

t82_intpro_1 (TMXMPm-
rkNd21GF57fcFVi14YXm89KLeimMn)

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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 $k3_intpro_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_intpro_1 : \iota \Rightarrow \iota$ 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. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k11_intpro_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (r1_tarski (k11_intpro_1 X0) (k13_intpro_1 X0)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_intpro_1)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 k1_intpro_1) \Rightarrow (\forall X2.(m1_subset_1 X2 k1_intpro_1) \Rightarrow \\ & (\forall X3.(m1_subset_1 X3 k1_intpro_1) \Rightarrow ((k3_intpro_1 X1 (k3_intpro_1 \\ & X2 X1) \in k11_intpro_1 X0) \wedge ((k3_intpro_1 (k3_intpro_1 X1 (k3_intpro_1 \\ & X2 X3)) (k3_intpro_1 (k3_intpro_1 X1 X2) (k3_intpro_1 X1 X3)) \in k11_intpro_1 \\ & X0) \wedge ((k3_intpro_1 (k4_intpro_1 X1 X2) X1 \in k11_intpro_1 X0) \wedge ((\\ & k3_intpro_1 (k4_intpro_1 X1 X2) X2 \in k11_intpro_1 X0) \wedge ((k3_intpro_1 \\ & X1 (k3_intpro_1 X2 (k4_intpro_1 X1 X2)) \in k11_intpro_1 X0) \wedge ((k3_intpro_1 \\ & X1 (k5_intpro_1 X1 X2) \in k11_intpro_1 X0) \wedge ((k3_intpro_1 X2 (k5_intpro_1 \\ & X1 X2) \in k11_intpro_1 X0) \wedge ((k3_intpro_1 (k3_intpro_1 X1 X3) (k3_intpro_1 \\ & (k3_intpro_1 X2 X3) (k3_intpro_1 (k5_intpro_1 X1 X2) X3)) \in k11_intpro_1 \\ & X0) \wedge ((k3_intpro_1 k2_intpro_1 X1 \in k11_intpro_1 X0) \wedge (k5_intpro_1 \\ & X1 (k3_intpro_1 X1 k2_intpro_1) \in k11_intpro_1 X0))))))))))))) \quad (2) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (4)$$

Theorem 1

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