

l25_waybel30

(TMZpiJS8uNQqkgr3gTbx6UddpA9PS9BEMtS)

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Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ 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. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((X2 \in X0) \wedge (X3 \in X1)) \Rightarrow \\ & (k1_binop_1 (k13_funct_3 (k10_funct_3 X0 X1) (k9_funct_3 X0 X1)) \quad (1) \\ & \quad X2 X3 = k4_tarski X3 X2) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (v1_relat_1 (k13_funct_3 (k10_funct_3 \\ & X0 X1) (k9_funct_3 X0 X1))) \wedge ((v1_funct_1 (k13_funct_3 (k10_funct_3 \\ & X0 X1) (k9_funct_3 X0 X1))) \wedge (v2_funct_1 (k13_funct_3 (k10_funct_3 \\ & X0 X1) (k9_funct_3 X0 X1)))) \quad (2) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. \forall X2. \\ & k1_binop_1 X0 X1 X2 = k1_funct_1 X0 (k4_tarski X1 X2)) \quad (3) \end{aligned}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((X2 \in X0) \wedge (X3 \in X1)) \Rightarrow \\ & (k1_funct_1 (k13_funct_3 (k10_funct_3 X0 X1) (k9_funct_3 X0 X1)) \\ & \quad (k4_tarski X2 X3) = k4_tarski X3 X2) \end{aligned}$$