

t24_bvfunc14

(TMUhB9KLWzRsssti8ffwGTEcAnonXcvUM3u)

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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 $k3_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_bvfunc_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_partit1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. k3_enumset1 \\ & X0 X1 X2 X3 X4 = k2_xboole_0 (k2_tarski X0 X1) (k1_enumset1 X2 X3 X4) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. k1_enumset1 X0 X1 X2 = k2_xboole_0 \\ & (k2_tarski X0 X1) (k1_tarski X2) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_bvfunc_2 X0))) \Rightarrow (\forall X2. (m1_eqrel_1 X2 X0) \Rightarrow (\forall X3. \\ & (m1_eqrel_1 X3 X0) \Rightarrow (\forall X4. (m1_eqrel_1 X4 X0) \Rightarrow (\forall X5. \\ & (m1_eqrel_1 X5 X0) \Rightarrow (\forall X6. (m1_eqrel_1 X6 X0) \Rightarrow ((X1 = k3_enumset1 \\ & X2 X3 X4 X5 X6) \Rightarrow ((X2 = X4) \vee ((X3 = X4) \vee ((X4 = X5) \vee ((X4 = X6) \vee (k5_bvfunc_2 \\ & X0 X4 X1 = k2_partit1 X0 (k2_partit1 X0 (k2_partit1 X0 X2 X3) X5) X6))))))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k2_tarski X0 X1 = k2_tarski X1 X0 \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_bvfunc_2 X0))) \Rightarrow (\forall X2. (m1_eqrel_1 X2 X0) \Rightarrow (\forall X3. \\ & (m1_eqrel_1 X3 X0) \Rightarrow (\forall X4. (m1_eqrel_1 X4 X0) \Rightarrow (\forall X5. \\ & (m1_eqrel_1 X5 X0) \Rightarrow (\forall X6. (m1_eqrel_1 X6 X0) \Rightarrow ((X1 = k3_enumset1 \\ & X2 X3 X4 X5 X6) \Rightarrow ((X2 = X5) \vee ((X3 = X5) \vee ((X4 = X5) \vee ((X5 = X6) \vee (k5_bvfunc_2 \\ & X0 X5 X1 = k2_partit1 X0 (k2_partit1 X0 (k2_partit1 X0 X2 X3) X4) X6))))))))))))) \end{aligned}$$