

t35_arytm_3 (TM- PRvxfha2pDVTbr7DgkQhALK7QH1UppZmk)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_arytm_3 : \iota$ be given. Let $k7_arytm_3 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_arytm_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_arytm_3) \Rightarrow (\neg(\neg X0 \in k4_ordinal1) \wedge \\ (\forall X1.(m1_subset_1 X1 k4_ordinal1) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 k4_ordinal1) \Rightarrow (\neg(X0 = k4_tarski X1 X2) \wedge ((r1_arytm_3 X1 X2) \wedge \\ (X2 \neq k1_xboole_0) \wedge (X2 \neq np_1))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4_tarski X0 X1 = k4_tarski X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)) \quad (2)$$

Assume the following.

$$m1_subset_1 k1_xboole_0 k4_ordinal1 \quad (3)$$

Assume the following.

$$\neg v1_xboole_0 np_1 \quad (4)$$

Assume the following.

$$\exists X0.v1_xboole_0 X0 \quad (5)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_arytm_3) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k4_ordinal1) \Rightarrow (((X0 \in k4_ordinal1) \Rightarrow ((X1 = k7_arytm_3 X0) \Leftrightarrow (X1 = \\ np_1))) \wedge ((\neg X0 \in k4_ordinal1) \Rightarrow ((X1 = k7_arytm_3 X0) \Leftrightarrow (\exists X2. \\ ((v3_ordinal1 X2) \wedge (v7_ordinal1 X2)) \wedge (X0 = k4_tarski X2 X1)))))) \end{aligned} \quad (7)$$

Theorem 1 $\forall X0.(m1_subset_1 X0 k5_arytm_3) \Rightarrow (k7_arytm_3 X0 \neq k1_xboole_0).$