

t10_yellow_3
(TMMkg2uzrfbAXSdthH2esTjQ7jJ5sJJvRuB)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k1_yellow_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. k2_xtuple_0 (k4_tarski X0 X1) = X1 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k1_xtuple_0 (k4_tarski X0 X1) = X0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X0) \wedge (v1_relat_1 X1)) \Rightarrow (v1_relat_1 (k1_yellow_3 X0 X1)) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. (v1_relat_1 X1) \Rightarrow (\forall X2. \\ & (v1_relat_1 X2) \Rightarrow ((X2 = k1_yellow_3 X0 X1) \Leftrightarrow (\forall X3. \forall X4. \\ & (k4_tarski X3 X4 \in X2) \Leftrightarrow (\exists X5. \exists X6. \exists X7. \exists X8. \\ & (X3 = k4_tarski X5 X6) \wedge ((X4 = k4_tarski X7 X8) \wedge ((k4_tarski X5 X7 \in \\ & X0) \wedge (k4_tarski X6 X8 \in X1)))))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Leftrightarrow (\forall X1. \neg (X1 \in X0) \wedge (\forall X2. \forall X3. X1 \neq k4_tarski X2 X3)) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. (v1_relat_1 X1) \Rightarrow (\forall X2. \\ & (X2 \in k1_yellow_3 X0 X1) \Leftrightarrow ((k4_tarski (k1_xtuple_0 (k1_xtuple_0 \\ & X2)) (k1_xtuple_0 (k2_xtuple_0 X2)) \in X0) \wedge ((k4_tarski (k2_xtuple_0 \\ & (k1_xtuple_0 X2)) (k2_xtuple_0 (k2_xtuple_0 X2)) \in X1) \wedge ((\exists X3. \\ & \exists X4. X2 = k4_tarski X3 X4) \wedge ((\exists X3. \exists X4. k1_xtuple_0 \\ & X2 = k4_tarski X3 X4) \wedge (\exists X3. \exists X4. k2_xtuple_0 X2 = k4_tarski \\ & X3 X4)))))))))) \end{aligned}$$