

l46_arytm_2
(TMJ9xPrLf6CymchV8Zv4EysdiMvzANqSH6g)

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Let $k2_arytm_2 : \iota$ be given. Let $k5_arytm_3 : \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_arytm_2 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r3_arytm_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k11_arytm_3 : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (X0 \in k4_xboole_0 X1 (k1_tarski X2)) \Leftrightarrow ((X0 \in X1) \wedge (X0 \neq X2)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k4_xboole_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (\neg X3 \in X1))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2_xboole_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \quad (4)$$

Assume the following.

$$\begin{aligned} k2_arytm_2 = & k6_subset_1 (k2_xboole_0 k5_arytm_3 k1_arytm_2) \\ & (ReplSep (toset (\lambda X0 : \iota. m1_subset_1 X0 k5_arytm_3)) (\lambda X0 : \\ & \quad \iota. X0 \neq k11_arytm_3) (\lambda X0 : \iota. ReplSep (toset (\lambda X1 : \iota. \\ m1_subset_1 X1 k5_arytm_3)) (\lambda X1 : \iota. \neg r3_arytm_3 X0 X1) (\lambda X1 : \\ & \quad \iota. X1)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned}
& k1_arytm_2 = k6_subset_1 (ReplSep (toset (\lambda X0 : \iota.m1_subset_1 \\
& \quad X0 (k1_zfmisc_1 k5_arytm_3))) (\lambda X0 : \iota.\forall X1.(m1_subset_1 \\
& \quad X1 k5_arytm_3) \Rightarrow ((X1 \in X0) \Rightarrow ((\forall X2.(m1_subset_1 X2 k5_arytm_3) \Rightarrow \\
& \quad ((r3_arytm_3 X2 X1) \Rightarrow (X2 \in X0))) \wedge (\exists X2.(m1_subset_1 X2 k5_arytm_3) \wedge \\
& \quad ((X2 \in X0) \wedge (\neg r3_arytm_3 X2 X1)))))) (\lambda X0 : \iota.X0)) (k1_tarski \\
& \quad k5_arytm_3)
\end{aligned} \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (\neg X1 \in X0) \tag{8}$$

Theorem 1 $\forall X0.\neg(X0 \in k2_arytm_2) \wedge (X0 = k5_arytm_3)$.