

t30_descip_1

(TMNSieYintBBZVgEUSsZ7qHjBJ4LLZoPxu7)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_32 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $np_4 : \iota$ be given. Let $np_5 : \iota$ be given. Let $np_6 : \iota$ be given. Let $np_7 : \iota$ be given. Let $np_8 : \iota$ be given. Let $np_9 : \iota$ be given. Let $np_10 : \iota$ be given. Let $np_11 : \iota$ be given. Let $np_12 : \iota$ be given. Let $np_13 : \iota$ be given. Let $np_14 : \iota$ be given. Let $np_15 : \iota$ be given. Let $np_16 : \iota$ be given. Let $np_17 : \iota$ be given. Let $np_18 : \iota$ be given. Let $np_19 : \iota$ be given. Let $np_20 : \iota$ be given. Let $np_21 : \iota$ be given. Let $np_22 : \iota$ be given. Let $np_23 : \iota$ be given. Let $np_24 : \iota$ be given. Let $np_25 : \iota$ be given. Let $np_26 : \iota$ be given. Let $np_27 : \iota$ be given. Let $np_28 : \iota$ be given. Let $np_29 : \iota$ be given. Let $np_30 : \iota$ be given. Let $np_31 : \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\
 & (\forall X2. (m1_subset_1 X2 X0) \Rightarrow (\forall X3. (m1_subset_1 X3 X0) \Rightarrow \\
 & (\forall X4. (m1_subset_1 X4 X0) \Rightarrow (\forall X5. (m1_subset_1 X5 X0) \Rightarrow \\
 & (\forall X6. (m1_subset_1 X6 X0) \Rightarrow (\forall X7. (m1_subset_1 X7 X0) \Rightarrow \\
 & (\forall X8. (m1_subset_1 X8 X0) \Rightarrow (\forall X9. (m1_subset_1 X9 X0) \Rightarrow \\
 & (\forall X10. (m1_subset_1 X10 X0) \Rightarrow (\forall X11. (m1_subset_1 \\
 & X11 X0) \Rightarrow (\forall X12. (m1_subset_1 X12 X0) \Rightarrow (\forall X13. (m1_subset_1 \\
 & X13 X0) \Rightarrow (\forall X14. (m1_subset_1 X14 X0) \Rightarrow (\forall X15. (m1_subset_1 \\
 & X15 X0) \Rightarrow (\forall X16. (m1_subset_1 X16 X0) \Rightarrow (\exists X17. (m2_finseq_1 \\
 & X17 X0) \wedge ((v3_card_1 X17 np_16) \wedge ((k1_funct_1 X17 np_1 = X1) \wedge \\
 & (k1_funct_1 X17 np_2 = X2) \wedge ((k1_funct_1 X17 np_3 = X3) \wedge ((k1_funct_1 \\
 & X17 np_4 = X4) \wedge ((k1_funct_1 X17 np_5 = X5) \wedge ((k1_funct_1 X17 np_6 = \\
 & X6) \wedge ((k1_funct_1 X17 np_7 = X7) \wedge ((k1_funct_1 X17 np_8 = X8) \wedge \\
 & (k1_funct_1 X17 np_9 = X9) \wedge ((k1_funct_1 X17 np_10 = X10) \wedge ((k1_funct_1 \\
 & X17 np_11 = X11) \wedge ((k1_funct_1 X17 np_12 = X12) \wedge ((k1_funct_1 X17 \\
 & np_13 = X13) \wedge ((k1_funct_1 X17 np_14 = X14) \wedge ((k1_funct_1 X17 np_15 = \\
 & X15) \wedge (k1_funct_1 X17 np_16 = X16))))))))))))))))))))))))))))) \\
 & \tag{1}
 \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Leftrightarrow(m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.(m2_finseq_1 X1 X0)\Rightarrow \\ & (\forall X2.(m2_finseq_1 X2 X0)\Rightarrow(((v3_card_1 X1 np_16)\wedge(v3_card_1 \\ & X2 np_16))\Rightarrow((v3_card_1 (k8_finseq_1 X0 X1 X2) np_32)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_1 = k1_funct_1 X1 np_1)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_2 = k1_funct_1 X1 np_2)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_3 = k1_funct_1 X1 np_3)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_4 = k1_funct_1 X1 np_4)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_5 = k1_funct_1 X1 np_5)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_6 = k1_funct_1 X1 np_6)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_7 = k1_funct_1 X1 np_7)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_8 = k1_funct_1 X1 np_8)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_9 = k1_funct_1 X1 np_9)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_10 = k1_funct_1 X1 np_10)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_11 = k1_funct_1 X1 np_11)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_12 = k1_funct_1 X1 np_12)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_13 = k1_funct_1 X1 np_13)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_14 = k1_funct_1 X1 np_14)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_15 = k1_funct_1 X1 np_15)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_16 = k1_funct_1 X1 np_16)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_17 = k1_funct_1 X2 np_1)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_18 = k1_funct_1 X2 np_2)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_19 = k1_funct_1 X2 np_3)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_20 = k1_funct_1 X2 np_4)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_21 = k1_funct_1 X2 np_5)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_22 = k1_funct_1 X2 np_6)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_23 = k1_funct_1 X2 np_7)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_24 = k1_funct_1 X2 np_8)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_25 = k1_funct_1 X2 np_9)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_26 = k1_funct_1 X2 np_10)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_27 = k1_funct_1 X2 np_11)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_28 = k1_funct_1 X2 np_12)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_29 = k1_funct_1 X2 np_13)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_30 = k1_funct_1 X2 np_14)\wedge((k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_31 = k1_funct_1 X2 np_15)\wedge(k1_funct_1 \\ & (k8_finseq_1 X0 X1 X2) np_32 = k1_funct_1 X2 np_16))))))))))))))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_finseq_1 X1 X0)\wedge(m1_finseq_1 X2 X0))\Rightarrow(m2_finseq_1 (k8_finseq_1 X0 X1 X2) X0) \quad (4)$$

