

t40_arytm_3
(TMGwthiRTGx92BWKthLvRADoXU59KAaLYGE)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k8_arytm_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_arytm_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow ((k4_arytm_3 k1_xboole_0 X0 = k1_xboole_0) \wedge ((X0 \neq k1_xboole_0) \Rightarrow (k4_arytm_3 X0 k1_xboole_0 = np_1))) \quad (1)$$

Assume the following.

$$\forall X0.((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow ((k4_arytm_3 X0 np_1 = X0) \wedge (k4_arytm_3 np_1 X0 = np_1)) \quad (2)$$

Assume the following.

$$np_1 = k1_ordinal1 k1_xboole_0 \quad (3)$$

Assume the following.

$$\forall X0.((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (v7_ordinal1 (k1_ordinal1 X0)) \quad (4)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0.((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (\forall X1. ((v3_ordinal1 X1) \wedge (v7_ordinal1 X1)) \Rightarrow (((X1 = k1_xboole_0) \Rightarrow (k8_arytm_3 X0 X1 = k1_xboole_0)) \wedge (((k4_arytm_3 X1 X0 = np_1) \Rightarrow (k8_arytm_3 X0 X1 = k4_arytm_3 X0 X1)) \wedge (\neg (X1 \neq k1_xboole_0) \wedge ((k4_arytm_3 X1 X0 \neq np_1) \wedge (k8_arytm_3 X0 X1 \neq k4_tarski (k4_arytm_3 X0 X1) (k4_arytm_3 X1 X0))))))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v7_ordinal1 X0) \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v3_ordinal1 X0) \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (\forall X1. \\ & ((v3_ordinal1 X1) \wedge (v7_ordinal1 X1)) \Rightarrow ((k8_arytm_3 k1_xboole_0 \\ & X0 = k1_xboole_0) \wedge (k8_arytm_3 X1 \text{ np_1} = X1))) \end{aligned}$$