

t39_normform
(TMcHdS5q8vaatGgZfQsKtcSWViZvoVeGFtW)

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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 $k5_finsub_1 : \iota \Rightarrow \iota$ be given. Let $k7_normform : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_normform : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_normform : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v4_finsub_1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((\neg v1_xboole_0 \\ & X0) \wedge (v4_finsub_1 X0)) \wedge (((\neg v1_xboole_0 X1) \wedge (v4_finsub_1 X1)) \wedge \\ & ((m1_subset_1 X2 (k2_zfmisc_1 X0 X1)) \wedge (m1_subset_1 X3 (k2_zfmisc_1 \\ & X0 X1)))))) \Rightarrow (r1_normform X0 X1 X2 X2) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k7_normform X0) \tag{2}$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 (k5_finsub_1 X0)) \wedge (v4_finsub_1 (k5_finsub_1 X0)) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 X0 X1) \Rightarrow (m1_subset_1 X2 X0)) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. m1_subset_1 (k7_normform X0) (k1_zfmisc_1 (k2_zfmisc_1 (k5_finsub_1 X0) (k5_finsub_1 X0))) \tag{5}$$

Assume the following.

$$\forall X0. v4_finsub_1 (k5_finsub_1 X0) \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.(m1_subset_1 X1 (k5_finsub_1 (k7_normform \\
& X0))) \Rightarrow (k9_normform X0 X1 = ReplSep (toset (\lambda X2 : \iota.m2_subset_1 \\
& X2 (k2_zfmisc_1 (k5_finsub_1 X0) (k5_finsub_1 X0)) (k7_normform \\
& X0))) (\lambda X2 : \iota.\forall X3.(m2_subset_1 X3 (k2_zfmisc_1 (k5_finsub_1 \\
& X0) (k5_finsub_1 X0)) (k7_normform X0)) \Rightarrow (((X3 \in X1) \wedge (r1_normform \\
& (k5_finsub_1 X0) (k5_finsub_1 X0) X3 X2)) \Leftrightarrow (X3 = X2))) (\lambda X2 : \iota. \\
& X2))
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \tag{8}$$

Theorem 1

$$\begin{aligned}
& \forall X0.\forall X1.(m2_subset_1 X1 (k2_zfmisc_1 (k5_finsub_1 \\
& X0) (k5_finsub_1 X0)) (k7_normform X0)) \Rightarrow (\forall X2.(m1_subset_1 \\
& X2 (k5_finsub_1 (k7_normform X0))) \Rightarrow (((X1 \in X2) \wedge (\forall X3.(m2_subset_1 \\
& X3 (k2_zfmisc_1 (k5_finsub_1 X0) (k5_finsub_1 X0)) (k7_normform \\
& X0)) \Rightarrow (((X3 \in X2) \wedge (r1_normform (k5_finsub_1 X0) (k5_finsub_1 X0) \\
& X3 X1)) \Rightarrow (X3 = X1)))) \Rightarrow (X1 \in k9_normform X0 X2)))
\end{aligned}$$