

l139_intpro_1

(TMQUkQH2t9GCRbf2QGHGrr3dVLQRDnBdpj)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_intpro_1 : \iota$ be given. Let $v10_intpro_1 : \iota \Rightarrow o$ be given. Let $k13_intpro_1 : \iota \Rightarrow \iota$ be given. Let $k6_intpro_1 : \iota \Rightarrow \iota$ be given. Let $k3_intpro_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_intpro_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_intpro_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_intpro_1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 k1_intpro_1) \Rightarrow ((X1 \in k13_intpro_1 X0) \Rightarrow (k6_intpro_1 \\ & X1 \in k13_intpro_1 X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 k1_intpro_1) \Rightarrow (k3_intpro_1 (k6_intpro_1 X1) (\\ & k6_intpro_1 (k6_intpro_1 X1)) \in k13_intpro_1 X0)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 k1_intpro_1) \Rightarrow (k3_intpro_1 (k6_intpro_1 X1) X1 \in \\ & k13_intpro_1 X0)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 k1_intpro_1) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_intpro_1) \Rightarrow \\ & (k3_intpro_1 (k6_intpro_1 (k3_intpro_1 X1 X2)) (k3_intpro_1 (\\ & k6_intpro_1 X1) (k6_intpro_1 X2)) \in k13_intpro_1 X0))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 k1_intpro_1) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_intpro_1) \Rightarrow \\ & (((X1 \in k13_intpro_1 X0) \wedge (k3_intpro_1 X1 X2 \in k13_intpro_1 X0)) \Rightarrow \\ & (X2 \in k13_intpro_1 X0)))) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 k1_intpro_1) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_intpro_1) \Rightarrow \\
& (\forall X3.(m1_subset_1 X3 k1_intpro_1) \Rightarrow ((k3_intpro_1 X1 (k3_intpro_1 \\
& X2 X1) \in k13_intpro_1 X0) \wedge ((k3_intpro_1 (k3_intpro_1 X1 (k3_intpro_1 \\
& X2 X3)) (k3_intpro_1 (k3_intpro_1 X1 X2) (k3_intpro_1 X1 X3)) \in k13_intpro_1 \\
& X0) \wedge ((k3_intpro_1 (k4_intpro_1 X1 X2) X1 \in k13_intpro_1 X0) \wedge ((\\
& k3_intpro_1 (k4_intpro_1 X1 X2) X2 \in k13_intpro_1 X0) \wedge ((k3_intpro_1 \\
& X1 (k3_intpro_1 X2 (k4_intpro_1 X1 X2)) \in k13_intpro_1 X0) \wedge ((k3_intpro_1 \\
& X1 (k5_intpro_1 X1 X2) \in k13_intpro_1 X0) \wedge ((k3_intpro_1 X2 (k5_intpro_1 \\
& X1 X2) \in k13_intpro_1 X0) \wedge ((k3_intpro_1 (k3_intpro_1 X1 X3) (k3_intpro_1 \\
& (k3_intpro_1 X2 X3) (k3_intpro_1 (k5_intpro_1 X1 X2) X3)) \in k13_intpro_1 \\
& X0) \wedge ((k3_intpro_1 k2_intpro_1 X1 \in k13_intpro_1 X0) \wedge (k5_intpro_1 \\
& X1 (k3_intpro_1 X1 k2_intpro_1) \in k13_intpro_1 X0))))))))))))) \\
& \tag{6}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (m1_subset_1 \\
& (k13_intpro_1 X0) (k1_zfmisc_1 k1_intpro_1)) \\
& \tag{7}
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow ((v10_intpro_1 \\
& X0) \Leftrightarrow (\forall X1.(m1_subset_1 X1 k1_intpro_1) \Rightarrow (\forall X2.(m1_subset_1 \\
& X2 k1_intpro_1) \Rightarrow (\forall X3.(m1_subset_1 X3 k1_intpro_1) \Rightarrow ((\\
& k3_intpro_1 X1 (k3_intpro_1 X2 X1) \in X0) \wedge ((k3_intpro_1 (k3_intpro_1 \\
& X1 (k3_intpro_1 X2 X3)) (k3_intpro_1 (k3_intpro_1 X1 X2) (k3_intpro_1 \\
& X1 X3)) \in X0) \wedge ((k3_intpro_1 (k4_intpro_1 X1 X2) X1 \in X0) \wedge ((k3_intpro_1 \\
& (k4_intpro_1 X1 X2) X2 \in X0) \wedge ((k3_intpro_1 X1 (k3_intpro_1 X2 (k4_intpro_1 \\
& X1 X2)) \in X0) \wedge ((k3_intpro_1 X1 (k5_intpro_1 X1 X2) \in X0) \wedge ((k3_intpro_1 \\
& X2 (k5_intpro_1 X1 X2) \in X0) \wedge ((k3_intpro_1 (k3_intpro_1 X1 X3) (\\
& k3_intpro_1 (k3_intpro_1 X2 X3) (k3_intpro_1 (k5_intpro_1 X1 X2) \\
& X3)) \in X0) \wedge ((k3_intpro_1 k2_intpro_1 X1 \in X0) \wedge ((k5_intpro_1 X1 \\
& (k3_intpro_1 X1 k2_intpro_1) \in X0) \wedge ((k3_intpro_1 (k6_intpro_1 \\
& (k3_intpro_1 X1 X2)) (k3_intpro_1 (k6_intpro_1 X1) (k6_intpro_1 \\
& X2)) \in X0) \wedge ((k3_intpro_1 (k6_intpro_1 X1) X1 \in X0) \wedge ((k3_intpro_1 \\
& (k6_intpro_1 X1) (k6_intpro_1 (k6_intpro_1 X1)) \in X0) \wedge (((X1 \in \\
& X0) \wedge (k3_intpro_1 X1 X2 \in X0)) \Rightarrow (X2 \in X0)) \wedge ((X1 \in X0) \Rightarrow (k6_intpro_1 \\
& X1 \in X0))))))))))))))))) \\
& \tag{8}
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (v10_intpro_1 \\
& (k13_intpro_1 X0))
\end{aligned}$$