

t34_intpro_1
(TMQ7zPBxPeKRVNequ2pDr8sUP3uabNZvzon)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_intpro_1 : \iota$ be given. Let $k4_intpro_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_intpro_1 : \iota$ be given. Let $v8_intpro_1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k3_intpro_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_intpro_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_intpro_1 : \iota$ be given. Assume the following.

$$v8_intpro_1 \ k8_intpro_1 \tag{1}$$

Assume the following.

$$m1_subset_1 \ k8_intpro_1 \ (k1_zfmisc_1 \ k1_intpro_1) \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 \ X0 \ k1_intpro_1) \wedge (m1_subset_1 \ X1 \ k1_intpro_1)) \Rightarrow (m1_subset_1 \ (k4_intpro_1 \ X0 \ X1) \ k1_intpro_1) \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 \ X0 \ k1_intpro_1) \wedge (m1_subset_1 \ X1 \ k1_intpro_1)) \Rightarrow (m1_subset_1 \ (k3_intpro_1 \ X0 \ X1) \ k1_intpro_1) \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 \ X0 \ (k1_zfmisc_1 \ k1_intpro_1)) \Rightarrow ((v8_intpro_1 \ X0) \Leftrightarrow (\forall X1. (m1_subset_1 \ X1 \ k1_intpro_1) \Rightarrow (\forall X2. (m1_subset_1 \ X2 \ k1_intpro_1) \Rightarrow (\forall X3. (m1_subset_1 \ X3 \ k1_intpro_1) \Rightarrow ((\\ & \quad k3_intpro_1 \ X1 \ (k3_intpro_1 \ X2 \ X1) \in X0) \wedge ((k3_intpro_1 \ (k3_intpro_1 \ X1 \ (k3_intpro_1 \ X2 \ X3)) \ (k3_intpro_1 \ (k3_intpro_1 \ X1 \ X2) \ (k3_intpro_1 \ X1 \ X3)) \in X0) \wedge ((k3_intpro_1 \ (k4_intpro_1 \ X1 \ X2) \ X1 \in X0) \wedge ((k3_intpro_1 \ (k4_intpro_1 \ X1 \ X2) \ X2 \in X0) \wedge ((k3_intpro_1 \ X1 \ (k3_intpro_1 \ X2 \ (k4_intpro_1 \ X1 \ X2)) \in X0) \wedge ((k3_intpro_1 \ X1 \ (k5_intpro_1 \ X1 \ X2) \in X0) \wedge ((k3_intpro_1 \ X2 \ (k5_intpro_1 \ X1 \ X2) \in X0) \wedge ((k3_intpro_1 \ (k3_intpro_1 \ X1 \ X3) \ (k3_intpro_1 \ (k3_intpro_1 \ X2 \ X3) \ (k3_intpro_1 \ (k5_intpro_1 \ X1 \ X2) \ X3)) \in X0) \wedge ((k3_intpro_1 \ k2_intpro_1 \ X1 \in X0) \wedge (((X1 \in X0) \wedge (k3_intpro_1 \ X1 \ X2 \in X0)) \Rightarrow (X2 \in X0)))))))))))))) \tag{5} \end{aligned}$$

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ k1_intpro_1) \Rightarrow (\forall X1.(m1_subset_1\ X1\ k1_intpro_1) \Rightarrow ((k4_intpro_1\ X0\ X1 \in k8_intpro_1) \Leftrightarrow ((X0 \in k8_intpro_1) \wedge (X1 \in k8_intpro_1))))$$