

t29_descip_1

(TMThQXFpmyKLjcyBuebisiy2SqF9FFjKKVp)

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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 $np_16 : \iota$ 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 $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\
& (\forall X2. (m1_subset_1 X2 X0) \Rightarrow (\forall X3. (m1_subset_1 X3 X0) \Rightarrow \\
& (\forall X4. (m1_subset_1 X4 X0) \Rightarrow (\forall X5. (m1_subset_1 X5 X0) \Rightarrow \\
& (\forall X6. (m1_subset_1 X6 X0) \Rightarrow (\forall X7. (m1_subset_1 X7 X0) \Rightarrow \\
& (\forall X8. (m1_subset_1 X8 X0) \Rightarrow (\exists X9. (m2_finseq_1 X9 X0) \wedge \\
& ((v3_card_1 X9 np_8) \wedge ((k1_funct_1 X9 np_1 = X1) \wedge ((k1_funct_1 \\
& X9 np_2 = X2) \wedge ((k1_funct_1 X9 np_3 = X3) \wedge ((k1_funct_1 X9 np_4 = \\
& X4) \wedge ((k1_funct_1 X9 np_5 = X5) \wedge ((k1_funct_1 X9 np_6 = X6) \wedge ((k1_funct_1 \\
& X9 np_7 = X7) \wedge (k1_funct_1 X9 np_8 = X8))))))))))))))))) \\
& \tag{1}
\end{aligned}$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\
& (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow (((v3_card_1 X1 np_8) \wedge (v3_card_1 \\
& X2 np_8)) \Rightarrow ((v3_card_1 (k8_finseq_1 X0 X1 X2) np_16) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_1 = k1_funct_1 X1 np_1) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_2 = k1_funct_1 X1 np_2) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_3 = k1_funct_1 X1 np_3) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_4 = k1_funct_1 X1 np_4) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_5 = k1_funct_1 X1 np_5) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_6 = k1_funct_1 X1 np_6) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_7 = k1_funct_1 X1 np_7) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_8 = k1_funct_1 X1 np_8) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_9 = k1_funct_1 X2 np_1) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_10 = k1_funct_1 X2 np_2) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_11 = k1_funct_1 X2 np_3) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_12 = k1_funct_1 X2 np_4) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_13 = k1_funct_1 X2 np_5) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_14 = k1_funct_1 X2 np_6) \wedge ((k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_15 = k1_funct_1 X2 np_7) \wedge (k1_funct_1 \\
& (k8_finseq_1 X0 X1 X2) np_16 = k1_funct_1 X2 np_8))))))))))))))))) \\
& \hspace{15em} (3)
\end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_finseq_1 X1 X0) \wedge (m1_finseq_1 X2 X0)) \Rightarrow (m2_finseq_1 (k8_finseq_1 X0 X1 X2) X0) \hspace{10em} (4)$$

Theorem 1

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