

l2_pcs_0

(TMNx8VbFqM37vYBHWE8G2G1YK4Yuiu5X7Uz)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_pcs_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ & ((m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \wedge (m1_subset_1 \\ & X5 (k1_zfmisc_1 (k2_zfmisc_1 X2 X3)))) \Rightarrow (k2_pcs_0 X0 X1 X2 X3 X4 X5 = \\ & k2_xboole_0 X4 X5) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (m1_subset_1 X3 (\\ & k1_zfmisc_1 (k2_zfmisc_1 X2 X2))) \Rightarrow ((k4_tarski X0 X1 \in X3) \Rightarrow ((X0 \in \\ & X2) \wedge (X1 \in X2))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. (\forall X2. \neg (X2 \in X0) \wedge (X2 \in X1)) \Leftrightarrow (r1_xboole_0 X0 X1) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (X2 = k2_xboole_0 X0 X1) \Leftrightarrow (\forall X3. \\ & (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X0))) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X1 X1))) \Rightarrow ((r1_xboole_0 X0 X1) \Rightarrow (\forall X4. \forall X5. \\ & ((k4_tarski X4 X5 \in k2_pcs_0 X0 X0 X1 X1 X2 X3) \wedge (X5 \in X1)) \Rightarrow ((k4_tarski \\ & X4 X5 \in X3) \wedge (X4 \in X1)))))) \end{aligned}$$