

l74_armstrng
(TMJ7yxJJ9jh7czh383rM7gyYXVnkWcjKq6K)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k6_armstrng : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (k4_tarski X0 X1 = k4_tarski X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((m1_subset_1 X1 (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 X0))) \Rightarrow (k6_armstrng X0 X1 X2 = k4_tarski X1 X2) \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (X1 = ReplSep2 (toset (\lambda X3 : \\ & \iota. m1_subset_1 X3 (k1_zfmisc_1 X0))) (\lambda X3 : \iota. toset (\lambda X4 : \\ & \iota. m1_subset_1 X4 (k1_zfmisc_1 X0))) (\lambda X3 : \iota. \lambda X4 : \iota. \\ & \forall X5. ((X5 \in X2) \wedge (r1_tarski X3 X5)) \Rightarrow (r1_tarski X4 X5)) (\lambda X3 : \\ & \iota. \lambda X4 : \iota. k6_armstrng X0 X3 X4)) \Rightarrow (\forall X3. (m1_subset_1 \\ & X3 (k1_zfmisc_1 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (k1_zfmisc_1 \\ & X0)) \Rightarrow ((k6_armstrng X0 X3 X4 \in X1) \Leftrightarrow (\forall X5. ((X5 \in X2) \wedge (r1_tarski \\ & X3 X5)) \Rightarrow (r1_tarski X4 X5)))))) \end{aligned}$$