

t44_funct_4

(TMY9G7bjKM8ZxP9wvTGJDBD143iq6FbQbb7)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_funct_4 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_binop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \neg(\forall X1. \neg(X1 \in X0) \wedge (\forall X2. \forall X3. X1 \neq k4_tarski\ X2\ X3)) \wedge (\forall X1. \forall X2. \neg r1_tarski\ X0\ (k2_zfmisc_1\ X1\ X2)) \quad (1)$$

Assume the following.

$$\forall X0. ((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow ((v1_relat_1\ (k2_funct_4\ X0)) \wedge (v1_funct_1\ (k2_funct_4\ X0))) \quad (2)$$

Assume the following.

$$\forall X0. (((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow (\forall X1. ((v1_relat_1\ X1) \wedge (v1_funct_1\ X1)) \Rightarrow ((X1 = k2_funct_4\ X0) \Leftrightarrow ((\forall X2. (X2 \in k9_xtuple_0\ X1) \Leftrightarrow (\exists X3. \exists X4. (X2 = k4_tarski\ X3\ X4 \wedge (k4_tarski\ X3\ X4 \in k9_xtuple_0\ X0))) \wedge (\forall X2. \forall X3. (k4_tarski\ X2\ X3 \in k9_xtuple_0\ X0) \Rightarrow (k1_binop_1\ X1\ X3\ X2 = k1_binop_1\ X0\ X2\ X3))))))) \quad (3)$$

Theorem 1

$$\forall X0. ((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow (\exists X1. \exists X2. r1_tarski\ (k9_xtuple_0\ (k2_funct_4\ X0))\ (k2_zfmisc_1\ X1\ X2))$$