

t6_bvfunc14 (TMMu- JYjFwNnNhR6vnCHXkxePoNR7A7c3f2m)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_bvfunc_2 : \iota \Rightarrow \iota$ be given. Let $m1_eqrel_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_bvfunc_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_partit1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. k1_enumset1 X0 X1 X2 = k1_enumset1 X1 X2 X0 \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ (k1_bvfunc_2 X0))) \Rightarrow (\forall X2. (m1_eqrel_1 X2 X0) \Rightarrow (\forall X3. \\ (m1_eqrel_1 X3 X0) \Rightarrow (\forall X4. (m1_eqrel_1 X4 X0) \Rightarrow ((X1 = k1_enumset1 \\ X2 X3 X4) \Rightarrow ((X2 = X3) \vee ((X4 = X2) \vee (k5_bvfunc_2 X0 X2 X1 = k2_partit1 \\ X0 X3 X4)))))))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ (k1_bvfunc_2 X0))) \Rightarrow (\forall X2. (m1_eqrel_1 X2 X0) \Rightarrow (\forall X3. \\ (m1_eqrel_1 X3 X0) \Rightarrow (\forall X4. (m1_eqrel_1 X4 X0) \Rightarrow ((X1 = k1_enumset1 \\ X2 X3 X4) \Rightarrow ((X3 = X4) \vee ((X4 = X2) \vee (k5_bvfunc_2 X0 X4 X1 = k2_partit1 \\ X0 X2 X3)))))))))) \end{aligned}$$