

t84_glib_000

(TMbozvacu2ZW1HuazTjjwDyZozHzCxvERGC)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_glib_000 : \iota \Rightarrow o$ be given. Let $m1_glib_000 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_glib_000 : \iota \Rightarrow \iota$ be given. Let $v11_glib_000 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v10_glib_000 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k26_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k27_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k28_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m1_glib_000 \\ & X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (k6_glib_000 X0)) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (k6_glib_000 X1)) \Rightarrow ((X2 = X3) \Rightarrow ((r1_tarski (k26_glib_000 \\ & X1 X3) (k26_glib_000 X0 X2)) \wedge ((r1_tarski (k27_glib_000 X1 X3) (\\ & k27_glib_000 X0 X2)) \wedge (r1_tarski (k28_glib_000 X1 X3) (k28_glib_000 \\ & X0 X2)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 (k1_tarski X1)) \Leftrightarrow ((X0 = k1_xboole_0) \vee (X0 = k1_tarski X1)) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m1_glib_000 \\ & X1 X0) \Rightarrow (\forall X2. \forall X3. \forall X4. (r1_glib_000 X1 X2 X3 \\ & X4) \Rightarrow (r1_glib_000 X0 X2 X3 X4))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m1_glib_000 \\ X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge ((v4_relat_1 X1 k5_numbers) \wedge ((v1_funct_1 \\ X1) \wedge ((v1_finset_1 X1) \wedge (v1_glib_000 X1)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (k6_glib_000 X0) \Rightarrow ((v11_glib_000 X1 X0) \Leftrightarrow (\exists X2.(k28_glib_000 \\ X0 X1 = k1_tarski X2) \wedge (\neg r1_glib_000 X0 X1 X1 X2)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (k6_glib_000 X0) \Rightarrow ((v10_glib_000 X1 X0) \Leftrightarrow (k28_glib_000 X0 X1 = \\ k1_xboole_0))) \end{aligned} \quad (6)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m1_glib_000 \\ X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (k6_glib_000 X0) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 (k6_glib_000 X1) \Rightarrow (\neg (X2 = X3) \wedge ((v11_glib_000 \\ X2 X0) \wedge ((\neg v11_glib_000 X3 X1) \wedge (\neg v10_glib_000 X3 X1)))))))))) \end{aligned}$$