

t20_funct_6
(TMTzNre53Ue8RS6SF7vCaohtfsLpXPnLuwp)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k1_funct_6 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_funct_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(r1_tarski\ X0\ k1_xboole_0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1\ X0\ X1) \quad (2)$$

Assume the following.

$$\forall X0.r1_tarski\ (k1_funct_6\ X0)\ X0 \quad (3)$$

Assume the following.

$$\forall X0.(\forall X1.(X1 \in X0) \Rightarrow ((v1_relat_1\ X1) \wedge (v1_funct_1\ X1))) \Rightarrow (k1_funct_6\ X0 = X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \wedge ((v1_relat_1\ X1) \wedge (v1_funct_1\ X1))) \Rightarrow (v4_funct_1\ (k2_tarski\ X0\ X1)) \quad (5)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow (v4_funct_1\ (k1_tarski\ X0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(X3 = k1_enumset1\ X0\ X1\ X2) \Leftrightarrow (\forall X4.(X4 \in X3) \Leftrightarrow (\neg(X4 \neq X0) \wedge ((X4 \neq X1) \wedge (X4 \neq X2)))) \quad (7)$$

Assume the following.

$$\forall X0.(v4_funct_1\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow ((v1_relat_1\ X1) \wedge (v1_funct_1\ X1))) \quad (8)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((\\ v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2.((v1_relat_1 X2) \wedge \\ (v1_funct_1 X2)) \Rightarrow ((k1_funct_6 k1_xboole_0 = k1_xboole_0) \wedge ((\\ k1_funct_6 (k1_tarski X0) = k1_tarski X0) \wedge ((k1_funct_6 (k2_tarski \\ X0 X1) = k2_tarski X0 X1) \wedge (k1_funct_6 (k1_enumset1 X0 X1 X2) = k1_enumset1 \\ X0 X1 X2)))))) \end{aligned}$$