

l71_normform (TMN- spc9DNMeWeVdEnFXxrkF9xewtpL58Bqd)

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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 $k10_normform : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_normform : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_normform : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\begin{aligned}
& \forall X0. \forall X1. (m1_subset_1 X1 (k2_zfmisc_1 (k5_finsub_1 \\
& X0) (k5_finsub_1 X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k5_finsub_1 \\
& (k7_normform X0))) \Rightarrow (\forall X3. (m1_subset_1 X3 (k5_finsub_1 \\
& (k7_normform X0))) \Rightarrow (\neg (X1 \in k10_normform X0 X2 X3) \wedge (\forall X4. \\
& (m2_subset_1 X4 (k2_zfmisc_1 (k5_finsub_1 X0) (k5_finsub_1 X0)) \\
& (k7_normform X0)) \Rightarrow (\forall X5. (m2_subset_1 X5 (k2_zfmisc_1 (\\
& k5_finsub_1 X0) (k5_finsub_1 X0)) (k7_normform X0)) \Rightarrow (\neg (X4 \in X2) \wedge \\
& ((X5 \in X3) \wedge (X1 = k1_normform (k5_finsub_1 X0) (k5_finsub_1 X0) X4 \\
& X5))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v1_xboole_0 X0) \wedge (v4_finsub_1 X0)) \Rightarrow (\forall X1. \\
& ((\neg v1_xboole_0 X1) \wedge (v4_finsub_1 X1)) \Rightarrow (\forall X2. (m1_subset_1 \\
& X2 (k2_zfmisc_1 X0 X1)) \Rightarrow (\forall X3. (m1_subset_1 X3 (k2_zfmisc_1 \\
& X0 X1)) \Rightarrow ((r1_normform X0 X1 X2 (k1_normform X0 X1 X2 X3)) \wedge (r1_normform \\
& X0 X1 X3 (k1_normform X0 X1 X2 X3))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k7_normform X0) \tag{3}$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 (k5_finsub_1 X0)) \wedge (v4_finsub_1 (k5_finsub_1 X0)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge (m1_subset_1 X1 (k1_zfmisc_1 X0))))\Rightarrow(\forall X2.(m2_subset_1 X2 X0 X1)\Rightarrow(m1_subset_1 X2 X0)) \quad (5)$$

Assume the following.

$$\forall X0.m1_subset_1 (k7_normform X0) (k1_zfmisc_1 (k2_zfmisc_1 (k5_finsub_1 X0) (k5_finsub_1 X0))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (7)$$

Theorem 1

$$\forall X0.\forall X1.(m2_subset_1 X1 (k2_zfmisc_1 (k5_finsub_1 X0) (k5_finsub_1 X0)) (k7_normform X0))\Rightarrow(\forall X2.(m1_subset_1 X2 (k5_finsub_1 (k7_normform X0)))\Rightarrow(\forall X3.(m1_subset_1 X3 (k5_finsub_1 (k7_normform X0)))\Rightarrow(\neg(X1 \in k10_normform X0 X2 X3)\wedge (\forall X4.(m2_subset_1 X4 (k2_zfmisc_1 (k5_finsub_1 X0) (k5_finsub_1 X0)) (k7_normform X0))\Rightarrow(\neg(X4 \in X3)\wedge(r1_normform (k5_finsub_1 X0) (k5_finsub_1 X0) X4 X1)))))))$$