

t43_graphsp
(TMQft1cCrB7ufsXUJJm3isX4VgzRkCAwCYd)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $r2_graphsp : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m2_finseq_2 X0 k1_numbers (k3_finseq_2 k1_numbers)) \Rightarrow \\
& (\forall X1.(m2_finseq_2 X1 k1_numbers (k3_finseq_2 k1_numbers)) \Rightarrow \\
& (\forall X2.(m2_subset_1 X2 k1_numbers k5_numbers) \Rightarrow (\forall X3. \\
(m2_subset_1 X3 k1_numbers k5_numbers) \Rightarrow ((r2_graphsp X0 X1 X2 X3) \Leftrightarrow \\
& ((k4_finseq_1 X0 = k4_finseq_1 X1) \wedge (\forall X4.(m2_subset_1 X4 \\
& k1_numbers k5_numbers) \Rightarrow (((X4 \in k4_finseq_1 X0) \wedge ((r1_xxreal_0 \\
& X2 X4) \wedge (r1_xxreal_0 X4 X3)))) \Rightarrow (k1_seq_1 X0 X4 = k1_seq_1 X1 X4))))))))) \\
& \tag{1}
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\
& (m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (\forall X2.(m2_finseq_2 \\
& X2 k1_numbers (k3_finseq_2 k1_numbers)) \Rightarrow (\forall X3.(m2_finseq_2 \\
& X3 k1_numbers (k3_finseq_2 k1_numbers)) \Rightarrow (\forall X4.(m2_finseq_2 \\
& X4 k1_numbers (k3_finseq_2 k1_numbers)) \Rightarrow (((r2_graphsp X2 X3 X0 \\
& X1) \wedge (r2_graphsp X3 X4 X0 X1)) \Rightarrow (r2_graphsp X2 X4 X0 X1)))))))))
\end{aligned}$$