

t48_rewrite1
(TMN7GddWBwXVcHqJZvqbyMvrryQVZHAPN8m)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r11_rewrite1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r10_rewrite1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_rewrite1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.\forall X2.(k4_tarski X1 X2 \in X0) \Rightarrow (r1_rewrite1 X0 X1 X2)) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(v1_relat_1 X1) \Rightarrow ((r11_rewrite1 \\ X0 X1) \Leftrightarrow (\forall X2.\forall X3.\forall X4.\neg(r1_rewrite1 X0 X2 X3) \wedge \\ ((r1_rewrite1 X1 X2 X4) \wedge (\forall X5.\neg(r1_rewrite1 X1 X3 X5) \wedge (r1_rewrite1 \\ X0 X4 X5)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(v1_relat_1 X1) \Rightarrow ((r10_rewrite1 \\ X0 X1) \Leftrightarrow (\forall X2.\forall X3.\forall X4.\neg(k4_tarski X2 X3 \in X0) \wedge \\ ((k4_tarski X2 X4 \in X1) \wedge (\forall X5.\neg(r1_rewrite1 X1 X3 X5) \wedge (r1_rewrite1 \\ X0 X4 X5)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(v1_relat_1 X1) \Rightarrow ((r11_rewrite1 X0 X1) \Rightarrow (r10_rewrite1 X0 X1)))$$