

l3_arytm_2

(TMErqu5SpgWu66BvKZTTwBNNeWy36vd5mTT)

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Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k5_arytm_3 : \iota$ be given. Let $r3_arytm_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k4_tarski X0 X1 = k2_tarski (k2_tarski X0 X1) (k1_tarski X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2_tarski X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 X0 k5_arytm_3) \wedge (m1_subset_1 X1 k5_arytm_3)) \Rightarrow ((r3_arytm_3 X0 X1) \vee (r3_arytm_3 X1 X0)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. k2_tarski X0 X1 = k2_tarski X1 X0 \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \neg k4_tarski X0 X1 \in \text{ReplSep} (\text{toset} (\lambda X2 : \\ & \quad \iota. m1_subset_1 X2 (k1_zfmisc_1 k5_arytm_3))) (\lambda X2 : \iota. \forall X3. \\ & \quad (m1_subset_1 X3 k5_arytm_3) \Rightarrow ((X3 \in X2) \Rightarrow ((\forall X4. (m1_subset_1 \\ & \quad X4 k5_arytm_3) \Rightarrow ((r3_arytm_3 X4 X3) \Rightarrow (X4 \in X2))) \wedge (\exists X4. (m1_subset_1 \\ & \quad X4 k5_arytm_3) \wedge ((X4 \in X2) \wedge (\neg r3_arytm_3 X4 X3)))))) (\lambda X2 : \iota. \\ & \quad X2) \end{aligned}$$