

t54_normform
(TMbS6354YsTiwcsQrXxzRDgN7bJERPqfhfU)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finsub_1 : \iota \Rightarrow \iota$ be given. Let $k7_normform : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_normform : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_normform : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v4_finsub_1 : \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. (m2_subset_1 X1 (k2_zfmisc_1 (k5_finsub_1 \\
& X0) (k5_finsub_1 X0)) (k7_normform X0)) \Rightarrow (\forall X2. (m2_subset_1 \\
& X2 (k2_zfmisc_1 (k5_finsub_1 X0) (k5_finsub_1 X0)) (k7_normform \\
& X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (k5_finsub_1 (k7_normform X0))) \Rightarrow \\
& (\forall X4. (m1_subset_1 X4 (k5_finsub_1 (k7_normform X0))) \Rightarrow \\
& (((X1 \in X3) \wedge ((X2 \in X4) \wedge (k1_normform (k5_finsub_1 X0) (k5_finsub_1 \\
& X0) X1 X2 \in k7_normform X0))) \Rightarrow (k1_normform (k5_finsub_1 X0) (k5_finsub_1 \\
& X0) X1 X2 \in k10_normform X0 X3 X4))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\
& X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k5_finsub_1 (k7_normform \\ & X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k5_finsub_1 (k7_normform \\ & X0))) \Rightarrow ((\forall X3.(m2_subset_1 X3 (k2_zfmisc_1 (k5_finsub_1 \\ & X0) (k5_finsub_1 X0)) (k7_normform X0)) \Rightarrow ((X3 \in X1) \Rightarrow (X3 \in X2))) \Rightarrow \\ & (r1_tarski X1 X2))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(((\neg v1_xboole_0 \\ & X0) \wedge (v4_finsub_1 X0)) \wedge (((\neg v1_xboole_0 X1) \wedge (v4_finsub_1 X1)) \wedge \\ & ((m1_subset_1 X2 (k2_zfmisc_1 X0 X1)) \wedge (m1_subset_1 X3 (k2_zfmisc_1 \\ & X0 X1)))))) \Rightarrow (k1_normform X0 X1 X2 X2 = X2) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\neg v1_xboole_0 (k7_normform X0) \quad (6)$$

Assume the following.

$$\forall X0.(\neg v1_xboole_0 (k5_finsub_1 X0)) \wedge (v4_finsub_1 (k5_finsub_1 X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge (\neg v1_xboole_0 X1)) \Rightarrow (\neg v1_xboole_0 (k2_zfmisc_1 X0 X1)) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Rightarrow (m1_subset_1 X2 X0)) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.m1_subset_1 (k7_normform X0) (k1_zfmisc_1 (k2_zfmisc_1 (k5_finsub_1 X0) (k5_finsub_1 X0))) \quad (10)$$

Assume the following.

$$\forall X0.v4_finsub_1 (k5_finsub_1 X0) \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k5_finsub_1 \\ & (k7_normform X0))) \wedge (m1_subset_1 X2 (k5_finsub_1 (k7_normform \\ & X0)))) \Rightarrow (m1_subset_1 (k10_normform X0 X1 X2) (k5_finsub_1 (k7_normform \\ & X0))) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned}
\forall X0.k7_normform\ X0 = ReplSep\ (toset\ (\lambda X1 : \iota.m1_subset_1 \\
X1\ (k2_zfmisc_1\ (k5_finsub_1\ X0)\ (k5_finsub_1\ X0))))\ (\lambda X1 : \\
\iota.r1_xboole_0\ (k2_domain_1\ (k5_finsub_1\ X0)\ (k5_finsub_1\ X0) \\
X1)\ (k3_domain_1\ (k5_finsub_1\ X0)\ (k5_finsub_1\ X0)\ X1))\ (\lambda X1 : \\
\iota.X1)
\end{aligned} \tag{13}$$

Theorem 1

$$\forall X0.\forall X1.(m1_subset_1\ X1\ (k5_finsub_1\ (k7_normform\ X0))) \Rightarrow (r1_tarski\ X1\ (k10_normform\ X0\ X1\ X1))$$