Theorem 1

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow \\
& (\forall X2.(m1_subset_1 X2 X0) \Rightarrow (\forall X3.(m1_subset_1 X3 X0) \Rightarrow \\
& (\forall X4.(m1_subset_1 X4 X0) \Rightarrow (\forall X5.(m1_subset_1 X5 X0) \Rightarrow \\
& (\forall X6.(m1_subset_1 X6 X0) \Rightarrow (\forall X7.(m1_subset_1 X7 X0) \Rightarrow \\
& (\forall X8.(m1_subset_1 X8 X0) \Rightarrow (\forall X9.(m1_subset_1 X9 X0) \Rightarrow \\
& (\forall X10.(m1_subset_1 X10 X0) \Rightarrow (\forall X11.(m1_subset_1 \\
& X11 X0) \Rightarrow (\forall X12.(m1_subset_1 X12 X0) \Rightarrow (\forall X13.(m1_subset_1 \\
& X13 X0) \Rightarrow (\forall X14.(m1_subset_1 X14 X0) \Rightarrow (\forall X15.(m1_subset_1 \\
& X15 X0) \Rightarrow (\forall X16.(m1_subset_1 X16 X0) \Rightarrow (\forall X17.(m1_subset_1 \\
& X17 X0) \Rightarrow (\forall X18.(m1_subset_1 X18 X0) \Rightarrow (\forall X19.(m1_subset_1 \\
& X19 X0) \Rightarrow (\forall X20.(m1_subset_1 X20 X0) \Rightarrow (\forall X21.(m1_subset_1 \\
& X21 X0) \Rightarrow (\forall X22.(m1_subset_1 X22 X0) \Rightarrow (\forall X23.(m1_subset_1 \\
& X23 X0) \Rightarrow (\forall X24.(m1_subset_1 X24 X0) \Rightarrow (\forall X25.(m1_subset_1 \\
& X25 X0) \Rightarrow (\forall X26.(m1_subset_1 X26 X0) \Rightarrow (\forall X27.(m1_subset_1 \\
& X27 X0) \Rightarrow (\forall X28.(m1_subset_1 X28 X0) \Rightarrow (\forall X29.(m1_subset_1 \\
& X29 X0) \Rightarrow (\forall X30.(m1_subset_1 X30 X0) \Rightarrow (\forall X31.(m1_subset_1 \\
& X31 X0) \Rightarrow (\forall X32.(m1_subset_1 X32 X0) \Rightarrow (\exists X33.(m2_finseq_1 \\
& X33 X0) \wedge (v3_card_1 X33 np_32) \wedge ((k1_funct_1 X33 np_1 = X1) \wedge \\
& (k1_funct_1 X33 np_2 = X2) \wedge ((k1_funct_1 X33 np_3 = X3) \wedge ((k1_funct_1 \\
& X33 np_4 = X4) \wedge ((k1_funct_1 X33 np_5 = X5) \wedge ((k1_funct_1 X33 np_6 = \\
& X6) \wedge ((k1_funct_1 X33 np_7 = X7) \wedge ((k1_funct_1 X33 np_8 = X8) \wedge \\
& (k1_funct_1 X33 np_9 = X9) \wedge ((k1_funct_1 X33 np_10 = X10) \wedge ((k1_funct_1 \\
& X33 np_11 = X11) \wedge ((k1_funct_1 X33 np_12 = X12) \wedge ((k1_funct_1 X33 \\
& np_13 = X13) \wedge ((k1_funct_1 X33 np_14 = X14) \wedge ((k1_funct_1 X33 np_15 = \\
& X15) \wedge ((k1_funct_1 X33 np_16 = X16) \wedge ((k1_funct_1 X33 np_17 = X17) \wedge \\
& ((k1_funct_1 X33 np_18 = X18) \wedge ((k1_funct_1 X33 np_19 = X19) \wedge \\
& (k1_funct_1 X33 np_20 = X20) \wedge ((k1_funct_1 X33 np_21 = X21) \wedge ((\\
& k1_funct_1 X33 np_22 = X22) \wedge ((k1_funct_1 X33 np_23 = X23) \wedge ((k1_funct_1 \\
& X33 np_24 = X24) \wedge ((k1_funct_1 X33 np_25 = X25) \wedge ((k1_funct_1 X33 \\
& np_26 = X26) \wedge ((k1_funct_1 X33 np_27 = X27) \wedge ((k1_funct_1 X33 np_28 = \\
& X28) \wedge ((k1_funct_1 X33 np_29 = X29) \wedge ((k1_funct_1 X33 np_30 = X30) \wedge \\
& ((k1_funct_1 X33 np_31 = X31) \wedge (k1_funct_1 X33 np_32 = X32))
\end{aligned}$$