

t28_bvfunc_1

(TMM7Z4H8NHhpWtBaazfYD7DefWNfGjkZXKb)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_margrel1 : \iota$ be given. 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 $r2_bvfunc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_eqrel_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $m1_eqrel_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in k10_eqrel_1 X1) \Leftrightarrow (\exists X2. (X0 = k1_tarski X2) \wedge (X2 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. m1_eqrel_1 (k10_eqrel_1 X0) X0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge (\\ (v1_funct_2 X1 X0 k6_margrel1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (\\ k2_zfmisc_1 X0 k6_margrel1)))))) \Rightarrow (\forall X2. (m1_eqrel_1 X2 X0) \Rightarrow \\ ((r2_bvfunc_1 X0 X1 X2) \Leftrightarrow (\forall X3. (X3 \in X2) \Rightarrow (\forall X4. \forall X5. \\ ((X4 \in X3) \wedge (X5 \in X3)) \Rightarrow (k1_funct_1 X1 X4 = k1_funct_1 X1 X5)))))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge (\\ (v1_funct_2 X1 X0 k6_margrel1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (\\ k2_zfmisc_1 X0 k6_margrel1)))))) \Rightarrow (r2_bvfunc_1 X0 X1 (k10_eqrel_1 \\ X0))) \end{aligned}$$