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v1_diraf : \iota \Rightarrow o$ be given. Let $v2_diraf : \iota \Rightarrow o$ be given. Let $l1_analoaf : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r2_aff_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 \\ & (u1_struct_0 X0)))) \Rightarrow (\neg(r2_aff_1 X0 X1 X2 X3) \wedge ((\neg X1 \in X3) \wedge (X2 \in X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 \\ & (u1_struct_0 X0)))) \Rightarrow ((r2_aff_1 X0 X1 X2 X3) \Rightarrow (r2_aff_1 X0 X2 X1 X3)))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge ((v2_diraf X0) \wedge \\ & (l1_analoaf X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X5.(m1_subset_1 X5 (k1_zfmisc_1 (\\ & u1_struct_0 X0)))) \Rightarrow ((r2_aff_1 X0 X1 X2 X5) \Rightarrow ((X1 \in X5) \vee (((\neg(X3 \in X5) \wedge \\ & (X3 = X4)) \wedge (\neg(\neg X3 \in X5) \wedge (\exists X6.(m1_subset_1 X6 (u1_struct_0 \\ & X0)) \wedge (\exists X7.(m1_subset_1 X7 (u1_struct_0 X0)) \wedge ((X6 \in X5) \wedge \\ & ((X7 \in X5) \wedge ((r2_analoaf X0 X6 X1 X7 X3) \wedge ((r2_analoaf X0 X6 X2 X7 X4) \wedge \\ & (r2_aff_1 X0 X3 X4 X5)))))))))) \vee ((r2_aff_1 X0 X2 X1 X5) \wedge ((\neg X2 \in X5) \wedge \\ & (((X4 \in X5) \wedge (X4 = X3)) \vee ((\neg X4 \in X5) \wedge (\exists X6.(m1_subset_1 X6 (\\ & u1_struct_0 X0)) \wedge (\exists X7.(m1_subset_1 X7 (u1_struct_0 X0)) \wedge \\ & ((X6 \in X5) \wedge ((X7 \in X5) \wedge ((r2_analoaf X0 X6 X2 X7 X4) \wedge ((r2_analoaf X0 \\ & X6 X1 X7 X3) \wedge (r2_aff_1 X0 X4 X3 X5)))))))))))))) \end{aligned}$$