

t31_arytm_3 (TM-
TAuoQ32RzdAZKKCf49FeQsoDsHUgTLBPN)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k5_arytm_3 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_arytm_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg v3_ordinal1 (k4_tarski X0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1_subset_1 X0 k5_arytm_3) \Rightarrow (\neg(\neg X0 \in k4_ordinal1) \wedge \\ (\forall X1. (m1_subset_1 X1 k4_ordinal1) \Rightarrow (\forall X2. (m1_subset_1 \\ X2 k4_ordinal1) \Rightarrow (\neg(X0 = k4_tarski X1 X2) \wedge ((r1_arytm_3 X1 X2) \wedge \\ (X2 \neq k1_xboole_0) \wedge (X2 \neq np_1))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} k5_arytm_3 = k2_xboole_0 (k6_subset_1 (ReplSep2 (toset (\lambda X0 : \\ \iota. m1_subset_1 X0 k4_ordinal1)) (\lambda X0 : \iota. toset (\lambda X1 : \\ \iota. m1_subset_1 X1 k4_ordinal1)) (\lambda X0 : \iota. \lambda X1 : \iota. (r1_arytm_3 \\ X0 X1) \wedge (X1 \neq k1_xboole_0)) (\lambda X0 : \iota. \lambda X1 : \iota. k4_tarski \\ X0 X1)) (ReplSep (toset (\lambda X0 : \iota. m1_subset_1 X0 k4_ordinal1)) \\ (\lambda X0 : \iota. True) (\lambda X0 : \iota. k4_tarski X0 np_1))) k4_ordinal1 \end{aligned} \quad (4)$$

Theorem 1 $\forall X0. (v3_ordinal1 X0) \Rightarrow ((X0 \in k5_arytm_3) \Rightarrow (X0 \in k4_ordinal1)).$