

t6_arytm_3 (TMLPcAH- fcr9C2smjrMPjSPZWX4HT944wKJh)

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Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k7_ordinal3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_ordinal3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\forall X2. \\ & (v3_ordinal1 X2) \Rightarrow (\forall X3.(v3_ordinal1 X3) \Rightarrow (((X0 = k10_ordinal2 \\ & (k11_ordinal2 X1 X2) X3) \wedge (X3 \in X2)) \Rightarrow ((X1 = k6_ordinal3 X0 X2) \wedge (X3 = \\ & k7_ordinal3 X0 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\neg \\ & (X0 \neq k1_xboole_0) \wedge (\forall X2.(v3_ordinal1 X2) \Rightarrow (\forall X3. \\ & (v3_ordinal1 X3) \Rightarrow (\neg (X1 = k10_ordinal2 (k11_ordinal2 X2 X0) X3) \wedge \\ & (X3 \in X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow (k10_ordinal2 k1_xboole_0 X0 = X0) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v3_ordinal1 X0) \Rightarrow (\forall X1.(v3_ordinal1 X1) \Rightarrow (\neg \\ & (X0 \in X1) \wedge (\forall X2.(v3_ordinal1 X2) \Rightarrow (\neg (X1 = k10_ordinal2 X0 \\ & X2) \wedge (X2 \neq k1_xboole_0)))))) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(v3_ordinal1 X1) \Rightarrow ((X0 \in X1) \Rightarrow (v3_ordinal1 X0)) \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v3_ordinal1 X0) \wedge (v7_ordinal1 X0)) \Rightarrow (\forall X1. \\ & ((v3_ordinal1 X1) \wedge (v7_ordinal1 X1)) \Rightarrow ((k1_xboole_0 \in X0) \Rightarrow (k7_ordinal3 \\ & X1 X0 \in X0))) \end{aligned}$$